IMPROVING TEACHING PRACTICES IN A FOUNDATIONAL LITERACY AND NUMERACY PROGRAM IN SENEGAL WITH APPLIED BEHAVIORAL SCIENCE

Organization: ideas42
Presenter: Carolina Better, Associate Managing Director

Foundational literacy and numeracy (FLN) outcomes in Sub-Saharan Africa (SSA) remain low, and Senegal is no exception. In 2019, 74% of children in Senegal at late primary age were not proficient in reading (World Bank, 2019), and pre-pandemic assessments showed that fewer than 10% of Senegalese 15-year-olds were achieving minimum proficiency levels in reading, mathematics, and science (PISA, 2017). School closures due to COVID-19 have further exacerbated these outcomes.

The evidence base for new instructional practices (such as Teaching at the Right Level or structured pedagogy) that can improve FLN outcomes at scale is growing. However, in order for these practices to lead to improved FLN outcomes, teachers need to understand the difference between current and target learning levels, accept that improving instruction will require changes in their teaching practice, and actually implement those changes in the classroom. Programs that aim to improve FLN and education outcomes more generally do not always consider teachers' behavior or decision-making, including their habits, motivations, and routines (Sabarwal et al., 2022). This occurs despite teacher beliefs—such as whether they think they can help students who are struggling or whether they think action will be taken against poor teacher performance—having shown to be strong predictors of student learning gains (Filmer, et al., 2021).

Associates for Research and Education for Development (ARED) launched an after-school remediation program in Senegal that aims to improve FLN outcomes among second and third graders whose schooling was most affected by the pandemic. This program trains public-school teachers on how to use a pedagogical methodology in which they break up a class of 20 students into two to three smaller groups and then use the local language to teach each group reading and math based on their specific skill level.

This methodology requires teachers to engage in many behaviors that are different from when they teach in their public-school classrooms. As such, with generous funding from the Bill and Melinda Gates Foundation, ARED partnered with ideas42, a nonprofit that applies insights from behavioral science, the study of how people make decisions and act in the real world, to better understand how to help teachers improve their use of this pedagogical methodology. Through qualitative interviews and classroom observations, ideas42 identified that although teachers were responsible for providing support to and rotating among multiple groups of students, they had difficulty doing so. Specifically, teachers primarily focused on the day's "relearning group" and spent limited time with the day's "autonomous groups." This resulted in many students in the autonomous groups being off task, inhibiting their ability to improve their FLN skills.

ideas42 identified four behavioral barriers that led to teachers' limited support of the day's autonomous groups:

1. Teachers prioritize the upskilling of the relearning group to such an extent that the needs of the autonomous groups are overlooked.
2. Teachers are content if autonomous groups are quiet, even if they are not on task.
3. Teachers do not have a rule of thumb of when to provide support to autonomous groups.

4. Teachers face obstacles that impede their ability to provide support to autonomous groups.

In order to address these barriers and improve teachers' utilization of ARED's pedagogical methodology, ideas42 designed an intervention composed of three solutions:

1. <u>Heuristics checklist and reminders</u>: A short guide with a checklist outlining what teachers should do before, at the start of, and during class. This is accompanied by reminders in teachers' lesson plans to rotate to autonomous groups.
2. <u>Training and commitment exercise</u>: An additional module in teachers' training that utilizes role modeling and role playing to practice how to set up autonomous groups up for success, rotate, and provide support. This is accompanied by a commitment exercise that helps teachers form strategies for how to achieve their goals.
3. <u>Ndaw Wune Promise</u>: A simple, catchy chant paired with hand movements to help teachers and students set goals for how they will behave in class and what they will accomplish.

ideas42 is currently testing the impact of this intervention; all 200 teachers in ARED's program have been randomly assigned to either receive the intervention or to continue with the program without the intervention. ideas42 will collect endline results in May and will be able to present at the What Works Hub for Global Education conference how the intervention impacted teachers' ability to provide support to autonomous groups and help all students in the program learn. This research has important implications for how the behavioral science approach can be utilized to affect teachers' decision-making and enhance their adoption of pedagogical best practices to improve FLN outcomes in low- and middle-income countries.