Designing Effective Monitoring Systems

The importance of feedback loops and getting systems to use data

This case study is fictional and designed to facilitate a conversation on strategies to consider when designing effective monitoring systems. There is a plethora of knowledge and experience in the room which we will lean on throughout this exercise.

Despite the city of Wakanda achieving rapid and consistent growth in school enrolment over the last ten years, learning outcomes in primary school remain low. The city has recently begun to consider global evidence to try to address its most persistent issues. Among the evidence that the City is considering is an approach known as Teaching at the Right Level (TaRL). After several conversations with members of the TaRL Community of Practice and consulting lessons from rigorous evaluations conducted on TaRL's effectiveness, Wakanda has chosen to implement teacher-led TaRL camps for students in grade 3 to 5. The TaRL Camps will have five bursts of ten-day camps over the course of the academic year. Wakanda has been advised by the TaRL Community of Practice that monitoring is key to the success of TaRL interventions. The Wakanda TaRL Task Team believes in data-driven action and wants to build a strong monitoring system as part of the intervention, but they are not sure what data to collect in this instance. How would you suggest Wakanda TaRL Task Team begin?

THEORY OF CHANGE

The task team is advised to develop a Theory of Change to get them started.
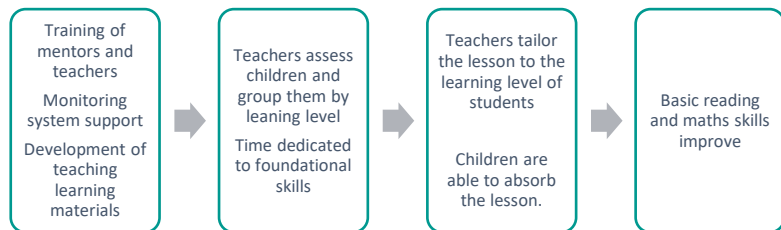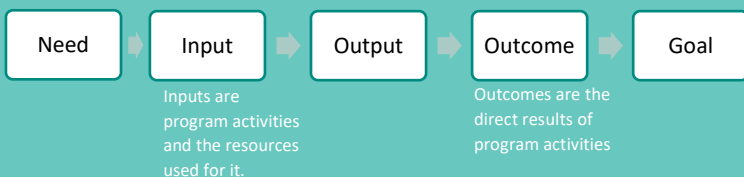
What is a Theory of Change?

A comprehensive description and illustration of how and why a desired change is expected to happen in a context. It Maps out the "missing middle" (between what a program does and its long-term goals)

Need is the deficiency or problem that a program aims to solve or ameliorate.

Outputs are direct results of program activities

Goals is the ultimate change the intervention aims to achieve

Need → Input → Output → Outcome → Goal

Inputs are program activities and the resources used for it.

Outcomes are the direct results of program activities

| Training of mentors and teachers / Monitoring system support / Development of teaching learning materials | Teachers assess children and group them by leaning level / Time dedicated to foundational skills | Teachers tailor the lesson to the learning level of students / Children are able to absorb the lesson. | Basic reading and maths skills improve |

Teaching at the Right Level Theory of Change

[1]**Indicators** are signs of progress – they are used to determine whether the programme/intervention is on its way to achieving its objectives and goal.

Why could developing a theory of change be a useful first step

INDICATORS

After successfully developing a theory of change, one of the task team members suggests that Wakanda think about how they would measure each of the steps along the theory of change. The task team begins developing a set of indicators[1] for each component of the theory of change.

What makes a good indicator?

After several hours of discussion, the task team has identified 50 indicators for each component of the theory of change.

The Director of Standards in charge of school monitoring and a member of the TaRL Task Team is furious. Her monitoring staff are already overstretched, and they don't have time to collect data on hundreds of questions. The Director of Research is outraged at the suggestion of removing indicators. He argues that each indicator is key in determining whether there is a break down in implementation which is crucial information for the assessment of the program.

What is your view on whether they should move forward with some or all the questions?

If they decided to use a subset of the questions, what guidelines would you provide them with on which type of questions to move forward with?

How might the Director of Research still achieve his goal without burdening the Standards department?

-------------------------Let's discuss -----------------------------

QUESTIONNAIRE DESIGN

The TaRL Task Team wants to build a monitoring system that can be held by the government system sustainably and so decides to develop a short classroom observation form which includes a subset of the questions initially developed. They cut the list down to a set of 7 questions. In addition, teachers will collect assessment data at the beginning and the end of each burst as this is part of the program. The objective of this is to provide mentors and policymakers with the information they need to make decision regarding the continuation of the program and the kind of support it requires.

See their classroom observation form below

What are the strengths and weaknesses of the questionnaire?

How could TaRL Task Team make the questionnaire more user friendly?

Prompts for facilitator:
- *How could this questionnaire influence how monitors/mentors act in the classroom?*
- *How could the questionnaire affect how far the information travels?*
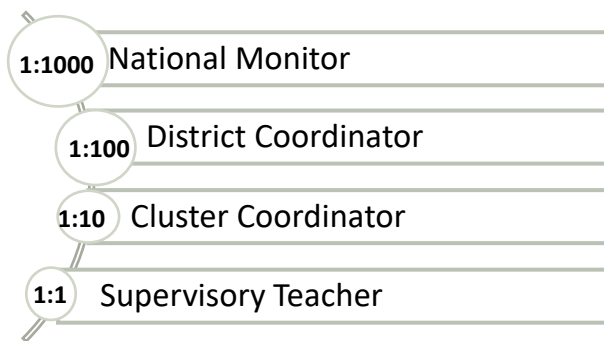- *What do you think about the kinds of questions the task team has included?*

Should this form include any of the assessment results collected by teachers?

-------------------------Let's discuss ----------------------------

DATA COLLECTION, FLOW AND FEEDBACK

Now that the task team has decided on their questionnaire, they need to establish who will enter the data and where it will flow to and how.

The Wakanda government monitoring system is described below.

1:1000	National Monitor
1:100	District Coordinator
1:10	Cluster Coordinator
1:1	Supervisory Teacher

The ratios on the left-hand side represent the number of schools each of these roles oversee. In the current system, Supervisory Teachers and Cluster Coordinators collect information from schools (number of school buildings, number of textbooks etc.) and send this information to the District Coordinator who sends this to the National Monitoring Board.

One TaRL Task Team member is excited about incorporating technology into the program. She suggests that Supervisory Teachers, Cluster Coordinators and District Coordinators all text their answers (from the classroom observation sheet) to someone who can enter them into a computer. The data could then easily be reviewed on a quarterly basis by the Task Team. If there were problems, the Task Team could send text messages back to the appropriate person.

What do you think of this suggestion?
What are some of the strengths of this approach?
How could this be improved?

Another task team member suggests that the cluster supervisor and the supervisory teacher should complete a paper classroom observation form each time they visit the school and when they are together at the school discuss their findings. He believes it is unnecessary for the data to travel any further than this.

What do you think of this suggestion?
What are some of the strengths of this suggestion?
Are there ways we could enhance this system?

A wise task team member suggests that they take a step back and consider the following:

1. What decisions does each member in the monitoring system make with regards to the TaRL program?
2. When do they make these decisions?
3. What information would be useful to help make these decisions?
4. How could this information be channelled to these individuals in a way that would help these people make these decisions well?

In your experience what are the major reasons for monitoring systems breaking down? How could this have been avoided?

What experiences do you have of monitoring systems that work well? What made them work well?

-------------------------Let's discuss ----------------------------