



TECHNICAL BRIEF

Reimagining Teacher Continuous Professional Development: Evidence from a Blended Approach in Senegal

SERIES: LEARNING FROM ALL CHILDREN READING*

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IN THIS BRIEF

- Strategic design details for blended continuous professional development (CPD)
- Evidence of the use, utility, and institutionalization of a blended CPD model
- Key lessons on the importance of in-person training for catalyzing reform while introducing lower-cost modalities and enhancing with technology

Evidence-based Reforms for Learning

The world has been facing a **global learning crisis** since even before the COVID-19 pandemic **triggered widespread learning loss**: students go to school but do not learn. In response, many countries are enacting reforms to improve foundational skills like reading, which require multiple coherent education system components that tightly align with learning (World Bank, 2018)ⁱ and use cost-effective approaches to achieve and sustain outcomes at national scale.

Quality classroom instruction is one of the most critical system components for learning. This brief shares evidence from Senegal about effective approaches for the CPD that teachers need to improve instruction for foundational skills.

Context: Reading Reform in Senegal

In 2017, Senegal set out to dramatically increase student reading outcomes in the earliest grades through the [Lecture Pour Tous](#) (“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 list of new competencies to master (see box).

From its inception, Lecture Pour Tous outlined a CPD model that included intensive in-person workshops introducing the reforms to teachers and school directors and follow-up support via other modalities (e.g., coaching, teacher learning circles, and SMS text messages). The original vision for CPD was to decrease the dosage of training in workshops once teachers and administrators demonstrated new competencies and to rely more on the less intensive and costly modalities for refining practice and sustain reforms. Two factors accelerated this evolution. First, the Ministry of National Education began in earnest to prepare for the expansion of national reforms to improve reading and bilingual education. Second, the COVID-19 pandemic halted in-person training. Both factors underscored the need for other forms of CPD, including using technology, and they increased openness to these alternatives.

Objective: Provide Effective CPD at Scale

In this changing context, the Lecture Pour Tous team sought to:

Continuous Professional Development

Ongoing opportunities for teachers to learn and practice new knowledge, skills, and attitudes

NEW TEACHER KNOWLEDGE, SKILLS, AND ATTITUDES TO MASTER

- Scientific approaches to reading instruction
- National languages as the medium of instruction
- Lesson scopes, sequences, plans, and routines
- Multiple teaching and learning materials
- Inclusive teaching techniques based on the belief that all children can learn
- Assessment tools and routines
- Parent communication tools and routines
- CPD modalities and coaching routines

- **Reduce the cost of in-person teacher training while providing practice-based skill development activities.** Studies have shown the importance of regular intensive in-person training workshops, particularly at reform inception (Popova et al., 2016),ⁱⁱ but the costs of such training are unsustainable in the long term on a national scale.
- **Reach teachers where they are with practice-based knowledge and skill development.** COVID-19 school closures and restrictions around in-person training expedited efforts to introduce alternatives to large in-person workshops. The rapidly growing use of technology, including smartphones and WhatsApp, provided opportunities to introduce new CPD modalities that could facilitate the practice required to integrate new skills and build peer-to-peer communities of practice (McAleavy et al., 2018).ⁱⁱⁱ
- **Respond to the need for differentiated support for teachers with different levels of experience and skill.** Annual teacher turnover in Senegal's schools, differing skill levels in the languages of instruction, and varying school contexts mean teachers have diverse needs. Thus, it was important to better differentiate CPD to provide teachers with targeted, timely support (Shaffner et al., 2021).^{iv}

CPD Reimagined: A Blended Approach

In 2020, Lecture Pour Tous responded quickly to pandemic-related learning loss, focusing on students and teachers. Like many programs across the globe, Lecture Pour Tous updated its model to continue to provide effective CPD at scale. The resulting blended approach (see box) introduced distance learning, improved and better linked learning components, and refined the use of in-person training. This reimagined design has four essential features.

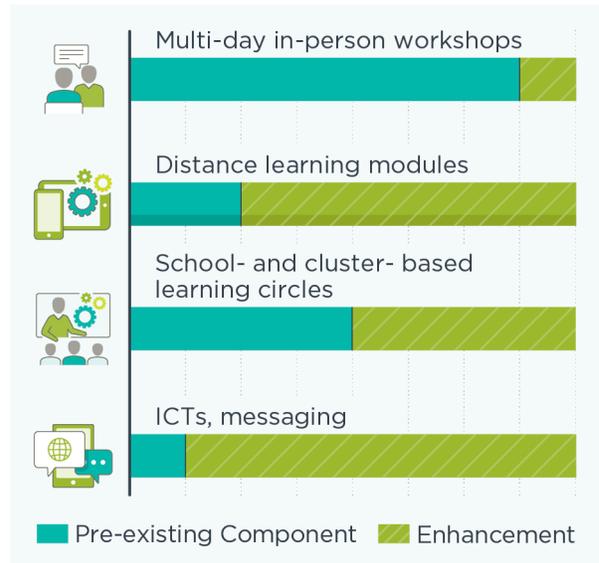
1. **Blends learning through interconnected components.** Multiple complementary strategies scaffold and reinforce learning.
 - Initial **in-person training workshop** that establishes a common knowledge base allows teachers to practice key skills needed early in the year and helps them understand upcoming CPD activities
 - Monthly cycle of three localized activities:
 - a) **Self-directed distance learning modules** with new information and models of good practice presented through video, audio, infographics, and hard copy

BLENDED CPD THAT ENHANCES EXISTING SYSTEMS

In the low-resource contexts in which most Senegalese teachers work, connectivity varies widely, and bandwidth is limited and costly. Blended CPD, in this case, combines in-person and primarily asynchronous remote support, including technologies teachers generally already use. These strategies built on existing CPD modalities in Senegal and enhanced them to differing degrees.

- b) **In-person school-based learning circles** to review concepts and practice skills from the self-guided modules
- c) **Peer discussion groups** and communications via WhatsApp
- Quarterly **in-person cluster-based learning circles** gathering teachers and directors from multiple schools to introduce new topics and provide ample opportunities to practice skills
- **SMS push messaging** for tips, reminders, and motivation

Blended CPD Model Leverages and Enhances Existing Training



2. **Builds on and enhances existing systems.** The updated design grew from official in-service training modalities in Senegal, including school- and cluster-based teacher learning circles, and revived older training approaches used in correspondence courses. Enhancements include:
 - Dedicated **time focused on reading instruction** as a priority within existing learning circles
 - Increased **emphasis on practicing new skills and instructional routines** and providing feedback to teachers
 - Increased rigor and relevance through new **facilitation tools** to guide activities, practice, and reflection
 - Embedded resources, like **video and audio clips**, integrated into digital versions of distance modules (see graphic, next page)
3. **Aligns with classroom teaching.** The updated design carefully aligns the year's CPD content and sequencing with the reading program's scope and sequence. Teachers prepare for upcoming lessons with the knowledge, reflection, practice, and feedback they need right when they need them.
4. **Facilitates differentiation.** The CPD model's modular structure builds flexibility into the training system. Content covers both common themes relevant to all early grade teachers and grade-specific knowledge and skills. These CPD elements thus support differentiation to meet teachers' diverse needs through:
 - **Peer learning** for mentoring and reflection across grades
 - **Distance modules** on key topics can target training for teachers per need
 - **Training resources** for teachers newly assigned or transferred mid-year to a new grade, language of instruction, or program school
 - Teacher or director use of the distance modules as **reference documents**

Self-directed Distance Learning Modules Incorporate Video, Audio, and Infographics



Videos model effective teaching practices.

Pour compléter la première partie du module vous devez :



1. Observer l'affiche.



2. Lire les informations.



3. Ecouter la capsule audio de la chanson de l'alphabet.

Audio clips model key oral elements, like the alphabet in national languages, and blending techniques critical for reading.

1.1 AFFICHE

Les étapes des base : l'enseignement de la prélecture - Semaines 1 à 4.

Etape 1: Enseignez la chanson de l'alphabet. 

Etape 2: Révissez les lettres minuscules. 

Etape 3: Enseignez les nouvelles lettres minuscules. 

Infographics visually communicate key instructional routines.

Ce module est organisé en 3 parties :

1	Activité individuelle	Je me familiarise avec les informations essentielles du module en utilisant les modalités proposées. Jours 1 à 6
2	Activité en présentiel	Je participe à la rencontre de la CAP interne (CAPI). Jour 7
3	Activité collaborative	Je lis l'étude de cas, je réponds aux questions en échangeant avec mes collègues sur WhatsApp. Le groupe doit soumettre un résumé de la discussion. Jours 8 à 10

The modules were adapted for reading on smartphones, provided as paper versions, and linked with other CPD components.

Monitoring and Learning

Lecture Pour Tous recognized that introducing this enhanced CPD approach would call for quick testing of new components, ongoing monitoring and learning, and a targeted study to measure effects. This comprehensive approach (see timeline on next page) included:

- 1. Initial pilot study** on the feasibility of the self-directed modules integrated into a blended approach
- 2. In-person school visits** during a break in COVID-19 restrictions
- 3. SMS-based surveys** of teachers and directors to track implementation
- 4. SMS-based pre- and post-tests** to measure key teacher knowledge before and after rounds of CPD interventions
- 5. Interviews** with a small sample of teachers and school directors coupled with **classroom observation**

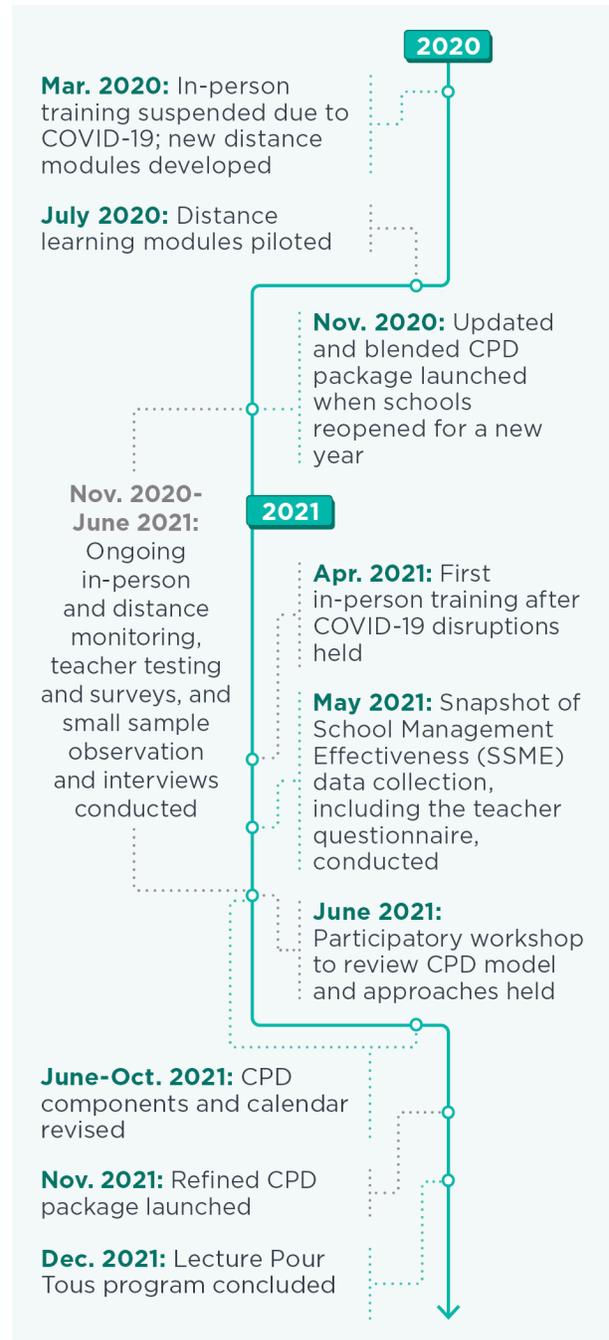
6. **Large-scale, representative teacher survey** conducted at the same time as student early grade reading assessment
7. **Questionnaires and a participatory workshop** at the end of the first year of CPD implementation
8. Program **participation recordkeeping**

These monitoring and learning activities resulted in important takeaways about the outcomes of the CPD approaches and adaptations that refined the approach.

CPD Outcomes

The CPD approaches that Lecture Pour Tous reimaged broke new ground in Senegal. The pandemic caused many disruptions in 2020 and 2021 — including the inability to hold in-person workshops to launch the year. Despite these challenges, teachers and directors benefitted from the mutually reinforcing CPD activities. Lessons learned along the way informed the refinement of approaches for the 2021-2022 school year, and the blended model now offers cost-effective solutions for the national scaleup of reading and bilingual education reforms. Key findings as they relate to the four aspects of the blended approach include:

Implementation, Monitoring, Learning, and Adapting of the Renewed CPD Model



Participation and usage of different components

- **Participation was highest for in-person CPD activities.** Nearly 100% of public primary school directors and Grade 1 and 2 teachers in the program's six regions attended the three- or four-day in-person workshops organized at the district and

department levels (program records). Two-thirds of teachers reported attending one or more sessions of the cluster-based teacher learning circles.^v About 60% reported attending at least one school-based session — although it was less frequent than the monthly schedule planned (EGRA/SSME, 2021).^{vi}

- **Usage of the self-guided learning modules was more limited.** Roughly half (53%) of teachers surveyed in 2021 reported that they did not complete any modules. Lecture Pour



40% of teachers completed two or more self-guided modules in the first year (2020-21).

Tous identified two key barriers:

difficulty accessing the modules and the lack of an orientation to them in the absence of in-person meetings to kick off the year. **Almost half (46%)** of teachers reported not receiving the digital copies sent out via WhatsApp, and 40% reported not accessing the single paper copy sent to schools. However, almost 40% of teachers reported completing two or more of the self-guided modules (EGRA/SSME, 2021).

- **Ongoing discussion among educators about reading reform was high.** Eighty-five percent of teachers reported being in contact with colleagues to discuss instruction, help each other, or share information (EGRA/SSME, 2021). This contact happened via SMS texting, WhatsApp, and school- and cluster-based meetings.

Perceptions of the blended components building on existing systems

- **Teachers remained most satisfied with in-person training workshops.** Eighty-nine percent of teachers reported in-person training — provided via the shorter, localized school- and cluster-based workshops — as satisfying or very satisfying. In contrast, 41% of teachers said they were “somewhat or very satisfied” with distance training received (EGRA/SSME 2021). Thirteen percent said the in-person workshops were “not satisfying” — an increase from 3% in 2019, likely due to modifications reducing the time and other benefits associated with attending the longer workshops (e.g., higher per diem and lack of pandemic stressors).
- **Teachers appreciated localized face-to-face opportunities for practice and discussion, building on prior CPD activities.** In surveys and small-sample interviews, teachers and directors deemed peer-to-peer learning at school and cluster learning circles very helpful. These learning circles enabled newer teachers to observe how their more experienced colleagues applied material from training to the classroom. Educators also appreciated the opportunities in cluster sessions to review topics and practice techniques introduced in the larger training workshops. Although these sessions happened much less often than intended, the school-based sessions generated demand for more (RF MERL, 2021).^{vii}

Alignment with classroom teaching and facilitation of differentiation

- **Experienced teachers appreciated having materials to support their work.**

Many teachers in a small sample interviewed in one region reported that the self-directed distance learning modules increased their understanding of (a) how to help students catch up after COVID-19 closed schools the prior year and (b) reading pedagogy (e.g., key blending techniques). However, some reported that the modules were too long and dense and that they could not make the most of the content without initial in-person training to orient them.

- **Directors reported distance materials filled a need.** For teachers who were transferred or who were newly assigned and had missed the in-person training, the distance modules provided reference material on the approach to early grade reading (review of WhatsApp group communications).

- **WhatsApp was a popular means of CPD communication; SMS push messages were also useful.**

Survey respondents found WhatsApp groups useful because they facilitated peer-to-peer communication and gave teachers relevant information and resources in a timely manner. Teachers and directors also found SMS messages with tips and reminders helpful, although not all received them (RF MERL, 2021).



Teachers found school-based learning circles to be “very useful,” especially for new teachers and those who do not speak the school’s language of instruction.

“The [school-based learning circles] provided a framework for sharing and discussion and for the development of a harmonized understanding of the distance modules.”

Deputy head inspector
of a district education office



“The WhatsApp discussions generated peer-to-peer discussions and helped us stay organized.”

School Director, Kaffrine

Effects of the blended approach to CPD

- **Some CPD components were associated with improved student reading scores.** Regression analyses of Grade 1 Wolof teachers found greater participation in learning circles positively associated with higher student reading scores. Completion of more distance learning modules also positively related to reading scores, but this relationship was not statistically significant (EGRA/SSME, 2021).
- **Peer-to-peer information sharing increased knowledge and reported use of key evidence-based reading instruction methods.** Analyses also found that communication between teachers and directors about CPD topics, via face-to-face discussions and resource sharing on WhatsApp, resulted in better understanding and more frequent use of the “I do, we do, you do” approach for students’ reading practice (EGRA/SSME, 2021).

- **Teachers' initial use of distance learning and local CPD modalities appeared to increase their knowledge of early grade reading instruction.**



Pre- and post-tests of key concepts suggest an increase in teacher

knowledge following a blended delivery of distance learning modules, learning circles, WhatsApp, and SMS — even before the eventual organization of multi-day in-person training workshops (once restrictions on gatherings were lifted). Teacher knowledge appeared to increase despite most teachers not completing all the assigned modules ahead of time; some used the modules as a reference.

Institutionalization

- **The Ministry of National Education and key stakeholders adopted blended CPD as a critical intervention under Senegal's new National Scholastic Reading Program.** The new program expands reading reforms primarily developed under Lecture Pour Tous to the entire country alongside national bilingual education reforms.
- **The Ministry of National Education led the next round of CPD using the refined blended model to support learning.** The ministry officially adopted and integrated the refined package of CPD activities (see below) into its work plan for the 2021-2022 school year, and the minister sent a communiqué to all program regions that CPD would continue. Ministry staff led in-person CPD workshops at the start of the year, which included orientation to all upcoming CPD components throughout the year. SMS messages also reminded school directors and inspectors to organize the first rounds of school and cluster sessions.
- **Regional and sub-regional engagement and accountability are critical to sustained CPD implementation.** In places where inspectors and school directors received and heeded the ministerial communications calling for reading reform and CPD to continue, administrators are holding school and cluster sessions and teachers are using the self-guided modules and WhatsApp groups. In other target areas, schools and districts have not continued to use all CPD components following the end of the USAID-supported Lecture Pour Tous program in December 2021.

Refinements to the CPD Model

Monitoring and learning from the pilot and the first full year of implementing the updated CPD model resulted in several adaptations (see table on next page). This refined design was particularly important heading into the 2021-2022 school year as Lecture Pour Tous ended and the Ministry of National Education launched a new round of CPD activities without program technical assistance.

Key Formative Design Takeaways from Pilot and Initial Implementation (2020-2021)	Adaptations to the CPD Approach (2021-2022)
Although mobile devices are prevalent and digital copies are widely used, access to devices and the internet is inconsistent over time and across the country.	Printed copies were provided to every teacher and school director, not just every school.
Lack of face-to-face training workshops at the start of the year due to COVID-19 resulted in low uptake of self-directed modules, particularly among new teachers who did not have any experience with the Lecture Pour Tous program.	Face-to-face training workshops were reinstated at the beginning of the school year thanks to loosened COVID-19 restrictions.
Timing of CPD activities was not well understood by teachers and school directors.	Initial in-person training included a refined CPD calendar for the year.
Organization and supervision of WhatsApp discussion groups were uneven.	Structured WhatsApp discussion groups were created and discussed during the in-person workshop at the start of the year.
Challenges with initial electronic distribution of the self-guided modules to all teachers and paper copies to schools contributed to low usage rates.	An improved electronic distribution plan, better compressed digital files, and files sent out via structured WhatsApp groups (created at the in-person training at the start of the school year) helped address these challenges; paper copies were distributed directly to all teachers during the same initial training.

Key Takeaways and Recommendations

- In-person training is needed at the beginning of a school year, for new teachers, and when reforms are introduced.** In-person gatherings provide teachers and administrators with an opportunity to engage with each other, gain a shared understanding of concepts, signal the start of expected activities or behavior changes, and reinforce the commitment and accountability of all actors — especially in low-resource settings with limited options for synchronous remote learning. Lecture Pour Tous found that teachers and administrators appreciated in-person gatherings after

pandemic-related school closures and program interruptions. In-person workshops can and should taper off as educators master new instructional practices — and access to and familiarity with technology-supported remote learning increases — while still providing targeted support based on needs.

- **Locally based CPD among peers is a useful, low-cost strategy, but incentives are needed.**

Director-led school and cluster-level learning circles hold promise, especially if



school-level learning circles eventually receive the same institutional support as cluster-level circles, which are linked to teacher payments. More accountability is required for regular sessions. Teachers at small schools or whose director lacks the time or skills to organize such sessions may also need additional opportunities to connect with peers.

- **Technology can be useful, but connectivity and cost remain important issues to address.** Commonly used mobile technology, social media, and digital resources — like videos and audio clips — can effectively complement and reinforce other CPD. However, access to technology is far from universal in many low-income and rural contexts, and cost subsidization or alternatives like paper copies for all teachers may remain necessary for now.
- **“Fit to purpose” sequencing and timing are critical.** Teachers need CPD activities and materials at specific times for those activities and materials to be useful and mutually reinforcing. Both the instructional design and content of in-person and technology-supported remote CPD must address the specific needs of the target population. The sequencing of content and modalities requires careful planning (e.g., initial training followed by distance learning, then school-based learning circles, all with linked exercises). On-time distribution of print and digital resources is therefore critical.
- **School- and cluster-level educational leadership is essential to sustain new CPD practices.** The experiences in regions and areas that have continued CPD after the end of Lecture Pour Tous illustrate that leadership of local education office staff is a deciding factor. Local education leaders must set and communicate expectations for CPD participation to directors and teachers, monitor its implementation, and provide support. Preparing local leaders — and forging mutual accountability — is thus critical to the success

of CPD, particularly when new training components are introduced.

Questions for Future Consideration

The blended CPD model featuring multiple components of in-person and technology-supported remote learning provided opportunities for teachers and school directors to gain and reinforce instructional knowledge and skills while overcoming some challenges associated with large-scale workshops. Future efforts to provide CPD at a large scale in low-income country contexts can be improved through additional research and learning in the following areas:

- **Cost-effectiveness:** What modalities, or combinations of training activities, are the most cost-effective in different contexts in improving teacher practices and student learning outcomes? At what point would it be cost-effective to increase the amount of CPD provided via technology? What “dosage” of CPD activities and in what form (e.g., in-person or remote) is needed to improve teacher instruction and student outcomes as their needs change over time?
- **Institutional capacity, incentives, and strategic targeting:** What capacity must government entities and leaders have to organize and support quality blended CPD? What human resources or incentives are required for regular, effective CPD? What low-cost, accessible tools could help track individual teachers’ needs and, in turn, respond to them with differentiated CPD?
- **Support for self-directed learning:** What support and incentives would help teachers make the best use of technology-supported, self-directed modules and lead to behavior change? For example, what is the value added of complementary in-person group learning or the use of reference documentation to support teachers’ changing professional situations and need for differentiated learning?



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 included 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.

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ⁱ World Bank, (2018). *World development report 2018: Learning to realize education's promise*. World Bank. doi:10.1596/978-1-4648-1096-1.

ⁱⁱ Popova, A., Evans, D.K., and Arancibia, V., (2016). *Training teachers on the job: What works and how to measure it*. Policy Research Working Paper No. 7834. World Bank. <https://openknowledge.worldbank.org/handle/10986/25150>.

ⁱⁱⁱ McAleavy, T., Hall-Chen, A., Horrocks, S., and Riggall, A., (2018). *Technology-supported professional development for teachers: Lessons from developing countries*. The Education Trust.

^{iv} Shaffner, J., Glewwe, P., and Sharma U., (2021). *Why programs fail: Lessons for improving public service quality from a mixed-methods evaluation of an unsuccessful teacher training program in Nepal*. Working Paper. <https://ageconsearch.umn.edu/record/316663>.

^v Teachers and directors received modest per diem for the multi-day training workshops in keeping with MEN policy and rates and could only receive their full allowances if they attended cluster sessions. There are few incentives and little accountability for directors to organize school-level sessions.

^{vi} These data — and all others citing "EGRA/SSME 2021" — are from the 2021 Early Grade Reading Assessment (EGRA) and Snapshot of School Management Effectiveness (SSME) study conducted in Senegal by Lecture Pour Tous in a representative sample of schools in the six regions targeted by the program. Some of these findings are presented in the final study report: <https://dec.usaid.gov/dec/content/Detail.aspx?vID=47&ctID=ODVhZjk4NWQtM2YyMi00YjRmLTkxNjktZTcxMjM2NDByM2Uy&rID=NTk2ODg4>.

^{vii} Data from multiple surveys, interviews, and classroom observation were conducted in collaboration with the [Rapid Feedback Monitoring Evaluation, Research and Learning](#) initiative under the USAID Global Development Lab. Survey data includes hundreds of teachers across multiple regions. Interview and observation data came from a small, randomized sample in one region covering nine school director interviews, 46 teacher interviews, and 42 classroom observations.

