







# Achieving Cost-Effective Instructional Coaching at Scale: Evidence from Senegal

### SERIES: LEARNING FROM ALL CHILDREN READING\*

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#### IN THIS BRIEF

- Challenges of achieving frequent, quality coaching in low-resource settings
- Design and results of a randomized control trial (RCT) of different coaching models
- Takeaways on the feasibility and relative cost-effectiveness of different models and institutional obstacles to reform
- Questions for future research on delivering coaching at scale

# **Evidence-Based Reforms for Learning**

The world has been facing a <u>global learning crisis</u> since even before the COVID-19 pandemic <u>triggered widespread learning loss</u>: students go to school but do not learn. In response, many countries are enacting reforms to improve foundational skills like reading. These reforms require multiple coherent education system components that tightly align with learning (World Bank, 2018)<sup>i</sup> and use cost-effective approaches to achieve and sustain outcomes on a national scale. Quality classroom instruction is one of the most critical system components needed for learning. This brief shares evidence from Senegal about models for delivering instructional coaching — an important intervention to support teachers in implementing reforms.

# **Context: Reading Reform in Senegal**

In 2017, Senegal set out to dramatically increase student reading outcomes in the earliest grades through the <u>Lecture Pour Tous</u> ("reading for all") program, supported by USAID-funded, Chemonics-led technical assistance. By the end of 2021, the program reached more than 600,000 students in Grades 1 through 3 from 3,700 public primary schools in six regions. The program increased reading scores by nearly 30 percentage points for the first cohort of students. Achieving these results required changing the practices of more than 14,000 teachers in these classrooms, especially in the absence of pre-service or other prior training on a formidable number of new competencies to master.

# **Objective: Provide Regular, Effective Instructional Coaching at Scale**

Research shows that improving teacher practice often requires frequent individualized coaching (Ganimian & Murnane, 2016;<sup>iii</sup> Kraft et al., 2018;<sup>iii</sup> JBS International, 2014;<sup>iv</sup> Joyce & Showers, 1980<sup>v</sup>; Moore et al., 2017 <sup>vi</sup>; Winton & McCollum, 2008 <sup>vii</sup>). Lecture Pour Tous thus aimed to greatly increase and improve instructional coaching as a key component of teacher support, seeking a model that could be scaled nationally and sustained at least over the reform period. Per the research on the importance of frequent coaching, the program's contract called for coaching at least twice a month.

#### Coaching before reading reforms

The Senegalese public primary school system, as in many low-income countries, has no designated instructional coaches. Nevertheless, school directors and inspectors have long been responsible for guiding

# INSTRUCTIONAL COACHING

Different from training, coaching provides personalized professional support to teachers, usually over multiple sessions, to help them teach better. Improving instruction could mean learning to use new curricula, languages of instruction, teaching strategies, teaching and learning materials, or student assessment tools; it could also mean implementing other reforms.

teacher practice. Prior to Lecture Pour Tous, however, one-on-one meetings with teachers were typically sporadic, supervisory, and rarely based on classroom observation. In Senegal, 70% of public-school directors teach in addition to their administrative duties, and finding time to support teachers is challenging. Before the program, directors and inspectors also were generally untrained in constructive coaching techniques.

Initial Base Model of Coaching

#### The initial coaching model for early grade reading

Under Lecture Pour Tous, specialists and key decisionmakers in the Ministry of National Education settled on a coaching model (see figure) that created few additional costs and minimized politically challenging institutional reforms by using ministry personnel — school directors and inspectors already slated to coach teachers. The program then introduced new coaching techniques and tools with training and other support.

# **Challenges and Opportunities**

Introduced in 2017, this initial model struggled to deliver coaching with the frequency and quality to consistently improve teacher practice (see box on next page).

#### Early learning and adaptation

In the face of these challenges, Chemonics teamed with the USAID-funded Rapid Feedback Monitoring, Evaluation, Research, and Learning (RF MERL) consortium for a mixed-methods investigation of causes and

School director (in **TYPE** the 70% of schools Inspector where the director does not also teach) Once per quarter per teacher, especially for FREQUENCY those without onsite coaching Twice per month from their school per teacher director Once per quarter per school director who coaches TECHNIQUES Classroom observation • Dialogue Constructive feedback Small-scale rapid student assessment MATERIALS • Coaching guide • Printed coaching tools Electronic versions of coaching tools and forms Multiple rounds of training on the new reading program, the use of national **TRAINING** D SUPPORT

- Coaching on coaching
- SMS push messages with reminders, tips, and encouragement

languages for instruction, and on the new coaching techniques and materials

- Phone/texting network between educators
- WhatsApp groups

potential solutions. Findings from an initial inquiry in 2018 and 2019 showed that major barriers were the lack of time for directors and large numbers of schools per inspector.

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These findings led to the piloting of modest modifications, such as the use of tablets with digital tools to guide coaching and synthesize data, but none increased the frequency or quality of coaching. The program then adapted the initial coaching model in the 2019-2020 school year to a) build in better planning at the district level; b) replace one monthly one-on-one coaching session with a group session during existing school-based teacher learning circles; and c) support a renewed push for inspectors to prioritize schools whose directors themselves taught early grades.

#### **Opportunities to explore alternatives**

Early that same school year, coaching with the updated model — then in over 3,000 schools and for nearly 8,000 teachers, with further expansion to come — still fell far short of the coaching frequency sought. This led to renewed discussions about alternative ways to provide coaching. Then, COVID-19 triggered two new factors to consider. First, teachers would require even more support once schools reopened due both to the cancellation of in-person workshops and to student learning loss from school closures. Second, using technology for "virtual" work became necessary, more familiar, and more routine. These factors led to ministry concurrence under Lecture Pour Tous to test alternatives to the updated coaching model presented in this brief.

### KEY COACHING CHALLENGES

#### Frequency

- School directors failed to coach teachers even once per month.
- Inspectors rarely visited schools — particularly problematic for the 30% of schools with no onsite coach because the directors were also teaching in the early grades.

#### Quality

- Not all directors or inspectors had an aptitude for coaching.
- No coaches had taught the new reading program or in national languages themselves.
- Inspectors generally did not end up coaching school directors who were coaches themselves.

# **Evidence on Effective Coaching Models**

The program reviewed the latest evidence on different coaching modalities' effectiveness as well as coaching experiences in Senegal and in similar contexts to identify models to test. Overall, global research shows that a country's needs, education system configuration, and available resources are key factors in determining how best to design a new program (USAID 2018).<sup>viii</sup> Additional key takeaways from recent literacture included:

• Mixing coaching and evaluative supervision or inspection can inhibit a coach's ability to build a strong relationship with teachers and may reduce effectiveness. It is common for inspectors/education officers and school directors to serve as coaches, but the effectiveness of coaching may be weaker when the coach is also an evaluator. In such cases, teachers may feel judged rather than supported, endangering trust and limiting their view of the coaching as a learning experience (Popova et al., 2016;<sup>ix</sup> Kraft & Gilmore, 2016;<sup>x</sup> Kraft et al., 2018; JBS International, 2014).

- **Coaches need the right skills, time, and support to be effective**. Strong coaches know the subject in which they are coaching, clearly understand the role, and have strong interpersonal skills (Pflepsen, 2019; USAID, 2018).<sup>xi</sup> Coaches must have a manageable workload so that they can spend enough time with each teacher (New Teacher Center, 2019).<sup>xii</sup> They also need sufficient training and practice to develop coaching skills and support and resources.
- Virtual coaching through mobile technology is potentially promising, but existing evidence is inconclusive. Virtual coaching has been shown to be as impactful and as or more cost-effective than in-person coaching at improving instructional quality and student learning (Kraft et al., 2018). However, in one recent example from South Africa, virtual coaching had less impact on learning outcomes than in-person coaching over time (Cilliers et al., 2021).<sup>xiii</sup>



#### BASE

**Coaches:** School director and inspector

**Teacher load:** 3-6 per director, up to 100 per inspector

#### Intended frequency

- Directors: once per month per teacher
- Directors: group sessions once per month
- Inspectors: once per quarter per teacher, especially for schools with no director coach
- Inspectors: once per quarter per director coach

#### The Three Coaching Models



#### **TELE-COACHING**

**Coach:** Head district inspector

**Teacher load:** 20 per coach

#### Intended frequency

- Once every 2 weeks per teacher
- Once per month per director coach
- Once per quarter during in-person school cluster meetings

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SUPPLEMENTAL IN-PERSON COACHING

#### **Coach:** Nearby experienced school

director without teaching duties

**Teacher load:** 10 per coach

#### Intended frequency

- Once per month per teachers
- Once per month per director coach
- Once per quarter during in-person school cluster meetings

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## **Randomized Control Trial of Coaching Models**

Informed by this literature and the local context, Lecture Pour Tous devised two supplemental coaching variations accepted by ministry decision-makers to test alongside the updated "base" model alone (see figure above) as the control. This experiment occurred during the 2020-2021 school year, with pandemic-related restrictions still in place. The study sought to answer three research questions:

1. **Can the different coaching models be implemented** as designed? Why or why not?

Updated Base Model

- 2. What are the effects of the different coaching models in terms of observed classroom practices, frequency of at-school coaching, and perceived utility of coaching?
- 3. Which coaching model is most likely to be sustainable in terms of feasibility of implementation (time and logistics) and relative cost-effectiveness?

		Implementation		Research and Analysis	
Nov 2020		School officially reopens mid-month after COVID-19 closures and delays		Establishment of experimental sampling	
Dec 2020		Randomized selection and initial training of experimental coaches Distance-learning modules as refresher for base model coaches		<b>Lean testing</b> via SMS surveys and telephone interviews to make quick adjustments to the tools or approaches for the variants as needed	
Jan 2021		Initial implementation of experimental coaching models and scheduled start of base model coaching			
Feb 2021		Adjustments to the coaching models based on lean testing results			
Mar 2021 Apr 2021		Full implementation of all coaching models			
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May 2021				Data collection and analysis on experience and impact around	
June 2021		School year ends		each of the models via SMS surveys, in-person interviews, and classroom observation	
July 2021					
Aug 2021				Final questionnaires and cost- effectiveness analysis	
Sept 2021				<b>Participatory workshop</b> to review coaching trends and RCT and cost-effectiveness results	
Dec 2021		End of Lecture Pour Tous program			

### **Coaching RCT Timeline**

#### **Experiment design**

To answer these questions, the study conducted an RCT coupled with qualitative research and cost analysis. Key design elements of the field experiment included:

- **Random assignment** of each of the nine school districts in the Kaolack region<sup>xiv</sup> to one of the three coaching models: either one of the two experimental models or the base model. Thus:
  - Three districts had tele-coaching added to the base model, with a total of three tele-coaches and 60 teachers (from a randomly selected cluster of schools).
  - o Three districts had supplemental in-person coaching with a total of six supplemental coaches and 60 teachers (also randomly selected from a cluster).
  - o Three districts had the updated base model alone.

This resulted in 68 schools and their school directors and teachers participating in the experiment (of the 692 schools in the region).

- Modified coaching approaches and tools for each new model and training for the telecoaches (district head inspectors) and supplemental in-person coaches (nearby experienced directors) to use them. Tools included a digital platform for collecting and tracking teacher practices and follow-up actions stemming from coaching sessions.
- **Multiple phases,** including "lean testing" of the experimental models during initial implementation for a quick check to make any rapid adjustments before the experiment began in earnest and other stages of data collection, analysis, and sensemaking (see timeline on previous page).

#### Study sampling and data collection

The study comprised survey data collected via SMS; qualitative data on directors and inspectors; classroom observations of Grade 1 and 2 reading lessons using an adapted Stallings tool<sup>xv</sup> detailing teacher and classroom activity; and a final questionnaire administered to coaches, district inspectors and teachers. Thirty of the 68 schools participating in the experiment were randomly selected with their early grade teachers (for a total of

#### KEY COACHING OUTCOME MEASURES

The impact of the different coaching models was measured in relation to key outcomes that included, for example:

#### **Observed Teacher Practices**

- Lesson time spent on learning activities
- Time spent on guided individual reading aloud
- Engagement of all students in learning activities
- Use of the "I do, we do, you do" routine
- Teacher's provision of positive/constructive feedback

#### Reported Coaching Implementation and Its Perceived Utility

- Teachers reporting having at least two coaching sessions during the year (with any coach)
- Teachers reporting that the coaching received from director-coaches is "very helpful"

46 teacher interviews and 42 classroom observations), nine school directors, three inperson coaches, and three tele-coaches for in-depth interviews. These data focused primarily on measuring the impact of the different models on key outcomes (see box) and better understanding participant experience with the coaching.

#### Cost-effectiveness analysis

Data on the cost of each of the three models were systematically collected and then compared with impacts on key outcomes ("effectiveness") using a ratio of cost per standardized effect size. These outcomes included a) observed teacher practices and b) the implementation of coaching and its perceived utility.

## Results

#### Implementation

1. Lean testing led to a few quick adjustments to the experimental coaching models, but some implementation challenges persisted. For instance, the program shifted to a more user-friendly digital platform to better track the needs and progress of each teacher and increased tele-coach phone credit to an unlimited monthly plan. However, some implementation challenges persisted, including higher than anticipated transportation costs, delayed reimbursements for in-person coaches, and challenges finding time for teachers to schedule tele-coaching sessions.

70% of teachers receiving tele-coaching and 65% of teachers receiving supplemental in-person coaching reported receiving at least two coaching sessions from any type of coach in the past month, compared to 25% of teachers in the base model.

2. Tele-coaching was linked to more frequent coaching at school by directors. Although coaching by school directors in their schools (as part of the base model) did not happen as frequently as intended, it became more frequent with the tele-coaching of teachers

and school directors in those schools. Teachers with only the base model reported the least amount of coaching by their directors across the models investigated.

3. Both coaching variants increased the number of teachers receiving at least two coaching sessions per month, but neither achieved its intended frequency.

Supplemental in-person coaches got the closest to their goal of coaching each of their 10 assigned teachers at least once a month. Teachers receiving supplemental in-person coaching or telecoaching were 23 percentage points more likely than teachers in the base model to give constructive feedback and critical guidance while students read. Tele-coaches did not have to travel, but they struggled to reach their goal of coaching each of their 20 teachers with two phone sessions a month on top of their duties as chief inspector for the district.

#### Effects

- Overall, teachers reported largely positive effects of coaching under Lecture Pour Tous, and the new models provided added value.
  Teachers across all models appreciated coaching from their directors and stated that supplemental coaching from the two new models provided a valuable opportunity for clarification and skill strengthening. Teachers reported the demonstration and practice were particularly useful during the base model's in-person group coaching.
- The two new models, whether with supplemental coaching in-person or by telephone, appeared to improve teacher practice more than the



#### Use of "I do, we do, you do" three or more times during a class period by coaching model (percent of teachers)

\*\*/\* Difference from the base model is statistically significant at the .05/.10 level

**base model.** Teachers who participated in supplemental tele- or in-person coaching exhibited better instructional practices compared to those in the base model alone. For instance, teachers with supplemental coaching more frequently used the "I do, we do, you do" technique to model new reading skills and guide students in their reading practice — one of the most important instructional routines of the reforms (see graph).

 In some cases, teachers with supplemental in-person coaching demonstrated better instructional practices than teachers with telecoaching. Teachers with supplemental in-person coaching were observed with higher levels of student engagement in reading lessons and were more likely to have consulted their teacher's guide or lesson plans than those with tele-coaching or the base model alone (see graph, next page).

- Supplemental coaching in-person was preferred to coaching over the **phone.** Many teachers receiving the supplemental tele-coaching also wanted in-person coaching sessions, either to replace tele-coaching or in addition to it. Tele-coaches themselves did not always think tele-coaching was as useful as inperson coaching, citing the inability to verify teacher progress as the biggest downside. Survey data also suggest that directors prefered inperson coaching. Although the data indicated no explicit teacher preference for who served as coach — i.e., inspectors or the experienced nearby school directors — teachers noted their appreciation of the practical experience and relationship building with the nearby director.
- Regardless of the type of coach, the rapport built with the teachers depended on three key factors: legitimacy borne of the coach's experience as an educator, the coach's competency as a teacher and as a coach, and the legal statutes governing their coaching role. Questionnaire data and participatory analysis at the end of the experiment suggested that all three are needed for coaching to work.



# Figure 2. Student engagement by coaching model (percent of class)

† = Difference between supplemental in-person and tele-coaching is statistically significant at the .10 level

#### Sustainability

- Despite implementation challenges, **teachers and directors in both new models received more coaching overall than teachers and directors in the base model.** The teachers and directors in the new models still did not receive coaching as frequently as planned.
- Time and logistical challenges with both models interfered with coaching frequency and quality. In-person coaches and tele-coaches alike struggled to find the time for coaching. The flexibility offered by tele-coaching was appreciated, but scheduling was difficult, and after-hours sessions created their own challenges, such as distractions that affected the quality of the

sessions. Transportation allowances for in-person coaches often fell short of actual costs, especially for reaching distant schools, and payment procedures based on proof of coaching often led to late reimbursements.

• Tele-coaching is generally more cost-effective in achieving key outcomes of teacher practice because it is significantly less expensive than in-person coaching. For instance, tele-coaching costs almost 83% less than in-person coaching to achieve 0.1 standard deviation of improvement, Generally, telecoaching was found to be significantly more cost-effective than supplemental inperson coaching because phone calls cost so much less than traveling to schools.

or 1.5 percentage points more in the frequency of teachers guiding individual student reading practice as compared to the base model alone. Tele-coaching also costs 74% less to achieve 0.1 standard deviation of improvement, or a 4 percentage-point increase in how frequently teachers use constructive feedback to students.

	BASE MODEL	+TELE-COACHING	+SUPPLEMENTAL IN- PERSON COACHING					
Pros	For the onsite component, coaching is conducted by school directors whom teachers already know, respect, and interact with daily.	Allows coaches to reach more teachers in less time than in-person visits.	Provides in-person coaching from someone with highly regarded experience and competencies that strongly legitimize their work with both teachers and directors.					
	Is directly linked to other school-based continuous professional development activities, such as teacher learning circles.	Allows for coaching the school-based director- coach.	Allows for coaching the school-based director- coach.					
	Requires no additional resources.	Offers coaches the flexibility to schedule sessions at their convenience.						
		Costs are modest in relation to the amount of coaching it enables.						
Cons	Coaches (both the school directors and inspectors) fell far short of providing the frequency of coaching required.	Tele-coaches struggled to find the time to coach and did not meet frequency goals.	Supplemental in-person coaches struggled to find the time to coach and did not meet frequency goals; some coached less in their own school.					

#### Advantages and Disadvantages of Each Model

Advantages and Disadvantages of Each Model						
	BASE MODEL	+TELE-COACHING	+SUPPLEMENTAL IN- PERSON COACHING			
	Coaches cannot be chosen by experience or profile and are not necessarily experienced or competent coaches.	Does not include classroom observation (although tele-coaches are supposed to work with the teachers they coach during cluster- based teacher learning circles).	Coordination with school directors to plan visits was sometimes challenging.			
		Additional financial resources are required, although they are modest.	Additional financial resources are required; transportation costs are significant for school visits; and arranging transportation can be challenging.			
		Connecting virtually was sometimes challenging, with technical difficulties including weak signals, dropped calls, and poor reception.	Transportation costs provided was at times insufficient, especially for reaching distant schools. This challenge was exacerbated by due diligence processes that can delay payments.			
		Coaching sessions scheduled outside of teacher work hours were challenging due to background noise, distractions at home, and not having reference documents/ materials at home.				

# **Applying the Findings in Context**

Lecture Pour Tous technical assistants worked with ministry personnel at multiple levels of the system, applying this study's findings and other program data on coaching to make decisions about the future of instructional coaching (see box for this process). These discussions were particularly critical as Senegal prepared for the nationwide scaling up of early grade reading and bilingual education reforms. As a result:

- Ministry personnel participating in the systematic review of coaching results concluded that, despite tele-coaching's relative cost-effectiveness, supplemental in-person coaching is the best option because of teacher preference and some greater effects. They recommended that inperson coaching should be scaled up in the next year and that coaching should be expanded to other subjects and grades.
- 2. Ministry decision-makers, however, ultimately decided that the base model would remain in place for the foreseeable future. They also stated that regional and district education offices could pursue whichever coaching model they preferred, but the ministry made no plans or resources available to support supplemental coaching.
- 3. Broad consensus among ministry staff and stakeholders about the value of coaching, especially during reforms, led to the inclusion of coaching as an important strategy in the national reading and bilingual education reform programs.

Given the small scale and limited run of this initial RCT, RF MERL research partners and program staff recommended additional testing of the alternative coaching models or modified versions to better

#### DATA FOR DECISION-MAKING

#### APPLYING COACHING FINDINGS TO PLANNING AND POLICY

- Systematic review of the quantitative and qualitative data on coaching trends over the four years of implementation and learning from the RCT
- 2. Systematic, structured individual and group reflection enabling system actors to recommend options for coaching modalities moving forward and identify additional data and learning needed before finalizing policy
- 3. Follow-up with ministry decision-makers to arrive at their determination of the way forward

understand cost-effectiveness over time and at a larger scale. Competing ministerial priorities and limited staff made additional testing at scale challenging to organize quickly. Analysis of the decision to maintain the status quo underscored resource constraints, difficulties in making structural changes to official job profiles, and likely resistance from system actors that stand to lose status and financial interests and have little incentive to take on additional work. However, the rollout of evolving national reforms in Senegal will likely lead to a return to these deliberations.

# **Takeaways and Future Directions**

#### Lessons for Instructional Coaching

1. Coaching continues to demonstrate measurable benefits for teacher practice, but how it is delivered matters for sustainability. Different models have different costs, feasibility, effects, and even political economies of related interests — all of which are critical for determining the relative value for money and acceptance in specific contexts.

 Achieving a high frequency and quality of



**coaching is hard, regardless of the model, especially when using existing system personnel.** Those implementing the alternative models tested in Senegal attempted to use them as sustainable "workarounds" to improve coaching despite institutional constraints. The experiment showed some positive possibilities, but the new models failed to fully achieve their goals in the face of the persistent structural problems long observed in low-resource contexts. Some level of additional financial and human resources is likely the only solution, regardless of the model chosen.

- 3. Coaching of coaches is a critical factor in coaching effectiveness, and alternative models can provide much higher rates of support. Support to coaches is particularly important in contexts in which existing system actors, like school administrators, are being asked to coach in ways they have never coached before. This support is also critical for major new reform initiatives.
- 4. Tele-coaching of teachers may not always have the same effects as inperson coaching, but its significant cost advantage makes it an important modality to consider. Tele-coaching could be especially helpful for coaching of coaches or as part of continuous professional development.
- 5. The profile and status of the coach are important to secure teacher trust and sustainability. Regardless of the actor chosen to coach, they must have the legal statute to play the role, be experienced, and be skilled at both teaching and coaching in order to build the level of rapport with teachers needed to change their practice.

#### Lessons for Using Data for Decision-Making

1. Evidence is only one part of the equation. The Senegal case clearly demonstrates this fundamental truth: decision-making is almost always a political process. RCTs and other learning can inform and sometimes transform decisions, but the political economy of resources, interests, and power dynamics determines how evidence is or is not used.

2. Changing coaching systems is institutionally challenging. As a corollary to the point above, reform nearly always requires additional resources and changes power dynamics. In this case, even if a new coaching model would be more cost-effective in the long run, decision-makers need broad support to mobilize the additional funding and human resources required. Decision-makers also require dialogue and potentially new incentives to grapple with competing interests linked to different system actors' changing roles.

#### **Recommendations for future study**

1. Use a larger sample and longer-term feasibility and impact testing to assess whether a)implementation of the models or modified versions can be sustained over a longer period of time and at a larger scale and b) there are

effects on both teacher practice and student learning over time.

2. Further study tele-coaching given its cost advantages, including testing different usages and configurations,



such as for coaching of coaches, to follow up on intensive in-person coaching of new teachers with light support for basic questions. Increase accountability for reform implementation among teachers and administrators.

- 3. Perform deeper cost analysis to factor in important indirect and opportunity costs, particularly of additional in-person coaching that will likely affect the longer-term costs and sustainability of different models.
- 4. Conduct political economy and positive deviance analysis to better understand the dynamics and interests related to coaching reform, potential collective action, or shifts in incentives that might be required to bring about sustainable change.







#### ABOUT

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**About this series:** From 2015 through 2021, Chemonics International led multiple early grade reading reform activities under the USAID All Children Reading Indefinite Delivery/Indefinite Quantity Contract. These activities include programming in Senegal to support the Ministry of National Education's Lecture Pour Tous program; in Rwanda under the Soma Umenye project; and in Tajikistan for the Read with Me project. "Learning from All Children Reading" shares key innovations and evidence generated from these programs.

**About Chemonics:** Founded in 1975, Chemonics is a 100% employee-owned international development consulting firm. In more than 70 countries around the globe, our network of approximately 5,000 specialists shares a simple belief: that the challenges we face today are best solved through the right partnerships — sharing knowledge, expertise, and experience to deliver results. Where Chemonics works, development works. Follow us on <u>Facebook</u> and <u>Twitter</u> or visit us at <u>www.chemonics.com</u>.

**About RF MERL:** Rapid Feedback Monitoring, Evaluation, Research, and Learning (RF MERL) provides timely evidence and feedback to guide decisionmaking and adaptation of programs funded by USAID. RF MERL is supported by the USAID Bureau for Policy, Planning and Learning and is implemented by a consortium of four organizations: Results for Development Institute (R4D), Mathematica, Abt Associates, and the Pulte Institute for Global Development at the University of Notre Dame.

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x<sup>iii</sup> Cilliers, J., Fleisch, B., Kotzé, J., Mohohlwane, N., Taylor, S., & T. Thulare (2021). Can virtual replace in-person coaching? Experimental evidence on teacher professional development and student learning. RISE Working Paper Series, No. 20/050. <u>https://riseprogramme.org/sites/default/files/2021-01/RISE\_WP-050\_Cilliers\_etal\_2021\_update\_0.pdf.</u>

<sup>xiv</sup> Although Kaolack schools are not representative of all schools in Senegal, they are similar enough to most schools so that the experiment would allow for insight into the feasibility and potential effectiveness of the different coaching models in Senegal.

<sup>w</sup> https://www.worldbank.org/en/programs/sief-trust-fund/brief/the-stallings-classroom-snapshot.

