IMPROVING EARLY GRADE LEARNING OUTCOMES IN RWANDA

Methods Brief

INTRODUCTION

In 2019, the U.S. Agency for International Development (USAID) and the UK's Department of International Development (DFID) embarked on a collaboration to develop improved diagnostic approaches for the education sector. This effort sought to embrace the complexity of an education system and to use systems analytic tools to better understand its unique dynamics and the effects of specific interventions. It was expected that improved diagnostics would increase the effectiveness and sustainability of efforts to improve educational outcomes in different settings.

As part of this effort, LINC facilitated a series of participatory systems mapping workshops in a pilot activity in Rwanda. Participatory systems mapping workshops are one method by which diverse perspectives in a system can be engaged to develop a more complete understanding of the connections and mechanisms within it. Four workshops were conducted at the district level, and one was conducted at the national level.

The workshops brought together stakeholders relevant to a particular set of issues around student literacy, including parents, teachers, Government of Rwanda (GOR) officials, and other development partners. Facilitators guided participants through a systems mapping process to produce more detailed understanding of factors that influence early grade learning outcomes, as well as the interactions among these factors.

This brief describes the process and the results of the pilot activity in Rwanda, including recommendations for similar activities.

ABOUT SPACES

This activity was conducted by the Strategic Program for Analyzing Complexity and Evaluating Systems (SPACES) consortium, an initiative of the U.S. Agency for International Development's (USAID) Global Development Lab.

SPACES aims to provide a variety of integrated systems tools and methodologies to support the design, monitoring, and evaluation of development programs.

DESIGN

The process began with an in-person scoping visit to understand key stakeholders' needs in the education sector, and how participatory systems mapping could support a useful strategic planning process. Over the course of several months, we identified and proposed a series of themes for the mapping exercises.

LINC

This uncovered a variety of interests among stakeholders depending on their roles and perspectives, resulting in ideas that ranged from the overall structure of the education system to specific interventions to specific events. Planners sought to identify feasible themes considering factors such as:

- Relevance to GOR and development partner education strategies
- Political acceptability of discussing the topics in an open atmosphere
- Expected interest of participants to engage on the topic
- A reasonable boundary relative to the expected time available for discussion
- The extent to which the topic presented an opportunity to add to a substantial existing evidence base
- Relevance of the themes to an overall systems diagramming diagnostic effort

Stakeholders aligned around two final themes for the workshops:

Children's attitudes toward school: This theme offered a potentially critical and unexplored entry point into the discussion of drivers of primary school dropout. We expected that the theme would generate useful discussion on the overall school experience from the perspective of a child.

Teaching capability: This theme sought to develop a shared understanding of what is helping and hindering teachers to apply their skills and knowledge to enhance student learning. Given considerable donor interest and investment in teacher training, this theme offered a fresh way of discussing teaching activities.

METHODOLOGY

Participatory systems mapping helps to explore a system and its dynamics from the perspectives of local actors.

Participatory systems mapping helps to explore a system and its dynamics from the perspectives of local actors. Many different approaches to participatory systems mapping exist, and the process of mapping is as important as the maps themselves. For the purpose of this pilot, we considered approaches that could be conducted in a standalone manner, though we sought to embed the process within ongoing activities at USAID/Rwanda.

We considered four main diagramming approaches (Rich Picturing, influence diagram, multiple cause diagram, and causal loop diagram). Based on the time available for the workshops (1/2 day per session) and the local context (the lack of a safe environment for open dialogue among different stakeholder groups), we decided to use influence diagrams based on a process developed by the Open University in the United Kingdom. Influence diagrams are 'snapshots' of what influences a situation as it is right now. They seek to identify in general terms 'who' or 'what' does or may influence a teacher's capability to teach to their ability or a child's enjoyment of school. Workshops were facilitated by a multi-national team: Sylvestre Musengimana (Rwanda), Bob Williams (New Zealand), and Megan McDermott (U.S.).

Workshop participants develop a map of influences on child learning outcomes

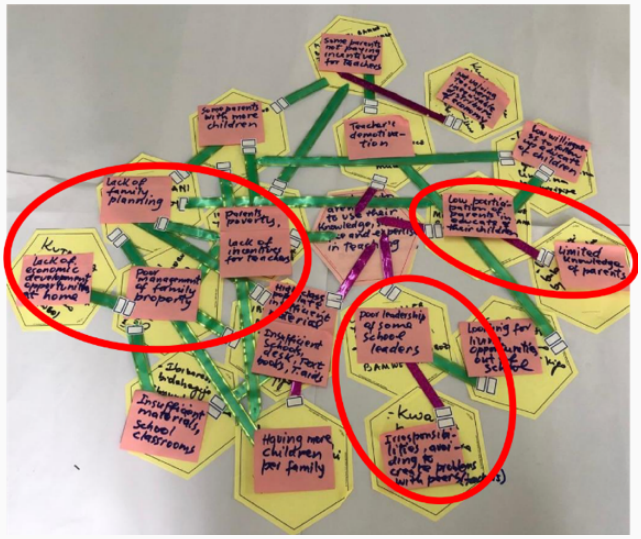
Participants worked in small groups according to their role in the education sector: parent, teacher, head teacher, education sector staff, or local government. They identified each of the factors that
influence the theme of the workshop (children's dislike of school or teacher capability), and then the factors that influence those factors, and so on. A brief sharing and exchange exercise towards the end of each workshop allowed for some discussion across stakeholder groups, but this was limited due to the time and context constraints of the pilot setting.

Finally, participants conducted a force field analysis exercise based on the maps. In this process, they identified the major influence relationships in their diagram, what helps those influences, what hinders those influences, as well as what strategies and actions are recommended based on this analysis of the system.

RESULTS

An overwhelming theme from all five workshops was a perceived lack of compassion, care and respect for the child—both in the classroom and in the home. Certain themes emerged in alignment with general literature and understanding of the sector, including:

- *Resources*: Lack of budget, school infrastructure, number of classrooms and teachers
- *Classroom factors*: Low teacher motivation, ineffective teaching styles and methods, unengaging content; inappropriate disciplinary measures
- *Household factors*: Poverty, household conflict, lack of family planning, lack of parental involvement in education
- *Leadership factors*: Ineffective leadership and role models at school, for both students and teachers



Example of a systems map developed by parents

While these are established factors, it was interesting to note that different stakeholders considered the relative importance and the relationships among these factors in different ways.

At the same time, certain factors that we expected to see based on the literature were not highlighted during the workshops, including peer-to-peer relationships, community engagement, and the role of local government.

Moreover, a number of prominent themes emerged that were unexpected based on literature review and typical educational strategy discussions, including:

- *Climate change* and its role in family poverty and instability, demonstrating the vulnerability of poor households
- *Stunting*, which highlighted the interaction among poor economic conditions, nutritional outcomes, and educational outcomes
- *Teacher-to-teacher conflict* credited to school environments where staff are overburdened and not incentivized to perform their duties, cooperate, or treat one another with basic respect

- *Household asset management* issues and the effect of poverty on children's psychological status
- *Alcohol abuse* by parents, teachers, and community members, and the negative effect this has on children's well-being

The findings from this activity were incorporated into a larger education systems diagnostic for use in USAID/Rwanda's education strategy and project design processes.

REFLECTIONS AND RECOMMENDATIONS

1 EMBED SYSTEMS MAPPING INTO EXISTING PROCESSES

This activity was completed as a pilot to understand whether and how education sector diagnostics could be improved through the use of systems analytic tools. As a result, we first identified the analytic tools to be tested, and then sought appropriate settings in which to apply them. While we engaged a local facilitator and coordinated extensively with local implementing partners, we recognize that the activities were implemented by outsiders with limited contextual knowledge. Our experience in other settings shows that the best results are achieved when mapping activities are carefully integrated into existing strategy, design, and implementation processes. Such integration amplifies both the validity of the findings as well as the use of the results.

2 SUPPORT SYSTEMS THINKING MINDSETS WITH MAPPING

Participants demonstrated a high level of satisfaction and engagement during the workshops. Creating a safe space for sharing and discussion was also highly valued. Immediate feedback reflected that participants appreciated the opportunity to provide honest input and propose their own solutions. Follow up six months later showed that many participants were using what they learned in the workshops in their daily work and lives. In some cases, participants reported they had changed how they thought about education problems and how they sought solutions. This activity stood in contrast to other planning processes that fail to engage frontline stakeholders, or only engage them in an nominal fashion.

3 INCLUDE OPPORTUNITIES FOR HONEST SELF REFLECTION

Careful attention needs to be paid to balancing discussion within like groups (parent, teacher, education officer, etc.) and uncovering and reflecting upon different perspectives—particularly in contexts where open dissent is not the norm. Due to logistical concerns as well as the desire to avoid unintended negative consequences, we conducted the majority of the mapping activities within stakeholder groups and included limited exchange among groups. The resulting maps tended not to be self-reflective: teachers identified problems with parents and children, and administrators and parents focused on problems with teachers. We recommend incorporating time and processes for each stakeholder group to reflect on their position in the overall system, which ultimately provides a path to forging better solutions together.

4 BUILD LOCAL CAPACITY FOR SYSTEMS MAPPING

Participants accepted the value of the methodology, and several indicated they planned to replicate the exercise. For example, one head teacher planned use the mapping in his school to help teachers identify and discuss the specific issues in their context. At the national workshop, a multinational donor found so much value in the methodology that they incorporated it into their stakeholder consultations occurring later that week. Our mapping approach can easily be modified, expanded, or contracted according to local circumstances. We recommend including flexibility in mapping activities to build local capacity among those who are interested.

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