TECHNICAL GUIDANCE NOTE
IMPLEMENTING EFFECTIVE 1-1 SUPPORT

COACH TOOLS AND RESOURCES
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<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>doi</td>
<td>digital object identifier</td>
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<tr>
<td>EGRS</td>
<td>Early Grade Reading Study</td>
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<tr>
<td>ELOS</td>
<td>Brazilian institute focused on community-building</td>
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<tr>
<td>HIC</td>
<td>high-income country</td>
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<tr>
<td>LMIC</td>
<td>low- and middle-income country</td>
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<tr>
<td>MoE</td>
<td>Ministry of Education</td>
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<tr>
<td>NGO</td>
<td>nongovernmental organization</td>
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<tr>
<td>PL</td>
<td>Pedagogical Leader</td>
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<tr>
<td>RTI</td>
<td>Research Triangle Institute International</td>
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<tr>
<td>SD</td>
<td>standard deviation</td>
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<tr>
<td>TPD</td>
<td>teacher professional development</td>
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<td>TTL</td>
<td>Task Team Leader (World Bank Group)</td>
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Overview

Research consistently shows that teachers are the most important school-based factor for student learning (Hanushek and Rivkin 2010). Providing tailored, practical, focused, and ongoing 1-1 support to teachers through coaching has proven a promising way to facilitate teacher learning that leads to changes in teaching practices and student outcomes. Coaching is a form of professional development in which a pedagogical leader (PL) supports teachers through individualized feedback. Although evidence in high-income countries (HICs) (Kraft, Blazar, and Hogan 2018) and low- and middle-income countries (LMICs) (World Bank 2021) demonstrates that sustained 1-1 coaching can be effective, this effectiveness depends on the quality of support provided (Kraft, Blazar, and Hogan 2018).

This *Implementing Effective 1-1 Support* guidance note builds on the *Structuring Effective 1-1 Support* guidance note¹ by providing a review of recent empirical and theoretical research and practical insights on how PLs can provide high-quality 1-1 support to teachers in LMICs. The current note focuses on how PLs already in the system can support teachers via 1-1 coaching sessions. Here, “PL” refers to any individual who provides ongoing support to teachers. This role most commonly is filled by a coach. However, individuals with a variety of backgrounds can fill the role of PL, including specially trained master teachers, researchers, principals, pedagogical advisors, school support officers, and inspectors (Darling-Hammond, Hyler, and Gardner 2017).

The current note is informed by an evidence review of literature on teacher professional learning, coaching, and mentoring² with a focus on LMICs. This note is supplemented by evidence from HIC settings in which research from LMIC contexts was not available. First, ten K-12 coaching interventions in LMIC contexts were reviewed. These interventions were evaluated in randomized trials and reported effects on student learning outcomes and/or teacher practices, featured in the *Structuring Effective 1-1 Support* guidance note. To learn more about the 1-1 coaching sessions, a subsample of local implementers and researchers from six of the coaching interventions who led these studies and were available for follow-up were interviewed. Implementation tips and the coaching cycle (figure 1) featured in this note are drawn from these interviews and the original evaluation reports. In line with the “effectiveness- plus” approach (Snilstveit 2012), an additional qualitative-focused literature review was undertaken simultaneously to supplement the ten program evaluations with theoretical and empirical literature that illuminates how 1-1 coaching can be conducted in LMIC contexts and why particular coaching steps and activities matter. The qualitative review includes best evidence syntheses, critical and conceptual reviews, and in-depth qualitative empirical studies that examine the process of conducting coaching (see Appendix B for detailed methodology).

This note includes a high-level overview of the 1-1 coaching cycle, followed by a more detailed discussion of each stage of the coaching cycle. Case study examples and research-informed implementation tips are shared throughout to help policymakers consider how parts of the cycle can be operationalized in their contexts, depending on the levels of financial, material, and technological resources available and levels of structure provided to PLs and teachers.

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¹. The *Structuring Effective 1-1 Support* guidance note advises policymakers how to structure the delivery of ongoing support to teachers along a spectrum that varies depending on the PLs’ level of expertise and the support provided to them.

². Given the substantial overlap between coaching and mentoring, such as the importance of feedback and collegial reflection, literature on mentoring is included. However, PLs typically are education specialists who are not based in a particular school but periodically visit teachers and schools to conduct 1-1 coaching. In contrast, a mentor tends to be an experienced or senior teacher based in a school who provides regular collegial support to teacher mentees. This relational difference is notable. For example, PLs may develop and sustain rapport with teachers differently than would a school-based mentor. As such, this note draws primarily on coaching literature but integrates insights from mentoring literature in which relevant similarities in the roles exist.
**Highlights**

Coaching programs are designed to facilitate teacher learning and changes in teaching practices. Effective 1-1 support programs are based in the *Coach* program’s four research-based principles: Coaching should be **tailored,** **practical,** **focused,** and **ongoing.** During repeated 1-1 coaching sessions, PLs work individually with teachers to improve teaching practices and achieve specific professional development goals.

Coaching programs are designed with varying degrees of structure. Structure refers to guidance given to PLs on the frequency and/or order of observations and feedback sessions. Such guidance includes tools that help PLs observe, facilitate reflection, provide feedback, and record their interactions with teachers. The key difference among these programs is the capacity of PLs in the system. A highly structured support model entails the use of more structured teaching and coaching materials with which PLs have limited expertise. In contrast, a low-structured support model relies on PLs who demonstrate deep expertise in relevant pedagogical and content knowledge. Education systems with a limited supply of highly skilled PLs often start at the more structured end of the continuum of support and feedback and move toward increasingly autonomous and tailored models.

Although the pedagogical focus of 1-1 sessions may vary over time depending on a teacher’s needs and the program goals, 1-1 coaching sessions typically follow a repeated cycle and often will occur monthly over a school year. The coaching cycle presented below is a blueprint for each 1-1 support session. The cycle features a relationship-building foundation, followed by 7 steps that are repeated each time a PL provides 1-1 support to a teacher. This cycle is a general model of what happens during and between 1-1 coaching sessions as identified through a review of the literature and 6 programs. However, the cycle can be adapted and operationalized differently based on contextual needs.

**Figure 1. The Coaching Cycle**
Foundations: Relationship Building

A trusting and supportive coaching relationship rooted in shared goals, open communication, and clear expectations is critical to facilitate teacher learning and change. How this 1-1 relationship is established initially matters and sets the tone for the entire coaching intervention. Before the first 1-1 coaching session, PLs should consider how and when they will get to know the teachers whom they will support and how they can use those initial interactions to build a foundation of rapport and trust. The initial interactions also are an important time to identify and discuss teachers’ backgrounds, self-identified needs, and challenges; develop “ground rules”; set goals; and clarify roles and expectations. In these first interactions and throughout their coaching intervention, PLs should work to build rapport and serve as a mentor—not an inspector.

Step 0: Pre-cycle – Prepare

Before conducting the 1-1 coaching sessions, the PL should review previous observation data, the teacher’s goals, and any additional relevant data related to the teacher’s learning and development plans. The PL then should brainstorm 1-2 areas on which a teacher could focus in the 1-1 session. Planning and preparing will help the PL focus closely and thoughtfully on the teacher’s real-time practice and learning, and less on logistics. These priorities will ensure that each teacher receives the PL’s full attention and highest quality of focused support during each 1-1 coaching session.

Step 1: Check-in

To build on and sustain the rapport and confirm plans for the 1-1 coaching session, the PL should briefly connect with the teacher before observing the teacher’s lessons. Check-ins are a brief, yet critical, moment in the coaching cycle. Check-ins enable the PL to gather relevant information and updates that might influence the focus of the 1-1 session or classroom observation; identify the teacher’s needs, challenges, or concerns faced in their teaching practices; and review shared goals for the classroom observation and 1-1 session. If a short, in-person check-in is not possible, the PL can call, email, or SMS the teacher a few days before the first 1-1 session.

Step 2: Observe

To understand what’s happening in the classroom and inform the focus of 1-1 debrief and practice sessions, PLs observe their teachers’ classrooms. These observations offer a foundation that PLs can use to discuss specific practice problems that teachers face. The observations can serve as a starting point to address challenges in a contextually appropriate way. When PLs are unable to conduct in-person classroom observations, classroom video recordings can be used. Teachers can send videos of their instruction so that PLs can provide feedback remotely. Regardless of whether the observation happens in person or remotely, classroom observation tools help PLs tailor their feedback and focus on specific skills that the teachers are expected to improve.

Step 3: Reflect

Directly following a classroom observation, the PL meets individually with the teacher for reflection and dialogue. The reflection portion of the cycle is a critical period for PLs to support teachers’ thinking and insights on their own practices. PLs help the teacher reflect on the observed lesson by “slowing down,” and carefully examining and noticing their own practice and how it affects students’ learning. PLs can use a variety of classroom data to facilitate reflection including observation notes, videos of the lesson, and/or student work or learning data.

Step 4: Feedback

PLs provide feedback to teachers. Before providing their feedback, PLs should make the structure for feedback explicit to teachers so that the latter know what to expect, such as how much feedback will be given and when they can ask questions and discuss specific areas of feedback. PLs first should provide positive feedback before introducing more constructive feedback. After identifying positive feedback, PLs should prioritize 1 or 2 areas of feedback for improvement. Before translating the feedback into applied practice, PLs should provide time for teachers to discuss and reflect on the feedback.
Step 5: Practice
Effective coaching requires teachers’ active engagement with, and application of, new learning and strategies. One of the best ways to actively engage teachers in their learning is through real-time practice. This practice must be deliberate, that is, a PL facilitates specific, ongoing efforts to help the teacher master a new skill. High-quality feedback is integral to this process. The PL guides the teacher on how to learn or try new techniques by first breaking down complex behaviors into specific steps. PLs model these specific steps for teachers—either in 1-1 debriefs, or if time and resources allow, in a follow-up live classroom lesson. Throughout the process of modelling, feedback, and practicing, a PL is challenged with providing ample support to ensure that their teachers understand the topic while slowly shifting the responsibility to the teacher.

Step 6: Set Goals
At the end of the 1-1 session, PLs and teachers should revisit the goal for the 1-1 session and decide whether they want to keep working toward that goal for the next session or adjust it. They might adjust it based on insights from the observation (including any changes documented in observation sheets/rubrics over time), reflection, feedback, and practice sections of the 1-1 cycle. Whether they decide to keep, amend, or develop a new goal, setting clear, attainable goals that the teacher can work toward in independent practice and future 1-1 sessions is critical to deliberate practice and improvement. Before leaving the 1-1 session, PLs should log agreed next steps, including the time and date for the next 1-1 session, and discuss with teachers when they will apply the practices covered in the session.

Between Sessions: Ongoing Skills Application
After each 1-1 session, teachers engage in ongoing practice and reflection individually, and—depending on material, technological, and capacity resources—collaboratively with colleagues and school leaders. In some contexts, PLs can maintain light-touch digital and remote support to teachers between 1-1 sessions by answering questions and reviewing teacher practice or reflections via SMS, phone call and/or email. These ‘in-between’ activities are critical to sustaining teacher learning, deepening change, and influencing student learning.

The Coaching Cycle in Detail
The following sections take a more nuanced look at the coaching cycle including how PLs can build the foundation of the coaching relationship and facilitate each step of the 1-1 coaching session with specific research-supported actions. The note then describes how teachers can continue to deepen their learning through regular practice and reflection between each 1-1 session. Each phase of the cycle and its corresponding strategies are underpinned by the four Coach guiding principles. Coaching should be (a) tailored to teachers’ needs; (b) based in active learning, reflection, and deliberate practice; (c) focused on specific professional development goals and skills; and (d) repeated over time with frequent cycles of observations, feedback, and support.

Foundations: Relationship Building
A trusting and supportive coaching relationship rooted in shared goals, open communication, and clear expectations is critical to facilitating teacher learning and change. How this 1-1 relationship is initially established matters and sets the tone for the entire coaching intervention. Before the first 1-1 coaching session, PLs should consider how and when they will get to know the teachers they will support, and how they can use those initial interactions to build a foundation of rapport and trust.

Programs often include an in-person training, ranging from a half-day to a week or more, in which PLs lead professional development workshops with a group of teachers before providing 1-1 support. In-person training can help PLs and teachers to establish familiarity and collegial relations in the comfort of a group setting before engaging in individualized feedback and practice sessions (Bean 2014). Other programs may assign PLs to schools and
teachers with whom the PLs have existing relationships based on previous professional development programming. In these situations, PLs may want to reflect on the existing relationships to determine the extent to which additional relationship-building is needed before starting the 1-1 coaching sessions.

Regardless of when and where the initial meeting takes place, the first PL-teacher meeting provides opportunities to:

- Discuss and clarify roles and expectations
- Discuss relevant experiences, motivations, and challenges that might influence the focus of the 1-1 coaching session
- Identify teachers’ self-identified needs, challenges, or any pressing concerns faced in their teaching practices
- Develop strong rapport, open lines of communication, a shared ethos, and agreed “ground rules,” or ways of working together
- Review and/or set preliminary shared goals for the first 1-1 coaching session.

**PLs should serve as a mentor, motivator, and confidant—not an inspector.** For teachers to engage in a vulnerable process of change that often includes overcoming fear, taking risks, trying new practices, making mistakes, and being open to and incorporating feedback, it is essential that they feel well supported and safe with their assigned PL (Also from 2018; Cilliers and others 2021; Keiler and others 2020; Orr and others 2013). PLs who serve as trusted mentors can enable teachers to feel comfortable in reflecting on their practice, asking questions, and receiving feedback. These PLs enable teachers to grow, resulting in tangible benefits for students’ learning (Cilliers and others 2021; Kotze, Fleisch, and Taylor 2019; Sider 2018). If PLs are simultaneously tasked with the roles of both coach and evaluator or inspector, the coaching relationship can be undermined by role confusion. Moreover, when teachers receive excessive amounts of directive feedback, they feel scrutinized instead of supported, thus eroding rapport and trust (Castanheira 2016).

**PLs should explicitly communicate their role as “mentors” to teachers and establish this distinction early in the relationship.** Knowing the PL is a supportive colleague and resource, rather than an inspector or evaluator, can help to soothe any initial hesitation or discomfort that teachers may feel about being observed or receiving feedback (Also from 2018). Explicitly distinguishing their roles as mentors only also helps PLs to establish clear roles, set expectations, and cultivate an ethos of learning and collaboration within the 1-1 coaching cycle.

**In their first interactions, PLs can develop a foundation of rapport by identifying shared experiences and goals with teachers and opening lines of communication** (Castanheira 2016). Engaging in a relaxed, open-ended conversation about general teaching motivations, goals, and experiences can help

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**IMPLEMENTATION TIP**

PLs can build rapport by asking probing questions about teachers’ professional interests, motivations, and values. For instance, PLs may ask:

- Where are you from? How did you get into teaching?
- What do you like to do outside of work?
- What do you enjoy most about teaching?
- What is the most difficult aspect of your job?
- What do you hope to get better at in your teaching?
- What do you wish you could change in your classroom?
- What other professional development experiences have you had?
- What did you find most valuable in those other experiences?
- What was most challenging?

PLs also can ask questions to identify collective school norms (shared among the teaching staff and leaders) and assumptions about the school’s students. For instance:

- What are your students like?
- Can you tell me more about your school culture and your students’ backgrounds?
- What is it like to be a teacher in your school?
- How do you work with your colleagues?
- How would you describe the school’s culture?
identify areas of commonality and communicate a nonjudgmental, non-evaluative atmosphere that facilitates trust, safety, teacher motivation for growth (Kotze, Fleisch, and Taylor 2019), and a collegial connection (Kennedy 2016).

**PLs can establish norms of open communication with teachers by asking questions and listening attentively.** Asking questions demonstrates care and a desire to listen to teachers and take their perspectives and experiences seriously (Alsofrom 2018). Taking time to ask thoughtful introductory questions also can help PLs become aware of any insecurities or feelings of inadequacy that teachers may be experiencing at the start of a new professional learning experience (Kotze, Fleisch, and Taylor 2019). PLs can use this information to tailor their feedback and help teachers see feedback as an opportunity to grow, feel comfortable being vulnerable, and embrace support to shift their instructional practices (Alsofrom 2018). Ultimately, creating open lines of communication focused on listening and understanding each other can help both the teacher and PL feel comfortable when engaging in reflective, constructive, and critical dialogues in the 1-1 coaching sessions (Kho, Khemanuwong, and Ismail 2020) (Spotlight 1).

**PLs should take time to identify and discuss the teachers’ professional learning needs and establish or review a general focus for the 1-1 coaching cycle.** Ensuring that teachers’ professional needs are acknowledged and incorporated in coaching sessions can help teachers notice how coaching helps them address a practical challenge—an important feature of effective teacher professional development (Edwards, 2010; Gibbons and Cobb 2017; Kennedy, 2016). Gathering insights on each teacher’s needs before starting the 1-1 cycle also can help to inform and establish a cycle of “deliberate practice” within the coaching cycle. Deliberate practice is a particularly powerful professional development activity in which feedback and training are targeted to the teacher’s current capability and well-scaffolded for continual improvement (Ericsson and Harwell 2019; Ericsson, Krampe, and Tesch-Römer 1993). A PL can replicate the benefits of deliberate practice by using this preliminary discussion of needs and goals to start determining how and in which areas a teacher can improve in a short time.

In low-structured programs, in which a focus has not been pre-set by the intervention and the PL and teacher can flexibly focus on the 1-1 coaching intervention, PLs can facilitate a dialogue with the teacher to identify the most salient professional learning needs. In highly structured programs, although the focus of the 1-1 session may be pre-set, PLs can remind the teacher of the coaching focus area and ask questions to help the teacher reflect on the ways that the focus area addresses a challenge they face in their classrooms. Helping teachers to see that the coaching focus area addresses a problem of practice is especially important because when teachers do not see the relevance of an initiative, over time, they may lose motivation and disengage (Kennedy 2016). PLs can support teachers to see how the pre-set focus area is relevant by prompting teachers to consider how the focus of the 1-1 intervention could play out in their own classrooms, based on their teaching experiences and understanding of classroom activities, students’ needs, and cultural norms (Bean 2014).

**After discussing professional learning needs and the 1-1 cycle focus, PLs should communicate clear expectations of how the 1-1 coaching cycle will be facilitated,** such as the role that PLs will take during classroom observations and how and when PLs will provide feedback and support (Bean 2014). Letting teachers know from the beginning if and when PLs will report their findings from classroom observations to principals, school administrators, or other teachers is essential to mitigate surprises and any potential risks to the teachers that could accompany their trying new innovations. Expectations for teachers, such as the need to practice and reflect independently between 1-1 sessions, also should be made explicit to ensure teachers understand the importance of their agentic and active role (Darling-Hammond, Hyler, and Gardner 2017).

**PLs and teachers also should co-create shared norms—or ‘ground rules’—for how they relate to one another throughout the coaching cycle and for how they engage in reflective and constructive discussions.** The importance of developing shared discussion-based and relational norms is based in extensive rigorous research on student learning (Mercer, Dawes, and Kleine-Staarman 2009). This research base can inform PLs efforts to support teacher learning (Bakkenes, Vermunt, and Wubbels 2010). PLs can develop shared norms with teachers by explicitly discussing the ethos, or quality and dynamic, of the relationship that they would like to cultivate (Alexander 2020). For example, PLs and teachers may want a respectful, open, reflective, encouraging, and growth-oriented ethos. PLs then can work with teachers to brainstorm shared norms about how they can work together to bring this ethos to life. Brainstorming could come up with “We listen carefully to one another”; “We give one another time to think”; or “We share our perspectives but also are prepared to modify our perspectives in light of one another’s questions and comments.” PLs and teachers can draw on these agreed
“ways of working” throughout the 1-1 coaching intervention to cultivate their desired ethos, especially during any moments of debate or disagreement. Both PLs and teachers also can refer to the ground rules throughout the coaching cycle and partnership to regularly review that both parties are following the norms they agreed together.

While setting strong foundations for the 1-1 relationship is important, equally important for PLs is to continuously deepen rapport at each stage of the 1-1 coaching cycle. Each interaction between the PL and teacher creates opportunities for connection, learning, and growth. Strategies for taking advantage of each interaction and sustaining a strong relationship are integrated throughout the following discussion of the coaching cycle—from the first check-in moment to the classroom observation, reflective 1-1 debrief, and shared and independent practice.

<table>
<thead>
<tr>
<th>SPOTLIGHT 1. Breaking the Ice and Building Rapport: Getting to Know Teachers</th>
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<tr>
<td>When PLs take the time to get to know teachers as individuals and professionals, PLs can foster a foundation of rapport and learn highly relevant information about teacher, school, and local norms (Kent, Kochan, and Green 2013). This information can significantly influence how PLs lead 1-1 sessions and support teachers to change their practice. Local assumptions and beliefs about teaching and learning affect what is viewed as “normal” and acceptable practice by classroom teachers, students, parents, and other stakeholders. For individual teachers change often is difficult because these norms, assumptions, and beliefs are well established and widely held, but, due to their familiarity, are commonly unconscious and unspoken. Encouraging teachers to make these norms explicit early in the relationship can help PLs understand how existing norms function as either facilitators or barriers to change. Bringing these norms to the surface also can inform how PLs facilitate the 1-1 coaching cycle to ensure that change is substantial and sustained (Hofmann and Ruthven 2018). PLs can start the conversation and get the most out of these initial connections by:</td>
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<tr>
<td>✔ Introducing themselves and sharing information about their personal and professional backgrounds.</td>
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<td>✔ Asking probing questions about teacher’s professional interests, motivations, and values.</td>
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<tr>
<td>✔ Asking probing questions to identify collective school norms (shared among the teaching staff and leaders) and assumptions about the school’s students, such as the extent to which students’ learning capabilities or talents are “fixed” or can be improved (Jackson, Gibbons, and Sharpe 2017 Patrick and Joshi 2019). These norms are known to influence current teaching practices and the extent to which teaching practices can be improved (Rainio and Hofmann 2021). PLs’ asking about these school norms can develop rapport and provide important information to guide 1-1 sessions.</td>
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<td>✔ Using legitimization strategies when asking probing questions, such as “Some other teachers have found it difficult to implement new practices after professional development workshops.” These kinds of statements make it easier for teachers to share both the strengths and challenges they may experience in their professional lives and can counteract teachers’ desire to respond to questions in a way that will be viewed favorably by the PL or others (Häßler, Hennessy, and Hofmann 2020).</td>
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<tr>
<td>✔ Identifying shared interests, experiences, or values that emerge from initial introductions and conversations.</td>
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<td>✔ Explaining the role of the PLs, emphasizing that they are there to support the teachers, not inspect or punish them.</td>
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<td>✔ Introducing the ideas underpinning a growth mindset (Spotlight 2), thus emphasizing that the PLs’ objective is to help teachers grow and that mistakes are part of learning.</td>
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Step 0: Pre-cycle — Prepare

PLs should come prepared to each coaching session. Before conducting a 1-1 coaching session, PLs should review previous observation data, the teacher’s goals, and any additional relevant data related to the teacher’s learning and development plan, and brainstorm 1-2 areas on which the teacher could focus in the 1-1 session. Planning and preparing will help the PL focus more closely and thoughtfully on the teacher’s real-time practice and learning, and less on logistics. This approach ensures that a teacher receives the PL’s full attention and the highest quality of focused support during each 1-1 session. While the PL’s planning and ideas for skill improvement may help guide the 1-1 session, s/he should remain flexible and ready to adapt if the teacher’s needs appear to be vastly different or if the educational context has shifted substantially since the previous visit. Being responsive to the local environment and to the teacher can strengthen rapport and help the teacher see the 1-1 support as relevant to his or her needs and priorities, further motivating the teacher’s learning and growth (Edwards 2010).
A key component of preparation is planning. The allotted planning time may vary, depending on how familiar the PL is with the teacher’s progress. At the beginning of the coaching cycle when a PL is less familiar with the teacher, the PL may spend more time preparing for the 1-1 session (for example, 30 minutes). Once in the cycle, a PL may need less time as the PL’s familiarity increases and areas that need skill development are clear. Alternatively, if a PL is using technological resources, such as tablet-based monitoring and data tracking systems in highly structured programs, preparation and planning may be less time consuming because the resources provide clear areas needing skill development based on previous teaching data from classroom observations.

**Step 1: Check-in**

At the start of the 1-1 session and before observing, providing feedback to, or practicing with teachers, PLs should strive to connect with teachers, even if briefly or digitally via SMS or phone call (Sailors and Price 2015). Check-ins can help PLs to:

- Gather relevant information and updates that could influence the focus of the 1-1 session or classroom observation
- Identify teachers’ needs, challenges, or any pressing concerns faced in their teaching practices
- Review and/or set shared goals for the classroom observation and coaching session.

The PLs should take a few moments before each 1-1 coaching session to discuss teaching and learning topics and ask general questions, which shows that the PL intends to listen and cares about the teacher as a colleague and individual. If there is no time to meet briefly before the classroom observation, this dialogue can happen via SMS or phone call the day before the 1-1 session. This quick check-in can create a space for a natural conversation that sets the tone for the 1-1 session and builds rapport (Kho, Khemanuwong, and Ismail 2020). The check-in also is an opportunity for the teacher to share updates that may influence the focus or flow of the 1-1 session, such as a need to end class early to accommodate a period allocated for student examinations. The teacher also could share information from her or his personal life that could affect energy level and overall teaching. The PL can take these factors into account to provide a supportive, relevant 1-1 coaching session that meets the demands and realities of the day-to-day school environment.

The PL can use the check-in to follow up and clarify the teacher’s professional learning needs for the 1-1 session. Refreshing the PL’s understanding of the teacher’s needs before the classroom observation can help the PL refine what s/he will pay attention to during the observation so that feedback, skill development, and areas for deliberate practice reflect the teacher’s priorities and needs (Edwards 2010; Ericsson and Harwell 2019).

After reviewing the teacher’s needs, the PL should review topics from previous coaching cycles, such as specific techniques that the teacher planned to practice between coaching sessions. This review provides an opportunity for the teacher to share any progress made and remember and reflect on previous topics, which can strengthen and sustain new learning (Thomas, Knowland, and Rogers 2020).

The PL then works with the teacher to review a shared goal (or set a shared goal if one was not agreed in a previous 1-1 session) and cultivate a positive mindset to target an instructional change, based on the teacher’s identified needs and the review of previous topics. Restating and/or establishing a goal and focus for the teacher’s classroom observation as well as the

**IMPLEMENTATION TIP**

In the virtual arm of the South Africa study, the PL is given a tablet to provide remote support to teachers. The tablet provides the means for the PL to check in with teachers more frequently than in-person visits via WhatsApp. The PL uses the tablet to schedule the coaching session calls so that teachers can plan accordingly. To keep track of all the teachers for whom the PL is responsible, the tablet assists the PL in creating an individual profile for each teacher and categorizes the teacher as green, orange, or red based on his or her capabilities. This categorization helps the PL structure each conversation with the teacher.

*South Africa Reading Activity II*
positive mindset are important to ensure that the 1-1 session has a constructive purpose. In these moments, the PL can set the tone for the 1-1 session and influence the teacher’s attitudes toward growth and the extent to which the teacher feels comfortable and confident trying new practices and learning from errors (Thomas, Knowland, and Rogers 2020). When the PL acts as a “champion” who encourages the teacher and genuinely believes in the teacher’s potential for growth, the PL helps the teacher stay motivated and focused on the goal at hand (Kotze, Fleisch, and Taylor 2019).

**SPOTLIGHT 2. Cultivating Positive and Growth-Oriented Mindsets in Teachers**

Individuals who believe their talents can be developed and continuously improve have a growth mindset. Those who believe their talents are innate and limited have a fixed mindset. Those with growth mindsets tend to achieve more than those with more fixed mindsets. Some research shows that mindsets can predict motivation and achievement (Dweck 2006; Zeng and others 2019). The extent to which a school community or education system views talent as acquired or fixed may directly affect teachers’ beliefs and motivations (Hanson, Ruff, and Bangert 2016) and, as a result, influence teachers’ agency, effort, and openness to change (Rainio and Hofmann 2021). PLs can help cultivate a growth mindset in teachers (Seaton 2018) through all steps in the coaching cycle by:

- Identifying and explicitly discussing local institutional beliefs about teachers, learning, capabilities, and the wider teaching community
- Encouraging teachers to see themselves as learners, reinforcing that they are capable of improvement, and reminding teachers how far they have come in their learning journey
- Praising teachers not only for how well they do but even more so for the effort that they have put into improving their practice
- Reminding teachers that they are capable and can exercise agency for growth and improvement within their professional practice
- Providing opportunities—in trainings and in day-to-day teaching—for teachers to try new practices and make mistakes
- Allowing teachers to constantly reflect on their practice, reminding them that making mistakes is a part of the process, and encouraging them to learn from mistakes
- Providing teachers with opportunities to set goals and choose where to focus their energy, based on where they are struggling most
- Assessing teachers’ performance based on effort rather than solely on outputs.

**Note:**

See this video, which provides an actionable example of how PLs can promote a growth mindset with their teachers.

**Step 2: Observe**

PLs observe their teachers’ classrooms to inform the focus of 1-1 debrief and practice sessions. These observations offer a foundation from which PLs can discuss specific problems of practice that individual teachers face, as a starting point to address challenges in a contextually appropriate way (Kotze, Fleisch, and Taylor 2019; Orr and others 2013). Classroom observations can help PLs to:

- Outline behavioral expectations for teachers based on a shared vision of what effective teaching entails
- Focus observations on the most relevant aspects of classroom learning that have been identified with teachers during check-ins
- Focus the feedback that they provide to teachers
- Keep feedback from becoming too personal
- Indicate areas of improvement to facilitate goal-setting at a school and classroom level (Bruns, Costa and Cunha 2018).
PLs use classroom observation tools during observation sessions. Classroom observation tools help PLs to focus on specific teaching and learning behaviors and actions the teacher is expected to change (Spotlight 3). These tools also can help teachers develop their shared language and understanding of what effective teaching entails. Some teachers have shown to intuitively understand and monitor effective aspects of their practice, but they may have difficulty articulating these practices (Hofmann, Ilie, and Curran 2020). Observation tools can help teachers overcome this challenge when PLs review these tools with teachers prior to the observation and/or during the subsequent 1-1 debrief. The tools then become a stimulus for reflection to help teachers explicitly discuss aspects their practice as well as the overall learning and change efforts (Bracq, Michinov, and Jannin 2019).

In highly structured programs, observation tools tend to be simplified, for example, PLs focus on specific aspects of the intervention, such as monitoring the use of teacher’s guides (Bean 2014; Sailors and others 2012). This specificity can be especially important for PLs who have limited experience conducting observations and providing feedback. In low-structured programs, PLs use more open-ended observation tools that can be adapted to focus feedback on the teachers’ needs. Here, PLs draw from check-in discussions and previous 1-1 sessions in which individual teachers and PLs established a shared focus or goal (Kho, Khemanuwong, and Ismail 2020). PLs and teachers then can engage in joint problem-solving to focus observations based on the agreed shared goals, such as focusing on a specific aspect of a lesson (Kennedy 2016).

When PLs are unable to conduct in-person classroom observations, classroom video recordings can be used to provide remote feedback. When PLs are unable to conduct in-person visits, teachers can send videos of their instruction so that PLs can provide feedback remotely. In the Un Buen Comienzo program, teachers send a video of a full-length lesson to the PL. The PL watches the video and uses a classroom observation tool to jot down observations of the teacher’s instruction that is shared with the teacher. In the Ceará Teacher Feedback and Coaching program, this remote feedback-sharing was carried one level up in which PLs videotaped themselves giving feedback to teachers and sent the videos to their master trainers. Using this video footage, the master trainers provided written feedback to PLs ahead of their quarterly video-call meetings. This written feedback provided the basis from which master trainers structured advice to PLs on how to facilitate stronger 1-1 support sessions with their teachers.

### Spotlight 3. Tips for Conducting Classroom Observations

The first step to improve the quality of teacher-student interactions is to measure it. At a system level, policymakers should use the findings from classroom observation tools to monitor the quality of teacher-student interactions through their national information systems. To do this at scale, policymakers should use tools that are psychometrically validated and content-validated, meaning the tools have been tested and found to (a) actually measure what they are designed to measure and (b) measure all aspects of the practice or behavior. For example, a tool captures all the different ways that a teacher facilitated students’ critical thinking, not just whether teachers asked students open-ended questions. Validated tools typically include an observation sheet to score teachers’ behaviors and a complementary manual that describes the tool’s components in detail.

Before PLs conduct observations, they should be trained on how to conduct observations using the tool and pass a certification examination to demonstrate their understanding. Typically, the training involves using videos of local teachers to practice the observation protocol. After passing the exam, PLs conduct observations as part of the coaching cycle, following the protocol established by the policymakers. When PLs conduct an observation, they should:

- Provide details about when and how often they will be observing and providing feedback to teachers
- Reiterate that the classroom data will be used solely for supportive, and not for evaluative, purposes
- Introduce the observation tool by showing the teacher the tool and explaining what each component measures, including how the data from the tool inform the coaching session
- Show the teacher an agenda for a coaching session and explain what the teacher will be doing
- Answer any questions or concerns the teacher may have about coaching.

**Note:** See this book, which offers practical guidance for improving observer training, assessment, and monitoring.
Step 3: Reflect

Directly following a classroom observation, the PL meets with the teacher for reflection and dialogue in a 1-1 debrief. The reflection portion of the 1-1 debrief is an opportunity for the PL to:

- Facilitate the teacher’s reflection by “slowing down” to carefully notice and examine her or his own practice
- Develop teachers’ thinking, insights, and understandings of their practice, their students, and strategies to improve classroom teaching and learning
- Utilize a variety of classroom data including observation notes, videos, and student data to stimulate further reflection, support teacher learning, and identify specific areas for growth.

At the start of the 1-1 debrief, PLs help teachers reflect on the observed lesson. PLs can facilitate reflection by asking questions about teachers’ experiences, thinking, and decision-making processes during the lesson and about their perceptions of what went well and what could be improved. By examining what happened in the observed lesson, teachers can identify and analyze connections among their experiences, challenges, needs, feelings, and beliefs (Avalos 2011; Clarke and Hollingsworth 2002; Korthagen 2017). Reflection can lead to new insights and is a critical part of teacher learning and behavior change (Cordingley and others 2015; Copur-Gencturk and Papakonstantinou 2016; Brodie, Lelliott, and Davis 2002). Facilitating and opening space for teacher reflection also enables teachers to engage with their professional practice differently (slow down, gain a slight distance) compared to their day-to-day teaching environments (often stressful, quick with little time for reflection) (Hobbiss, Sims, and Allen 2021). By slowing down during reflection, PLs can help teachers identify what they can control and change and create opportunities for them to exercise agency in choosing the areas that should be improved (Kho, Khemanuwong, and Ismail 2020). Finally, PLs can cultivate common ground with teachers through reflective discussion before going into detailed feedback, which can help teachers be more receptive to feedback (Kho, Khemanuwong, and Ismail 2020).

Although critical to teacher learning, reflection is a skill that can take time to develop. In some cultures, norms for critical reflection within one’s education (Koosimile and Suping 2011) and workplace are uncommon (Akyeampong 2002). Furthermore, knowledge is seen as “fixed,” making it difficult to look at oneself or one’s practice with constructive critique. As such, PLs may need to be aware of “big-picture” norms of professional reflection, as well as the different ways those norms and beliefs about reflection manifest in a particular school setting (Rainio and Hofmann 2021). PLs can support teachers who are less used to, or comfortable with, reflection by establishing a ground rule that when reflecting on a lesson, teachers are not allowed to use the word “okay.” Instead, they are asked to use more descriptive language or vocabulary provided by the PL. For instance, in the South Africa Early Grade Reading Study (EGRS I and II), PLs are encouraged to use probing “why” and “how” questions as tools to facilitate meaningful reflection.

Some research shows that teachers tend to reinforce or strengthen their current assumptions or practices when reflecting on their practice—even when reflecting on instances in which they have successfully trialed new teaching practices (Rainio and Hofmann 2021). For example, after successfully using a new group activity to facilitate student collaboration, discussion, and critical thinking, teachers may reflect, “The kids talked a lot, shared some ideas, and seemed to enjoy the activity—more than I expected actually...but ultimately when the talking gets too loud, it becomes distracting so they don’t really learn or focus.” In such an instance, the teacher sees and is surprised by how the new practice had value, but the teacher also draws on existing assumptions (“too much noise is not conducive to learning”) to justify not using the new practice in the future. To overcome this tendency, PLs should slow down, spend time examining any surprises or unexpected events from teachers’ experiences trialing new practices, and help teachers to use these surprises to question or challenge their current assumptions and beliefs. PLs also should...
encourage teachers to avoid rushing to quick solutions where they face problems and instead actively reflect on any concerns and draw attention to contradictions that come up. These contradictions between teachers’ assumptions and actual experiences can be used to generate change in teachers’ beliefs and develop relevant solutions (Rainio and Hofmann 2021; Louie 2016).

In highly structured programs, reflection can be facilitated with guiding questions and debrief templates that help teachers first describe, evaluate, and analyze their classroom teaching experience and next steps (Gibbs 1988). In Namibia, structured reflection templates have been shown to deepen teachers’ reflective capabilities and practices (O’Sullivan 2002). In slightly less structured programs, such as the OER4Schools, a professional development initiative in Zambia, researchers found that guided reflection led by a PL enabled “quality conversations” (Wallace 2003) and allowed teachers to notice in their beliefs and practices contradictions that were not problematic and created possibilities for change (Hennessy, Haßler, and Hofmann 2016). Notably, the guided reflection helped teachers direct their attention to what students were doing, understanding, and learning. Focusing on students’ participation and learning can help refocus teachers’ growth, learning, and efforts to change on the goal of improving student learning (Barber 2021).

**PLs can use inputs from student data to focus teachers’ reflections on students’ needs and how the teachers’ actions directly affect students’ learning** (Bean 2014). Drawing on additional sources of information also can offer a more complete picture of the lesson and stimulate a focused discussion on the teachers’ actions and students’ misconceptions, helping teachers to notice where students may be struggling and how the teachers can change their practice to address student misunderstandings (Barber 2021). Some highly structured programs provide PLs with sample student work and scripts to facilitate conversations in which PLs identify gaps in student understanding. In low structured programs, PLs can use student learning data from the teachers’ lessons to better focus on a specific problem of practice or to investigate new areas for teacher growth (Gibbons and Cobb 2017). For example, in the Teaching at the Right Level (TaRL) program, PLs support teachers to examine student performance on rapid, formative assessments of basic literacy and numeracy skills. Examining this rapid, formative assessment data can help teachers and PLs identify how to adapt and improve teachers’ instructional practices to be more appropriately targeted toward student learning needs (Banerji and Chavan 2016).

**Classroom video recordings can be used to facilitate reflection by replaying what happened in the classroom.** PLs and teachers can view a video of the lesson to provide an objective view of teachers’ practice immediately after a lesson to reduce the strength of emotional responses that can come during and immediately after a lesson (Roth and others, 2007). PLs also can use videos of teachers’ instruction to help teachers reflect on, analyze, and discuss specific aspects of their lessons through a new or different “lens” to help teachers ultimately see their practices differently and identify ways to change their practices (Allier-Gagneur and others 2020; Borko and others 2008; Hollingsworth and Clarke 2017; Power and others 2019). Viewing videos of their own lessons also can help teachers feel greater ownership of and responsibility for their learning and improvement and more receptive to feedback from others (Hollingsworth and Clarke 2017).

PLs should ask for teachers’ consent before recording the teachers’ instruction during the classroom observations. Moreover, to maintain trust and rapport, the recordings should not be shared with colleagues or school leaders without obtaining each teacher’s permission to do so. If teachers are unsure about being recorded, PLs can describe some of the benefits of video recordings (Spotlight 4) to reassure teachers that the videos will be used only for reflection and their personal learning purposes.
Video-stimulated reflection is a well-established tool to stimulate teachers' reflections and reasoning and support their growth and practice (Allier-Gagneur and others 2020; Geiger, Muir, and Lamb 2016; Hennessy and Deany 2009; van Es and Sherin 2008).

Specifically, using videos during 1-1 reflections can enable the quality of teachers’ reflections to become more:

- **Specific and content-focused.** A study in Turkey found that video-based reflections helped teachers to focus more closely on specific content-focused teaching practices, such as how to better facilitate students’ understandings of a mathematical concept, rather than focusing on generic teaching practices (Ulusoy 2020).

- **Student- and learning-focused.** Video-based reflection can help teachers see and notice how their practices directly affect students’ participation and learning through concrete examples. PLs can use such concrete examples to keep teachers’ reflection focused on students’ needs and learning, making it easier and less emotional for teachers when considering ways to improve their practices. When teachers practice reflecting on students’ learning during 1-1 debriefs, they can become more attuned to student capabilities, misunderstandings, and needs during future lessons, creating opportunities to adjust their practice in real time to support student learning (Barber 2021; Tan and Towndrow 2009).

- **Observant and insightful.** Video-based reflections have been shown to help teachers slow down and view their own practice from an objective or “outsider” position. This process helps teachers to notice, examine, and question aspects of their practice that they typically might take for granted or assume cannot be changed (Mbhiza 2019). This process of close observation can help teachers see differently and generate new insights and learning about their teaching.

- **Change- and action-oriented.** Ultimately, when teachers generate specific, learning-focused observations and insights from watching their own teaching, they can develop, envision, and enact new, concrete ways to improve their teaching practices (Mbhiza 2019).

### Recording a Lesson and Video-Based Reflection: Step by Step

1. The PL should quietly record a lesson by placing the camera in a safe and stable area of the classroom that captures the teacher’s activities as well as some student interactions. PLs should check the view of the camera before starting the lesson to ensure that the recording captures key people and activities. The PL and the teacher also may agree before the lesson to record only the portion of the lesson that is the focus of the 1-1 coaching cycle. Alternatively, the teacher can record the lesson and send it to the PL, who can provide feedback remotely. To do so, the PL would follow these same steps.

2. After the lesson but before viewing a video recording of the lesson, the PL and the teacher should engage in a few minutes of warm-up reflection questions and discussion, such as:

   - “How was the lesson for you? What went well? What moment do you feel proud of? What moment do you think you could do differently next time?”

3. The PL and the teacher discuss and agree on a portion of the recording that they would like to watch based on the initial reflection. The PL and teacher watch the video recording. Videos can be watched straight through; or they can be paused periodically at key moments so that the PL and teacher can discuss and reflect on specific actions or activities.

4. After viewing the video, the PL and teacher can use a blank observation tool to take notes and score the video together, identify a key moment to re-watch and discuss step-by-step, and/or elaborate on their initial reflection. The PL can use prompting questions to guide and deepen the teacher’s reflection when watching and reflecting on the video, such as:

   - “Can you tell me what you were thinking in this moment? What influenced your decision to do x?”

   - “What do you think you did well in this instance? Is there anything you would change next time? Why or why not?”

   - “How did students react when you did x? Did that surprise you? Why?”
Step 4: Feedback

Following reflection and discussion, the PL provides the teacher with specific feedback—or suggestions, actions, and strategies to improve her/his practice. Providing feedback is a critical part of the coaching process and must be facilitated with care and attention to maintain relationship rapport, trust, and respect. When constructively led, the feedback portion of the 1-1 session enables the PL to:

- Highlight areas of success and areas for growth
- Ensure that reflection and discussion are oriented toward action and improvement
- Provide specific, tailored, practical, and actionable guidance to help the teacher’s growth
- Support the teacher to focus on 1-2 areas for immediate practice and improvement.

After facilitating teacher reflection, PLs provide specific feedback to teachers (Spotlight 5). Before sharing feedback, PLs should make the structure for feedback explicit to teachers so that they know what to expect from the feedback portion of the 1-1 debrief (Keiler and others 2020). For instance, PLs should indicate how many points of feedback will be delivered and when teachers will have a chance to reflect on and respond to the feedback. **All feedback should be focused on a task or specific teaching practice, such as the previously agreed goal for the 1-1 session, and be delivered respectfully** (Thurlings and others 2013) to support teachers’ targeted growth while sustaining rapport.

PLs first should provide positive feedback before introducing more constructive feedback. Some research has found that feedback that is concrete and constructive with a positive undertone can be most meaningful for teachers (Watling and others 2013). This type of feedback reinforces good performance and frames any forthcoming constructive critique not as a personal fault but as suggestions for improvement and growth, further strengthening PL’s rapport with teachers (Bean 2014). 1-1 coaching sessions should not start by criticizing teachers’ practice, as this may create an environment in which teachers feel defensive, uncomfortable making mistakes, or hesitant to try new practices (Le 2007; McAleavy and others 2018). There is an added risk that experienced PLs may unknowingly practice judge-mentoring—in which PLs reveal their own judgments or evaluations of the teacher’s practice—and, in turn, unintentionally jeopardize the relationship (Hobson and Malderez 2013; Harion and others 2020). By intentionally first focusing on and detailing positive feedback, PLs can avoid judge-mentoring, reinforce teachers’ growth, and motivate continuous improvement.

After identifying positive feedback, PLs should prioritize one or two areas of feedback for instructional improvement, linked to the teacher’s current goal. To avoid overwhelming teachers with too many areas for improvement and to help teachers work toward a specific goal, feedback should focus on one or two specific areas. To ensure that the feedback is useful and realistic to implement, it should be aligned with teachers’ needs, goals, and problems of practice. These often have been identified in the check-in, previous 1-1 sessions, and the reflective debrief (Gibbons and Cobb 2017; Hattie and Timperley 2007). Feedback also should be clear, corrective, and actionable so that teachers are able to envision how they can incorporate feedback into their instructional practices and meet their agreed goals (Gibbons and Cobb 2017; Keiler and others 2020; Scheeler and others 2004; Sider 2018).

When providing feedback, it is especially important for the PL to provide instructive feedback to novice teachers because their needs differ from those of more senior teachers (McAleavy and others 2018). Specifically, evidence indicates that novice teachers’ working memories can become overwhelmed by complex tasks (Paas and van Gog 2006). Therefore, new teachers should be provided with sufficient scaffolding and targeted, specific, and manageable actions to help them focus on the salient aspects of the PL’s support (Allier-Gagneur and others 2020; Sims and Fletcher-Wood 2018). Research also suggests that individuals with lower prior knowledge benefit more from examples

**IMPLEMENTATION TIP**

In Brazil, each school’s principal, PL, and teacher received a copy of *Aula Nota 10* (Portuguese translation of *Teach like a Champion*). The book describes “high-impact” teaching practices that have been shown to stimulate student learning. The book includes practical descriptions of useful techniques and access to online video examples. The Lemann Foundation, an NGO responsible for translating these materials, also created examples of the same techniques filmed in Brazilian classrooms.

*Ceará Teacher Feedback and Coaching Program*
(Chernikova and others 2020) so feedback that includes specific examples may be especially valuable for novice teachers.

Expert practitioners with higher prior knowledge, who may be more likely to be found in low-structured programs, benefit from reflection (Chernikova and others 2020). They therefore may benefit most from feedback that incorporates elements of reflective questioning and discussion of their practice. Expert teachers can acquire new skills with less scaffolding so should be provided with feedback that enables them to draw on and build their pedagogic knowledge through problem-solving, elaboration, and discussion of specific classroom situations in which the feedback may usefully applied (Seidel, Blomberg, and Renkl 2013).

PLs can use tools, such as videos or instructional resources, to guide teacher feedback and point to explicit areas for instructional improvement. Videos can be a useful tool that PLs can use to show exemplary practice, especially in highly structured settings (McAleavy and others 2018). However, teachers do not gain new insights about practice merely from watching classroom videos (Brophy 2003). Instead, PLs must first establish a clear purpose for viewing a video that is based on teachers’ specific learning goals (Borko and others 2008; Brophy 2003; van Es and others 2014). Teachers with lower prior knowledge may benefit most from the PL first sharing specific principles for improvement before viewing the video and then sharing the video to exemplify the specific principles (Chernikova and others 2020; Seidel, Blomberg, and Renkl 2013). Teachers with higher prior knowledge may benefit most from viewing the videos first and then identifying and reflecting on the principles in collaboration with the PL (Seidel, Blomberg, and Renkl 2013; Chernikova and others 2020). Regardless of a teacher’s level of experience and prior knowledge, PLs should select video clips that are linked to a specific area of feedback or improvement (Borko and others 2008) and support the teacher to consider how the video relates to the teacher’s goals, practice, and areas for growth (Allier-Gagneur and others 2020). In one such program in India, teachers attributed the use of video as a tool for reflection and guidance for practice as the main driver of their instructional change (Wolfenden and others 2017).

### SPOTLIGHT 5. Feedback: Four Rules of Thumb

Four “rules of thumb” for how to deliver effective feedback to teachers were identified in a systematic review of 60 studies on providing feedback in education settings (Thurlings and others 2013). Effective feedback is:

1. **Discussed.** Teachers should have an opportunity to engage in dialogue with PLs about the feedback, with time to ask questions, request elaboration, and/or to discuss specific examples. A PL can save a few minutes after each point of feedback for the teacher to respond. If the teacher does not respond to the feedback, the PL may prompt a dialogue by saying:
   - “Does this suggestion resonate with you? Why or why not?”
   - “How might you apply this feedback in your class?”
   - “Do you have any questions?”

2. **Justified.** PLs should provide justifications for any areas for improvement—an indication of a mistake or area for improvement is not enough. PLs should justify and elaborate on the feedback by linking it to specific examples from the teacher’s classroom captured during the classroom observation. Using examples from classroom observations ensures that the PL provides concrete feedback that is informed by a specific teacher action.

3. **Learning-focused.** Feedback should be a tool to facilitate teachers active learning and growth. Instead of telling teachers what to do, PLs should share feedback in a way that helps teachers understand the ideal practice for which they are striving, notice their own current practice, and identify ways to close the gap between current and ideal practice. PLs can do this by:
   - **High-structured programs:** Using the feedback to show how teachers’ current practice could become the ideal practice.
   - **Low-structured programs:** Helping teachers compare and contrast ideal and current practices. When any dissonance emerges, instead of rushing to quick solutions, encourage teachers to interrogate the dissonance and generate a variety of ways to bridge the gap (Rainio and Hofmann 2021).

4. **Timely.** Feedback should be given frequently, as soon as possible, and when it is still relevant to teachers, ideally immediately after a classroom observation or real-time practice session. If, between 1-1 coaching sessions, a PL receives a video of teacher practice, a teacher lesson plan, or sample student work sent via SMS or email, the PL should respond with feedback as soon as possible within a few days.
Step 5: Practice

Effective coaching requires teachers’ active engagement with, and application of strategies through, practice and real-time feedback. Throughout the 1-1 cycle, especially during the “practice phase,” rather than simply presenting material to them, PLs should intellectually and actively engage teachers. Active engagement increases the likelihood that teachers will internalize, understand, and draw on their learning (Kennedy 2016; Thomas, Knowland, and Rogers 2020).

When supporting teachers to learn or try new techniques, PLs first should break down complex behaviors into specific steps. PLs are well placed to help teachers implement a complex skill if it is well defined and the teachers are given opportunities to see the skill in action, implement it themselves, and obtain feedback about their performance (Matsumura, Garnier, and Spybrook 2012). In highly structured programs, structured materials (such as teacher’s guides) can be useful tools to help PLs break down complex behaviors into concrete actions. These materials provide teachers with clear and specific directions on how to implement a given practice that otherwise may be difficult to enact (Thijs and van den Berg 2002).

As PLs break down complex behaviors into specific steps, they should model these steps for teachers during the 1-1 debriefs. Modelling is known to positively influence teacher practice and is a key activity in effective coaching (Gibbons and Cobb 2017). Modelling demonstrates behavioral expectations and new instructional practices (Darling-Hammond, Hyler, and Gardner 2017; McAleavy and others 2018; Westbrook and others 2013); supports teachers to envision what is possible for them to achieve in their classroom instruction. Moreover, if conducted in a live classroom, modelling can facilitate a gradual transfer of responsibility to assist teachers in independently implementing specific strategies (Bean 2014). In more resource-intensive programs, in which PLs have the time and support to conduct a follow-up classroom observation after the 1-1 debrief, PLs also can model certain practices during follow-up live classroom lessons. Modelling within the live classroom can be especially effective because it takes place in real time (Scheeler and others 2004) and in teachers’ real environments in which they will be expected to enact similar instructional practices in the future (Westbrook and others 2013). In less-resource-intensive programs, in which the PL may not have the time or availability to model during the 1-1 session in a live classroom, videos can be used to model instructional practices to teachers (as described in Step 4).

PLs then should provide opportunities for teachers to apply their learning through ‘deliberate practice’ with the PL in real time (Spotlight 6). Practice alongside and with the support of a PL is critical to teacher learning and change in behavior and to improved student learning (Darling-Hammond, Hyler, and Gardner 2017). However, PLs should be aware that how teachers practice matters and that spending a lot of time practicing will not be beneficial if the practice is not high quality. “Deliberate practice” is a high quality, intentional, and scaffolded form of practice in which teachers are supported by an expert mentor or coach, such as a PL, to build expertise over time in the coaching cycle (Ericsson and Harwell 2019; Ericsson, Krampe, and Tesh-Römer 1993). Deliberate practice involves individualized 1-1 support from a well-qualified PL in a low structured program or a well-supported PL in a highly structured program so that the PL can help teachers practice at quality and with precision. PLs should create practice activities that are targeted to the teacher’s current capability and well scaffolded so that the teacher is challenged to try something new but not overwhelmed by a task that is too difficult. In highly structured programs, PLs may use program materials or handbooks to determine which practice activities are most appropriate for each teacher. In low-structure programs, PLs may develop a targeted practice activity based on insights from the observation or reflection portion of the 1-1 session. While teachers’ practice deliberately, PLs should provide real-time feedback to support teachers to adjust, attend to any challenges, and improve in real time.

Throughout the process of modelling, feedback, and practicing deliberately, PLs are challenged to provide ample support to ensure that their teachers understand the topics, while slowly shifting the responsibility to the teachers

IMPLEMENTATION TIP

In Brazil, modeling and independent practice are integral parts of the training that teachers receive before the coaching intervention. Master trainers model exactly the behaviors for which the program is encouraging the teachers to change their behavior. Teachers were placed in small groups as teams. Each group was responsible for trialing each behavior with the group members.

Ceará Teacher Feedback and Coaching Program
Designing practice tasks that encourage teachers to try new instructional practices both in 1-1 practice sessions and in live classrooms, but that also are not too difficult or complex, can ensure that teachers are challenged, yet not overwhelmed, by new instructional practices (Ericsson and Harwell 2019). In this sense, PLs and the teacher first should collaborate on a task that the teacher may find difficult to perform independently. As the teacher gains experience and confidence, s/he should be able to perform the same task independently (Kho, Khemanuwong, and Ismail 2020).

**SPOTLIGHT 6. “Practice Perfect”**

In the “Practice Perfect” methodology (Lemov 2012), practice can be harnessed by PLs to maximize the efficacy of teacher professional development. PLs integrate deliberate practice activities in the support and feedback that they provide to teachers during 1-1 coaching sessions. Integrating activities in PLs’ support ensures that the skills are not repetitive but challenge the teacher to apply the concepts that they will be expected to incorporate in their instruction. School systems can create a culture of practice and should provide PLs with the resources to help teachers: (a) work toward specific, manageable goals, (b) receive accurate and useful feedback on the performance of their practice, (c) be challenged to adopt new skills and instructional techniques, and (d) build on their decision-making skills. This last concept requires knowledge of how to get better, when to use a practiced skill, and when it is relevant to incorporate the skill in a live lesson. The “Practice Perfect” methodology outlines four types of practice that coaches can use to design and develop valuable practice activities.

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<td>Short introductory practice (with no feedback) that isolates foundational skills, builds muscle memory, and ensures that the teacher understands the practice activity.</td>
<td>Increasingly complex or challenging rounds of practice in which techniques or their elements are progressively combined; decision-making is addressed; and the teacher receives instant, bite-sized feedback.</td>
<td>Practice to prepare teachers for the realities of implementation by replicating the conditions of an actual classroom setting.</td>
<td>Planning potential content activities based on available instructional data, and receiving feedback on their quality from a PL before incorporating them in an actual lesson.</td>
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**Note:**
See this video, which provides an explanation of why it is crucial for PLs to actively practice with their teachers.

**Step 6: Set Goals**

At the end of the 1-1 session, PLs and teachers should revisit the goal for the 1-1 session and evaluate whether they want to continue working on that goal for the next session or adjust it based on how the observation and coaching session went (Kho, Khemanuwong, and Ismail 2020). In highly structured programs, PLs have supportive materials that prompt them when they should introduce and support the teacher toward a new goal. In low-structured programs, PLs have more autonomy to decide whether or how the goal should be adjusted. Regardless of structure, when deciding the next goal, PLs should decide whether teachers feel confident “graduating” from the particular goal or whether they would prefer more practice and support before starting a new goal.

PL and teacher then should agree on a clear, shared goal for the teacher to work toward independently before the next 1-1 session. Setting clear and attainable goals that the teacher can work toward in independent practice and future 1-1 sessions is critical to deliberate practice and improvement (Ericsson and Harwell 2019). Goal setting also can help teachers notice areas in which they can exercise agency and engage in change; internalize that growth is possible; and establish professional norms toward improving their instructional practice (Gibbons and Cobb 2017). Depending on the program structure, goal setting can be determined collaboratively and via consensus through open, constructive discussion informed by the teacher’s needs (Kho, Khemanuwong, and Ismail 2020) and the progress from the 1-1 session. In somewhat structured programs, the PL can provide the teacher with several options and the teacher can choose the area of focus. Through making this decision, teachers exercise agency and increase relevance of the focus.
to the teacher’s problem of practice (Bean 2014). In highly structured programs, the goal may be pre-determined based on prior classroom observations or student learning data. Note that this process should not be entirely decided by the PL but should be determined based on the observation data and teacher’s preferences and personal learning goals.

**After agreeing on the shared goal, PL and teacher should discuss when and how the teacher will integrate the practice or work toward the shared goal in their independent teaching and classroom practice.** Some research has found that teachers can see themselves as “un-agentic”—unable to make the suggested changes in practice—because they feel the changes might not work in their settings or that the changes are “not allowed” by their school leaders or inspectors, even when this is not the case (Hennessy, Haßler, and Hofmann 2015; Horn and Kane 2015; Rainio and Hofmann 2021; Vedder-Weiss and others 2018). Therefore, it is especially important for the PL to support the teacher to explicitly envision how s/he will achieve the goal in her or his own classroom—and how s/he can draw on support from school leaders, colleagues, and the PL for continuous support between 1-1 coaching sessions (Spotlight 7).

Before leaving the 1-1 session, PLs should log agreed next steps, including the next 1-1 session. Although the quality of the coaching session is the most important piece of program effectiveness, the frequency with which PLs visit teachers also is essential. Several reviews of recent research note that 1-1 sessions should be scheduled regularly to allow for repeated, ongoing support (Cordingley and others 2015; Orr and others 2013). To operationalize the regular schedule, the PL should set a time to meet with the teacher following each session while being cognizant of time and scheduling constraints that teachers face. A lack of planned, regular follow-up risks losing the gains that teachers have made with their PLs (Orr and others 2013).

**SPOTLIGHT 7. Achieving Goals with Implementation Intentions**

Evidence has shown that having individuals specify when, where, and how they intend to achieve their goals increases the likelihood of success. These “implementation intentions,” or if-then plans, have shown to be a powerful self-regulating strategy for overcoming the typical obstacles associated with goal setting (Gollwitzer and Brandstätter 1997). Actively prompting individuals to make plans increases their likelihood of following through on their goals (Rogers and others 2015), despite common challenges such as struggling to get started, getting derailed after starting, pursuing failing goals, and struggling to pursue new goals (Rogers and others 2015). By clearly outlining implementation intentions, individuals have a greater likelihood of recalling what they intend to do in the right circumstances and time when they need to execute the task; simplifying the execution of the plan by clearly outlining the steps needed to implement it; and maintaining autonomy over their decisions (Rogers and others 2015). PLs can benefit from incorporating implementation intentions in their coaching routines because doing so will increase the likelihood that the teacher is able to adopt the practice in real time. For this to work, a PL should discuss when and how the teacher implements the specific agreed skills.

**Plan when.** PLs can help teachers by asking them to specify when they will use a particular strategy. For instance, instead of simply setting a goal such as “check for understanding more,” the PL can help the teacher identify specific situations in which the teacher should check for understanding. If the teacher has decided she wants to check for additional understanding with the students to determine whether they understand and all the students respond with a resounding “Yes!” the teacher has a realistic plan and cue for action. A PL can reinforce his planning by asking the teaches to set a reminder, or to make a commitment to the PL to stick to this agreed plan (Rogers and others 2015).

**Plan how.** PLs also can help teachers to plan how they will act and overcome barriers in executing this plan. For instance, if a teacher finds that all the students answer with a resounding “Yes!” the teacher should be prompted to want to walk around the room and ensure that the students have the correct responses written and are following along before proceeding with the lesson. PLs can ensure that teachers implement their intentions by specifying in what setting they will implement the skill; envisioning what problems may arise when using it; and brainstorming how to respond to these possible disruptions.

**Note:**

See this video, which provides an actionable example of how to execute these two tips.
Between Sessions: Ongoing Skills Application

Although the 1-1 session is a critical period for learning and growth, additional important activities take place outside that 1-1 time, including independent practice, occasional digital communications between the PL and the teacher, and collaboration with colleague teachers or school leaders. Teachers can use a variety tools and techniques such as observation forms, reflection sheets, and prompting questions to capture, stimulate, and sustain their learning when the PL is not present (Hofmann and others 2021). The extent of these activities and tools will depend on the schools’ and PLs’ capacities and time, materials, and technological resources. Nevertheless, these activities should be prioritized. These "in-between" activities help solidify teacher learning and can determine the program’s ultimate effects on student learning (Darling-Hammond, Hyler, and Gardner 2017).

PLs should encourage teachers to deliberately practice new skills and strive to achieve agreed goals between coaching visits and 1-1 sessions. Trialing new practices as a part of a professional learning intervention such as coaching can help teachers become more aware of their agency to effect change (Hofmann 2020; Hennessy, Häßler and Hofmann 2016). Then, repeatedly practicing new skills in their own classrooms can help teachers refine a skill and develop new habits to make particular teaching actions more automatic (Sims and Fletcher-wood 2020). If teachers do not practice in their classrooms when not observed by the PL, the new practices are not likely to take root and to show sustained improvement.

PLs should encourage teachers to explicitly share change efforts with their students and explicitly address the norms that the teachers are trying to change. For example, teachers trying to implement more student-centered or discussion-based teaching practices should tell students they will have more opportunities to collaborate in small groups and they will be expected to collaboratively debate, problem solve, share, and explain their reasoning with their peers before agreeing on an answer or solution. Making change efforts and new norms explicit to students can help shift students’ expectations, making it easier to change collective teaching and learning practices and less likely that teachers will revert to old practices (Hofmann and Ruthven 2018).

PLs also should encourage teachers to continuously reflect on their practice; note successes, challenges, and surprises; and communicate challenges, questions, and insights to the PL between 1-1 coaching sessions. Teachers’ reflections can be documented in a variety of ways, as in a written or audio diary, voice memos or messages to their PLs, or reflective meetings with teacher colleagues within their school, depending on availability of resources. Teachers also can record short videos of their teaching and examine these videos with observation tools or templates to critically reflect on their teaching independently (Spotlight 8). These videos can be used to complement other forms of teacher reflection and can be shared with in-school colleagues and/or PLs for collaborative reflection. Collaboratively examining teachers’ practice can make teacher learning explicit and therefore open for deeper examination, helping to expand teachers' understanding of what is possible to achieve and change (Engeström 2001; Hofmann and others 2021; Horn and Kane 2015; Rainio and Hofmann 2021). The PL then can incorporate these experiences, insights, and questions in future 1-1 sessions to build on and further encourage teachers’ independent practice and learning.

SPOTLIGHT 8. Providing Remote Support to Teachers

<table>
<thead>
<tr>
<th>PLs can encourage teachers’ ongoing development and practice between 1-1 sessions through occasional phone calls, emails, or SMS, depending on the availability of technology. PLs can maintain and strengthen rapport by connecting with teachers digitally between 1-1 sessions. Some PLs have reported positive experiences and feelings from these digital connections at a distance (Mendenhall and others 2018). PLs can offer light-touch, but highly valuable, individualized remote support by:</th>
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<tbody>
<tr>
<td>✔ Responding to teachers’ questions</td>
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<tr>
<td>✔ Sharing intermittent tips and teaching techniques</td>
</tr>
<tr>
<td>✔ Offering short reminders of teachers’ goals and messages of encouragement</td>
</tr>
<tr>
<td>✔ Requesting teachers to share short video clips of their teaching, examples of student work, and/or brief audio reflections on their progress.</td>
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</table>
If PLs support many teachers and are unable to provide intermittent individual support, they can support multiple teachers at a school or within a region by starting a mobile messaging group on a shared messaging platform. Shared digital spaces offer group support from the PLs and fellow teachers. Teacher WhatsApp groups have been shown to be a viable way to support improvement, program monitoring, and a community of practice, especially in settings separated by wide geographic distances between PLs and teachers (Mendenhall and others 2018; Moodley 2019). For example, in the South Africa Early Grade Reading Study (Cilliers and others 2021), PLs hold small competitions in which teachers win small prizes for sending pictures of their best student work and weakest student work to the PL and other teachers in their WhatsApp group. Sharing student work in this way allows all the teachers to see good practice and encourages other teachers to submit work to the coach, which helps give the PL an understanding of what is happening in the classroom.

Considerations When Contextualizing Coaching

While the coaching cycle provides a reliable and replicable blueprint for implementing 1-1 support, coaching interventions can be adapted to meet unique contextual needs across a diverse range of educational contexts, as illustrated in the Appendix A case study matrix and the diverse set of implementation tips from a variety of LMIC contexts. When designing and supporting the implementation of 1-1 coaching, policymakers should consider several areas within their own contexts, including:

- PLs’ backgrounds and training
- Existing education landscape and policies
- Teachers’ capacities and needs
- Need for low- vs. highly structured programs
- Availability and use of technology.

Policymakers should recognize that PLs come with a diverse set of backgrounds and experiences and are active learners, too, just as the teachers they support. Individuals with a variety of backgrounds can fill the role of PL, including specially trained master teachers, researchers, principals, pedagogical advisors, school support officers, and inspectors (Darling-Hammond, Hyler, and Gardner 2017). The quality of this support varies, depending on the PL’s position. For instance, in some systems, principals provide ongoing support to teachers. However, principals often are not likely to be able to make time to provide high-quality support, especially if they also are expected to handle all administrative tasks. To positively affect teacher and student learning, PLs require continuous support and opportunities for professional development (Bean 2014; Galluci and others 2010) (Bruns, Costa and Cunha 2018). Coaching programs should take PLs’ needs into account and provide learning opportunities for PLs that are tailored, active, ongoing, and on-the-job (Bruns, Costa, and Cunha 2018; Galluci and others 2010; Kotze, Fleisch, and Taylor 2019), with opportunities to develop deep pedagogical content knowledge as well as interpersonal, communication, and leadership skills (Bean 2014).

When supporting the development and implementation of coaching interventions, policymakers also should consider the wider policy, professional development, and education systems (Kent, Kochan, and Green 2013). Understanding and aligning new coaching programs with existing parameters to which teachers are held accountable—such as curriculum expectations or student performance on standardized assessments—can help ensure instructional and policy coherence and avoid contradictory teaching and learning goals that lead to inaction or ineffectiveness (Haßler, Hennessy, and Hofmann 2020; Liao and others 2021).

Policymakers also should link coaching interventions to teachers’ needs and goals to ensure three conditions: (a) that teachers have the time and capacity to engage in such a program; (b) that the program helps to address a genuine, self-identified problem of practice or achieve a goal that teachers’ care about or see as important in their
local setting (Edwards 2010; Kennedy 2016); and (c) that the program has an appropriate amount of structure. Ensuring these conditions are met can improve the chances of program buy-in, uptake, and sustainability. Considering the role and availability of technology can help ensure that where technology is used within a coaching program, such as via SMS, videos, and/or remote coaching, the technology supports program efficacy (Allier-Gagneur and others 2020). Additional program design decisions that may be helpful to policymakers such as the ratio of PLs to teachers and the frequency of coaching sessions are discussed in the Structuring Effective 1-1 Support guidance note (World Bank 2021).


The Covid-19 pandemic has changed educational landscapes, policy, and practices globally in significant ways: moving teaching and learning into remote and digital spaces and redesigning how in-person instruction takes place to accommodate social distancing and health regulations. Schools, PLs, and policymakers should consider how Covid-related changes may affect their efforts to implement effective 1-1 support through coaching interventions.

When planning, (re-)designing, and supporting 1-1 coaching interventions in a Covid and post-Covid educational landscape, policymakers should consider three critical actors:

- **Teachers.** How has the role of teachers changed? How can a 1-1 coaching intervention fit into their current professional routines and expectations? How can a 1-1 coaching intervention support their professional practice and any emergent challenges in the Covid and post-Covid context?

- **Schools.** How has the schooling environment changed due to any temporary or ongoing social distancing policies and practices? What has changed due to temporary, repeated, and/or ongoing school closures? How might a 1-1 intervention need to be adapted to accommodate these changes?

- **PLs.** How and when can PLs provide 1-1 support given any ongoing or expected social distancing regulations, school closures, or staff shortages (due to isolation, sickness, and other reasons)?

Policymakers need to be cautious of replacing in-person relationships with fully virtual ones. As this guidance note demonstrates, the quality of the relationship between teachers and PLs is crucial to teacher learning and change. Adapting a program to meet virtually on an ongoing basis does not ensure that the quality of these interactions will be high. It is therefore recommended that policymakers consider and integrate the following 1-1 coaching intervention design principles:

a. **Ensure that PLs have at least 1 opportunity to meet teachers in person prior to starting the 1-1 coaching intervention.** Building rapport with teachers is critically important in 1-1 coaching interventions and is harder to do remotely. Some evidence exists that in-person coaching can be supplemented with videos (Bruns, Costa, and Cunha 2018; Leyva and others 2015). However, it is important to have highly skilled PLs who have a pre-established relationship with the teacher to facilitate these 1-1 coaching relationships in a meaningful way.

b. **There should be an in-person component to every coaching relationship.** If technology-based and remote support, such as online messaging, SMS, videos, and/or phone calls is being used, use it not to supplement, but to complement an in-person training/coaching relationship.
Conclusion

At its core, coaching is a collaborative learning relationship and involves a continuous, supportive, trusting partnership between a PL and a teacher to support teacher growth and improved teaching practice. PLs serve as mentors, trusted colleagues, and champions who support teachers to try new practices—even and especially in the face of vulnerability, risk, and uncertainty—and who motivate and encourage teachers’ continued growth (Also from 2018; Cilliers and others 2021; Kotze, Fleisch, and Taylor 2019). PLs provide 1-1 coaching by observing teachers’ classroom practices, facilitating meaningful feedback and practice sessions, and encouraging teachers’ independent and deliberate practice between 1-1 sessions. 1-1 coaching sessions often follow a typical pattern and are guided by Coach’s 4 research-based principles: coaching should be tailored, practical, focused, and ongoing. Through repeated 1-1 coaching sessions, ongoing independent practice and reflection, and a sustained dynamic relationship with the PL, teachers gain opportunities to learn, receive feedback, try new techniques, and improve their practices.

The coaching cycle detailed in this guidance note provides a blueprint and research-based strategies for providing quality 1-1 support. However, and ultimately, how PLs implement the cycle matters: PLs should stay attuned to teachers’ self-identified and observed needs, view their work as deeply relational, and cultivate a partnership guided by support and growth, instead of monitoring or inspecting. Importantly, policymakers should prioritize creating conditions that enable PLs to conduct 1-1 sessions with teachers consistently and at quality—and consider how the cycle might be uniquely implemented within their local contexts.
### Table A1. Case Studies of 1-1 Coaching Cycle

#### Program

**Foundations: Relationship Building**
The PL establishes a trusting relationship with the teacher by communicating clear expectations and roles, co-creating shared ground rules, and creating open lines of communication. These interactions deepen rapport by identifying shared experiences and cultivating a positive, learning-oriented ethos.

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<tr>
<td>Before meeting with a teacher, the PL familiarizes him- or herself with the lesson plan and learning goals and reviews the teacher's needs and previous topics covered. If logistically possible, the PL meets briefly (5 minutes) with the teacher to set shared goals before the observation.</td>
<td>The PL observes the teacher for the entirety of the lesson. The classroom observation can be live, or the teacher can record her/his lesson and send it to the PL to review. The PL uses an observation tool to focus on specific skills.</td>
<td>The PL facilitates reflection, in which the teacher reflects on areas of strength or improvement.</td>
<td>The PL draws on classroom observation data and the teacher's reflections to identify one area of strength and one area of improvement, providing instructive and clear feedback for areas to practice.</td>
<td>The PL demonstrates one skill the teacher can improve by modeling and discussing an exemplary video, and/or co-facilitating and engaging in deliberate practice with the teacher.</td>
<td>The PL and teacher set a time to meet each month and agree on a plan that outlines goals for the teacher to strive toward between 1-1 coaching sessions.</td>
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</table>

**Between Sessions: Ongoing Skills Application**
The PL encourages the teacher to deliberately practice new skills and strive to achieve agreed goals between coaching visits and 1-1 sessions. On the next visit, the PL restarts the cycle by preparing for the session, reviewing the teacher’s previous goals, learning, and application during the brief check-in meeting before the lesson, then continues to the observation, debrief, and application.

**Early Grade Reading Study (EGRS) I and II (In-person arm)**

**Country:** South Africa  
**Grade:** Primary  
**Focus:** Literacy  
**Structure:** High  
(Cilliars and others 2019; Cilliars and others 2021)

**Recap and needs-based workshop with group of teachers.**  
At the beginning of each coaching session, the PL begins by recapping what s/he covered in the last session.

Although the PL does not conduct a pre-meeting with each teacher, after observing all the teachers in a school, the PL may convene a needs-based workshop, in which the PL reinforces specific skills with which the majority of teachers struggle.

**Observe with a classroom observation and feedback tool.**  
During the observation, the PL uses a classroom observation tool, which includes a complementary feedback tool, to facilitate the coaching session.

The PL observes the teacher for the full length of the lesson.

**Facilitate reflection.**  
Following the classroom observation, the PL begins by facilitating reflection, providing teachers with vocabulary so that they can express themselves more precisely. For instance, teachers may not say the lesson went “okay,” but must use the vocabulary terms provided by the PL. The PL also will ask probing “why” and “how” questions to facilitate a meaningful reflection session.

**Identify three skills to improve.**  
After reflecting, the PL selects three skills for the teacher to improve. To a certain extent, data from classroom observations inform what is covered in the coaching session. However, most teachers start with classroom management and eventually work toward literacy-specific skills.

**Model specific skills and occasionally co-teach.**  
During the coaching session, the PL models specific skills with the teacher.

Important caveat: during the observation, the PL will co-teach the lesson if the teacher requests it. However, the PL is not supposed to interrupt the teacher as s/he is instructing and to interrupt only if the teacher explicitly asks for this assistance.

**Agree shared goals and next time to meet.**

At the conclusion of the coaching session, the PL and teacher set three shared goals together.

The teacher and PL then sign the observation form, which includes the agreed next steps and areas that the teacher will improve on before the next visit.
<table>
<thead>
<tr>
<th>Tablet facilitates recap.</th>
<th>Observe with a classroom observation tool.</th>
<th>Collect student data and facilitate reflection.</th>
<th>Identify 2-3 skills at which the teacher excelled and 2-3 skills to improve.</th>
<th>Model specific skills on occasion, following the teacher’s guides.</th>
<th>Follow goals set in the teacher’s guides.</th>
</tr>
</thead>
<tbody>
<tr>
<td>At the beginning of each coaching session, the PL begins by reviewing what s/he covered in the last session. The tablet enables the PL to easily call up previous visits to gauge the extent to which teacher behavior has changed over time. The PL does not conduct a pre-meeting with the teacher.</td>
<td>During the observation, the PL uses a low- inference classroom observation tool that helps track the extent to which the teacher is following the structured teaching guide. This tool is accessible to the PL through the Tangerine software, which is loaded on the PL’s tablet. The PL observes the teacher for the full length of the lesson.</td>
<td>Following the classroom observation and before the coaching session, the PL collects information on the student/book ratio. The PL then selects three students with whom s/he conducts a series of short, content-related assessments. The PL meets with the teacher to provide feedback either directly after the lesson or after school, depending on the teacher’s schedule and preference. The PL begins the 1:1 session by facilitating reflection, asking the teacher a series of questions: “How did it go? What went well? What did not go so well?”</td>
<td>After reflecting, the PL focuses on 2-3 skills for the teacher to improve. The Tangerine software synthesizes the findings from the classroom observations and student assessments to recommend 2-3 skills the teacher did well and 2-3 areas to improve.</td>
<td>During the coaching session, the PL sometimes models a portion of the lesson with which the teacher struggled. Important caveat: the PL is strongly encouraged not to re-teach any content that the teacher already has covered in class because re-teaching is distracting and can undermine the teacher’s authority. On occasion, the PL sometimes models a portion of the lesson in front of the students.</td>
<td>At the conclusion of the coaching session, the PL does not establish shared goals with teacher. Instead, they are encouraged to follow the goals outlined in the teacher’s guides. Relatedly, they do not explicitly agree on next steps or time to meet because the tablet informs the PL when next to visit teacher.</td>
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### Un Buen Comienzo

**Country:** Chile  
**Grade:** Pre-K and Kindergarten  
**Focus:** All subjects  
**Structure:** Low  
(Leyva and others 2015)

<table>
<thead>
<tr>
<th>Pre-coaching session goal setting and recap.</th>
<th>Observe a recorded lesson of the teacher using a classroom observation tool.</th>
<th>In-person reflection followed by 3 skills at which the teacher excelled and 1 skill to improve.</th>
<th>Identify 3 skills the teacher excelled at and 2-3 skills to improve.</th>
<th>Use videos of high-quality instruction to model.</th>
<th>Agree shared goals and next time to meet.</th>
</tr>
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<tr>
<td>At the beginning of each coaching session, the teacher and PL discuss an area that the teacher wants to improve. In each subsequent coaching session, the PL begins by asking the teacher what s/he did to improve that particular skill from the last session. If a PL notices that the teacher is struggling with a particular skill, the PL will continue to review it in subsequent coaching sessions. The PL does not conduct a pre-meeting with the teacher.</td>
<td>The teacher sends a video of a full-length lesson to the PL. The PL watches the video and uses a high-inference classroom observation tool to record observations about the recorded video of the teacher’s instruction.</td>
<td>After reviewing the video, the PL uses a video feedback rubric to send written feedback to the teacher ahead of an in-person discussion. When the teacher and PL meet for the in-person session, they re-watch the video together, which helps to create an objective view of what happened in the classroom. The video footage helps the PL facilitate reflection because they can stop the video at specific points to prompt the teacher to self-reflect.</td>
<td>After reflecting, they focus on 3 skills that the teacher did well and 1 skill the teacher could improve. Important caveat: no matter how high or low a teacher scores on the classroom observation tool, the PL does not divert from that structure thus, the coaching sessions are not data driven).</td>
<td>During the coaching session, the PL uses high-quality instruction videos to demonstrate the skill with which the teacher struggled. The PL does not model the skill for the teacher. Instead, PL and teacher watch the exemplary video together, practice it, and plan when the teacher will apply the skill in the future.</td>
<td>At the conclusion of the coaching session, the PL and teacher set shared goals and determine the next time to meet. Each month, the PL conducts 1 in-person and 1 fully virtual visit with the teacher. To coordinate the in-person visit, the PL and teacher decide what time, format, and other details work best for the teacher’s timetable.</td>
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Appendix B. Case Study and Literature Search and Selection Methodology

Case Study Selection and Inclusion
The team reviewed a sample of 10 evaluated coaching programs in low- and middle-income countries (LMICs). These programs satisfied the inclusion criterion of being a low- or middle-income country K-12 coaching intervention that had undergone an impact evaluation and had reported impacts on student test scores and/or teacher practices. These program reports were supplemented by 8 qualitative interviews from 6 of the coaching programs and included examples across the continuum of high/low structured support. The country distribution of the six included coaching case studies was focused predominantly in Africa (Kenya-1, Malawi-1, South Africa-2) with several from South America (Brazil-1, Chile-1). To complement these case studies and to demonstrate a full geographic range of LMIC contexts, the team sought qualitative research that featured countries in South and East Asia and additional countries throughout Africa and South America.

Literature Review Conceptual Focus
The supplementary literature review draws from a wide range of research on teacher professional learning, development, and coaching from the professional learning sciences, education, behavioral economics, and psychology. More specifically, selected literature focuses on coaching as well as teacher professional learning, effective professional development, and mentoring.

Given the substantial overlap between coaching and mentoring, such as the importance of feedback and collegial reflection, literature on mentoring was included. However, PLs are education specialists who often are not based in a particular school and instead periodically visit teachers and schools to conduct 1-1 coaching. In contrast, mentors tend to be senior teachers or leaders based in one school who provide regular collegial support to teacher mentees. The relational difference is notable. For example, PLs may develop and sustain rapport with teachers differently than does a school-based mentor. As such, this guidance note draws primarily on coaching literature but also integrates insights from mentoring literature that display relevant similarities in the roles.

Literature Review Regional and Temporal Focus
The supplementary literature review includes research from a variety of locations including high-income countries (HICs) but focuses on LMICs. When evidence was not available from a particular region or low-income country (LIC) context, the note relies on evidence from HIC.

The prioritized literature also inherently has a temporal dimension, prioritizing the most recent literature. Selected systematic, critical, and/or best evidence reviews typically were published in the past five years (with a few exceptions) because these reviews integrate, critique, and build on previous systematic, critical, or best evidence reviews. These most recent reviews thus are inclusive of older literature while adding relevant new insights.

Methodological Focus
Because this guidance note focuses on how to implement 1-1 coaching sessions, rigorous qualitative research was deemed the most appropriate evidence base to include beyond the evaluation reports of the 10 LMIC coaching interventions, which were drawn from the Structuring Effective 1-1 Support guidance note. Therefore, the current note prioritized systematic, critical, and/or best evidence reviews on coaching, teacher professional learning, and specific actions within the coaching cycle from LMICs and HICs. Subsequently empirical papers were searched and selected according to the type of evidence required. The empirical papers included randomized controlled trials (RCTs) with qualitative components and qualitative studies primarily from LMICs with occasional HIC-based research to supplement areas in which LMIC evidence was not identified.
Literature Search Strategy

The literature search began with education research databases, journals, and gray literature sources (Education Sub-Saharan Africa (ESSA) African Education Research Database, Education Resources Information Center (ERIC), Google Scholar, EdTech Hub, Africa Education Review, Compare, Comparative Education Review, International Journal of Educational Research). These resources then were searched for empirical education research papers with "coach" or "mentor" in the title or abstract and/or the terms for more targeted actions within the coaching cycle such as "feedback," "reflection," and "modelling." When a surplus of papers was identified, these search terms were combined with terms from LMICs to narrow the scope. Additionally, recent reviews/syntheses, and systematic reviews from teacher professional learning literature were sought and reference lists in selected papers were consulted using a snowballing, reference list tracing method. Finally, the literature base was supplemented with papers recommended by expert advisors and reviewers.

Papers were reviewed and selected for an in-depth review based on three criteria: (1) topical relevance to the coaching cycle, (2) specific actions identified within the cycle, and (3) geographic regions starting with LMICs in which research was not available, then expanding to HIC contexts. All papers were read fully and given a score of 1 to 5 based on the 4 criteria below. The criteria were based on contextual and conceptual relevance and methodological rigor. Relevant insights and methodological limitations were extracted to create an evidence matrix. The evidence matrix was reviewed and synthesized, acknowledging the evidence weight.

The four criteria were (a) methodological rigor (systematic review, meta-synthesis, RCT, and/or qualitative research with well-documented and strong analytic method); (b) conceptual focus on coaching cycle, Coach principles, and behaviors; (c) LMIC context; and (d) published within the past 5 years.

Table B1. Selection Criteria

<table>
<thead>
<tr>
<th>Score</th>
<th>Criterion</th>
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<tbody>
<tr>
<td>5</td>
<td>All four criteria met.</td>
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<tr>
<td>4</td>
<td>Three of 4 criteria met.</td>
</tr>
<tr>
<td>3</td>
<td>Two of 4 criteria met with 1 criterion being either strong methodological rigor or conceptually relevant.</td>
</tr>
<tr>
<td>2</td>
<td>Methodologically limited (a) but offers specific insight from key behavior or aspect of coaching (b) OR key context (c).</td>
</tr>
<tr>
<td>1</td>
<td>Methodologically weak (a) and limited context (c) but provides insight or (b) perspective on key behavior or aspect of coaching.</td>
</tr>
</tbody>
</table>

3. Grey literature includes information from academia, government, and industry produced outside of traditional academic publishing channels. This information is not controlled by commercial publishing and, therefore, is not well represented in indexed databases. (From the Fourth International Conference on Grey Literature: New Frontiers in Grey Literature. GreyNet, Grey Literature Network Service. Washington D.C. USA, 4-5 October 1999). See also https://www.greylit.org/about.
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