EVIDENCE FOR SYSTEM TRANSFORMATION BRIEF

FOUNDATIONAL LEARNING

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Acknowledgements

This Brief was written by Katy Bullard with input from Ramya Vivekanandan and Raphaelle Martinez. It is part of a series of briefs from the GPE Secretariat's Education Policy and Learning Team on teacher, teaching, and learning issues.

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1. Background

Foundational learning is one of the most pressing and prominent issues in global and national education discourse. According to the Commitment to Action on Foundational Learning, a global initiative launched at the 2022 Transforming Education Summit, foundational learning refers to "basic literacy, numeracy, and transferable skills such as socio-emotional skills" (World Bank 2023). This holistic vision of learning outcomes aligns with the Global Partnership for Education's (GPE) prioritization of learning in GPE 2025, which includes strong attention to foundational skills, namely literacy, numeracy, and social-emotional skills. Foundational learning is essential because it serves as the basis for all later learning. Without basic literacy and numeracy skills, the knowledge and skills of other school subjects and higher school levels will be largely inaccessible. Foundational transferable skills, including social-emotional skills, likewise, set an important groundwork for children's positive development throughout their school lives and beyond.

Box 1. GPE's broad vision of support for learning

As laid out in GPE 2025, "GPE will help countries achieve improvements in learning along each stage of a child's education, including early learning, foundational skills such as literacy, numeracy, socio-emotional learning and the wider range of skills necessary to prepare students for the 21st century."

Global interest in foundational learning has been fueled by growing attention to the learning crisis, which was exacerbated by the COVID-19 pandemic and ensuing school closures. *Learning poverty*—that is, the portion of children unable to read a simple text with comprehension by age 10—has been high since the indicator was coined by the World Bank and the UNESCO Institute for Statistics (World Bank 2021a). In 2019, the learning poverty rate in low- and middle-income countries was 53 percent, and 86 percent in sub-Saharan Africa. The pandemic pushed learning poverty dramatically higher, to an estimated 70 percent in low- and middle-income countries in 2022 (World Bank et al. 2022). Learning poverty data appear to indicate that learning poverty rates are typically somewhat higher among girls, especially in some parts of sub-Saharan Africa (Piper and Dubeck, n.d.). Regional and national assessments reflect similar concerns about low levels of literacy, as well as low numeracy rates (for

instance, see PASEC 2019 findings from 14 countries in francophone Africa). Basic proficiency in reading and mathematics also aligns with the focus areas of Sustainable Development Goal (SDG) 4 and is monitored through indicator 4.1.1.[1]

Given this attention to early grade reading and mathematics, foundational literacy and numeracy (FLN) are clear priorities at the global and national levels. FLN typically refers to early grade reading and math up to grade 3, sometimes including pre-primary education. In recent years, there has been some tension around the definition of foundational learning and whether it should include only FLN—given the tremendous need for such learning—or also extend to social-emotional skills and other non-academic skills. While FLN remains the primary interest for many governments and funders, there has been broad coalescence around an expanded vision of foundational learning as set forth in the Commitment to Action on Foundational Learning, and GPE's own vision of learning aligns with this broader conceptualization. There are clear academic benefits—along with community and societal benefits—to holistic forms of education, including those that support social-emotional learning (Jacobs Foundation, Porticus, and LEGO Foundation 2023). Such evidence underscores the value of a more comprehensive conception of foundational learning.

Foundational learning is a clear priority among GPE partner countries, as reflected in the compact development process. Of the 33 compacts finalized at the time this note was written, 29 have a priority reform focused on teaching and learning and at least nine of these have an explicit focus on foundational learning, according to a rapid analysis. With growing country attention to this topic, this note reviews the evidence of key factors that can foster foundational learning and raises considerations for GPE and partner countries in thinking about how to support and engage with foundational learning.

[1] Part of SDG 4's goal of equitable quality education is measured by the "proportion of children and young people: (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex" in indicator 4.1.1 (OECD 2019).

2. Evidence

School-based foundational learning efforts take place within the context of the curriculum, even though foundational learning programs are sometimes delivered on top of the existing school curriculum. System-level action for foundational learning needs to account for how the curriculum currently approaches literacy, numeracy and social-emotional development.

Broadly, the action areas needed to support foundational learning—such as high-quality, well-supported teachers and well-designed learning materials—align with those needed to support learning at all levels. Within these areas, though, there are specific strategies and needs for supporting foundational skills, particularly early grade reading and early grade mathematics. For instance, early grade reading skills include language skills, phonological and phonemic awareness (hearing and identifying words and individual sounds within words, respectively), concepts of print (that is, the purpose of print and how it works and the role of corresponding materials such as books), alphabetic principles, spelling, vocabulary, reading fluency, comprehension and writing. Effective instruction for early grade reading needs to foster all these skills (Barnes and Pallangyo 2019).

There has been less research on and investment in early math skills, but these skills are nonetheless essential, linked to later academic achievement. Key domains of mathematics knowledge in primary school include numbers and operations, measurement, geometry and spatial reasoning, algebra, and probability and statistics (Lutfeali et al. n.d). While the skills for social-emotional development may be contextualized, the early grades are an essential time for building the intra- and interpersonal competencies needed for healthy social-emotional regulation and well-being. The five core social-emotional competencies set forth by the Collaborative for Academic, Social, and Emotional Learning (CASEL) are self-awareness, self-management, social awareness, relationship skills and social awareness.[2] (See GPE's evidence for system transformation brief on 21st-century skills for more detail on social-emotional development).

Foundational learning holds great potential to promote quality and equity in education by setting a strong groundwork for later learning. Realizing this potential for promoting equity requires inclusive and responsive strategies throughout all the

[2] "What Is the CASEL Framework?" CASEL, https://casel.org/fundamentals-of-sel/what-is-the-casel-framework.

action areas discussed above. For instance, teacher training, pedagogical practice, teaching and learning materials, and other ingredients for foundational learning all need to account for the particular learning needs of (and possibilities for marginalizing and excluding) girls and boys to ensure that foundational learning efforts are effective for all students, especially the most marginalized (see Bronwin, Jefferies, and Tao 2023). Likewise, ensuring that all children have foundational learning opportunities requires attention to equity and inclusion. Foundational learning at scale will only be achieved if, as a starting point, all students have access to school environments that meet their specific needs (see Cameron 2023).

Pre-primary Education

Quality pre-primary education sets a strong foundation for learning by helping students develop pre-literacy, pre-numeracy, and social and emotional skills. A large body of evidence points to the value of quality pre-primary education in helping students develop key skills and enter primary school ready to learn. Pre-primary education has been categorized as a "good buy" by the Global Education Evidence Advisory Panel (Banerjee et al. 2023) for its solid evidence of cost-effectiveness. Early childhood is a critical time for setting the foundation for learning because it is a crucial window for children's cognitive development. Attending quality pre-primary can prepare students with bigger vocabularies, stronger number awareness, better social skills, more curiosity, and other social, emotional and (pre-) academic skills. As such, children who attend pre-primary are more likely to reach minimum competency levels in reading and mathematics. UNICEF calculations using Multiple Indicator Cluster Surveys (MICS) and Demographic and Health Surveys (DHS) data found that 44 percent of children attending early childhood education (ECE) programs were on track in emergent literacy and numeracy skills, compared with only 12 percent of children not attending ECE programs (UNICEF 2019).

In primary school, children who attended pre-primary are shown to have higher academic outcomes; PASEC data from nine countries in West and Central Africa show that in grade 2, children who attended pre-primary were twice as likely to attain minimum literacy competency, on average (cited in UNICEF 2019). They were also more likely to demonstrate minimum competency in math. Pre-primary also helps children develop the psychosocial skills to manage stressful situations, a particularly important skill set in fragile settings. In this way, pre-primary education can play a pivotal role in setting the foundation for early grade reading, early grade math and social-emotional wellness. Aside from the benefits to students' own learning, these

learning gains can also improve system efficiency by reducing repetition and the need for catch-up programming (UNICEF 2019).

Despite the strong body of evidence pointing to the value of investing in pre-primary education, access and quality is low in many low- and middle-income countries. Harnessing pre-primary education to promote foundational learning will require efforts not only to make pre-primary education available but also to ensure its quality. Planning and implementation must account for pre-primary curriculum, teachers, quality assurance and engagement of families and communities, among other factors. In many countries, the number of pre-primary teachers is insufficient and they do not receive the support they need. Regulation of the pre-primary sector is often insufficient, and the pre-primary curriculum is often not aligned with the primary curriculum (UNICEF 2019).

Some evidence suggests that improving pedagogy or providing teacher training can improve learning. These and other evidence-backed strategies (see Banerjee et al. 2023) should be considered as part of efforts to scale and improve pre-primary. Promoting foundational learning through pre-primary education will require political prioritization, attention to these quality factors and persistent commitment to equity to ensure that the most marginalized can benefit. This includes attention to gender responsiveness in early learning, including gender-responsive curriculum and teachers and teaching practice, which may require tackling early childhood teachers' and other actors' gender biases and stereotypes (Kilsby 2014; Subramanian 2019). It also requires addressing the barriers, such as domestic burdens, that may interfere with girls' learning at even extremely young ages (Kilsby 2014).

Box 2. Prioritizing early childhood in partnership compacts to promote foundational learning

Several partnership compacts include support for early childhood education with the intention of supporting foundational learning more broadly. El Salvador's compact, for instance, focuses on early childhood learning because of its "potential to generate a virtuous cycle of learning and equality through the education system" (El Salvador, Local Education Group, Ministry of Education, Science and Technology 2022). Côte d'Ivoire, Uganda and The Gambia all include pre-primary as components of their reforms, which ultimately aim to improve foundational learning (Côte d'Ivoire 2023; Uganda, Ministry of Education and Sports 2022; The Gambia, Ministry of Basic and Secondary Education 2023).

Language of Instruction

In many low- and middle-income countries, the language that children speak at home (L1) may be different from the official national language(s). A national language is typically the language of instruction (LoI) for at least part of the education system.

Language is the basis for learning all subjects, as students need to understand the spoken and written language of the classroom in order to learn. As such, language of instruction is a critical consideration for foundational learning (Trudell et al., n.d.(a)). It appears that low learning outcomes may be partially a result of LoI policy, as many students are taught in languages they do not understand (World Bank 2021b). The evidence is clear that teaching students in a language they understand has benefits for not only their learning of that language but also their broader learning. Learning in their home language in the early years can help students better develop their foundational skills (Soh, Del Carpio, and Wang 2022) and ultimately helps them better learn a second language. A strong body of research points to the value of LoI policies that use students' home language in primary, building up their literacy in their home language before potentially switching to a second language (L2) as the language of instruction at a later stage (World Bank 2021b).

In particular, evidence suggests that using students' home language as the language of instruction for *all* subjects *throughout* primary best facilitates their learning. A study of nine bilingual education programs in Africa found that they best produce learners who can transition to secondary when students' home language is the LoI in all of primary, with teaching and learning materials developed for that language, teachers who are bilingual in all languages of the classroom, language learning curriculum for the second language integrated all across primary, and with attention to building second language vocabulary in academic subjects (Trudell et al., n.d.(a)). It is often common, though, to have an "early exit" policy of students learning the first language in the early years (up to grades 1, 2 or 3) and then transitioning to a second language, though such policies are not always implemented with fidelity. L1 policies can sometimes mean that language-related subjects are in students' home language, facilitating their language development in L1, but other subjects, such as science and math, are taught in L2, which may hamper student learning in these subjects. Many international donors, including GPE, support L1 instruction in language and literacy classes in the early years but don't tend to focus as much on the language of instruction for other subjects (Trudell et al., n.d.(a)).

Decisions about LoI policy need to account for both political feasibility and the evidence of what works. While the evidence is clear, the politics and logistics of LoI are complex: language of instruction is politically charged in many contexts, with instruction in (inter)national languages typically seen as more prestigious than in the local languages that many students speak at home (Trudell et al., n.d.(a), n.d.(b)). Logistically, too, home language instruction can be challenging, especially in contexts with great linguistic diversity, as each language requires its own pedagogical pathway requiring scope and sequencing and development of teaching and learning materials in that language. L1 experts should be closely engaged in the process to inform pedagogical and curricular decisions. Introducing L1 for *all* subjects will help students better learn the curricular content, but it does require more resourcing, as more curricular support is needed. Regardless of whether L1 is used across the curriculum or just in literacy instruction, it will be essential that teacher training align with the new approach. Literacy is often not included in many sub-Saharan African teacher training programs, but teachers will need to be prepared for L1 literacy instruction, which will require alignment between pre-service and the LoI policy and school curriculum, and capacity building at pre-service training institutions. In-service teachers will also need to be trained and supported. Moreover, LoI policies may impact decisions about where and how teachers are recruited and deployed to ensure that teachers' language skills align with the LoI in the schools in which they are teaching.

Engagement of parents and broad consensus across all the stakeholders in an education system will be essential for effective LoI reforms, particularly given the political nature of LoI issues. Where L1 instruction is not politically tenable, ensuring effective implementation of L2 instruction—including through many of the other features discussed in this note—becomes all the more important (Trudell et al., n.d.(b)). Given these considerations, developing new curricular materials and support for L1 is an intensive project in both technical expertise and resourcing (Trudell et al., n.d.(b)). Notably, the choice of LoI may be particularly complex in contexts where the student body has multiple home languages. In such contexts, choosing one of those home languages to instruct the class, rather than using a (inter)national language of instruction that none of the students know, will likely be more effective for student

learning (Trudell et al., n.d.-b). Of course, the equity implications of such choices must also be considered.[3]

Teachers

Capable, well-supported teachers are essential for achieving foundational learning. While early grade teachers need to be prepared to foster student learning from the time they enter the classroom, many multi- and bilaterally funded teacher programs focus largely on funding in-service teacher training without much attention to pre-service training. Both pre- and in-service teacher professional development (TPD) are important for teachers to be prepared and supported to foster students' foundational learning.

For teachers likely to be teaching in the early grades, it is key to begin developing their understanding of early grade instructional practices during pre-service. In many contexts, however, pre-service training may not expose teachers to the instructional materials and pedagogical approaches that they will be expected to use to implement foundational learning programs or to foster students' social-emotional development. Tackling this challenge requires not only strengthening the quality of pre-service broadly (for instance, through improved coursework, practicum experience, quality assurance and other factors) but also ensuring alignment between pre-service training and foundational skills programs, such that pre-service develops and provides the skills, knowledge and experience teachers will need to support foundational learning and implement the early grade curriculum. GPE's evidence for system transformation brief on pre-service training and the Science of Teaching initiative's literature review and how-to note on pre-service for primary

[3] While the vast number of languages raises concerns for how to approach LoI policy and implementation, it appears that many children in low- and middle-income countries currently instructed in a language other than their L1 speak a relatively small number of L1s, meaning that adding instruction in a relatively small number of additional languages could reach a relatively large group of students in their home language. The World Bank estimates that 37 percent of children in low- and middle-income countries are taught in a language other than their L1. This percentage reflects the 27 percent of students who speak a "minority written language" (that is, a language with more than 1.5 million speakers that has an existing written form and is not the national or official language) and the 10 percent of students who speak a language that is less common. The languages spoken by the 27 percent of students who speak a minority written language represent about 3 percent of the languages spoken in these countries. Though implementing L1 instruction in new languages is a major undertaking, these numbers do indicate that expanding instruction to some of these minority written languages could reach a sizable portion of children not currently receiving instruction in their L1 (World Bank 2021b).

literacy and numeracy offer more detailed guidance on strengthening pre-service systems.

In-service TPD, likewise, is a much-needed avenue to prepare and assist teachers to implement early grade reading, math and other foundational learning programs. Far too often, though, TPD fails to meaningfully improve teacher practice. Effective TPD programs provide targeted support to teachers; TPD will have a better chance of improving teacher practice if it homes in on particular skills and topics, like early grade reading or math concepts and pedagogies, rather than aim for generalized improvements. It is also critical that teachers have opportunities to practice the skills targeted by training, not simply observe them. For early grade reading and math programs, this may involve teachers practicing key pedagogical strategies or the use of new reading materials.

Evidence points to the value of sustained support in the form of ongoing follow-up visits and long-term school-based coaching and mentoring in changing teacher practice and raising student learning. School-based coaching and mentoring can also help keep the focus on teachers' classroom practice. These principles apply to in-service TPD for all teachers (see GPE's evidence for system transformation brief on in-service teacher professional development), including early grade teachers working on foundational learning. Particularly where countries implement new foundational learning programs, strong in-service TPD approaches will be critical to ensure that the teachers already in the workforce are equipped and supported to implement these programs in their classrooms.

Teacher deployment processes should also be considered in working to boost foundational learning. Highly capable teachers are an important piece of the puzzle in improving foundational learning. In some contexts, however, more qualified teachers tend to be deployed to higher grades. Moreover, overcrowding is often most severe in the early grades (Watkins 2013). Ensuring that sufficient numbers of teachers—and sufficiently qualified and capable teachers—are deployed to the early grades is an important policy consideration for promoting foundational learning alongside teacher professional development.

Box 3. Sierra Leone's approach to foundational learning

Sierra Leone's partnership compact prioritizes "foundations of learning for all," with the goal of all grade 4 students reading with fluency and comprehension, attaining fundamental math skills and developing social-emotional skills. The compact approaches this goal through multiple pillars: pre-primary to build students' readiness; a strong instructional core for foundational learning; recruitment, training and support for teachers' delivery of foundational learning; data and technology leveraged to support service delivery; and improvements to governance, management and accountability to improve foundational learning. Sierra Leone's approach to raising foundational learning underscores the need to approach teaching and learning for foundational skill development from multiple angles.

Assessment-Informed Instruction

Instruction that responds to students' individual learning levels is key for fostering student learning. Assessment of student learning levels is critical for informing instruction and curricular decisions (as well as informing broader policy and practice) and helping ensure accountability for learning. Assessment-informed instruction relies on not a single diagnostic test but rather on an ongoing process of assessing learning to inform the way the teacher teaches and, ideally, to identify individual student needs and strengths. Too often, teachers' guides and other teaching and learning resources do not provide guidance on what and how to assess, and some teachers struggle to know when to assess. Moreover, where instructional time is already full from an extensive curriculum, teachers may find it difficult to fit assessment and differentiated instruction into their teaching. This may be all the more difficult in large classrooms. As such, teachers need support to know what, when and how to assess, and need to be given sufficient time to do so. Critically, assessment-informed instruction is not just about assessing students; it also relies on teachers being able to act on the assessment findings. As such, teachers need to be supported in this process (Ralaingita et al., n.d.).

A strong body of evidence demonstrates that targeting instruction to students' learning levels, rather than their grade levels, can be highly cost-effective, which is considered a "great buy" for its strong evidence of cost-effective impact. Implementation of such an approach can involve grouping students by level (instead of age) for some or all learning time (Banerjee et al. 2023). Teaching at the Right Level (TaRL) is among the most prominent assessment-informed instruction programs that

relies on grouping, in part because of the impact demonstrated through multiple rigorous evaluations. The approach was developed in India by the nongovernmental organization Pratham and has since been adopted in somewhat adapted forms in other contexts, including through government-led programs in Côte d'Ivoire, Zambia and several states in Nigeria and through partner-led programs in several other countries in sub-Saharan Africa.[4]

Recognizing that many children fall behind in the school curriculum, the TaRL approach specifically aims to develop foundational reading and math skills for children ages 7 and above. To do so, children are grouped into learning levels for part of the day (depending on the number of children in a given class, these groupings may span grades). Grouping is determined by simple oral assessments that the teacher conducts with each student, and students are tested occasionally so that they can be regrouped as needed. Once grouped, students receive instruction targeted to their learning level. Instructional activities are simple and rely on low-cost materials (like letter charts or cards with words) that can be adapted for appropriate use in different groups. Teachers receive ongoing training and support on TaRL from "leaders of practice," who ideally have used the TaRL approach, and learning data are used to inform programming. Notably, TaRL and other assessment-informed instruction approaches need not be constrained to the school day; they have also been used in community settings and/or alongside in-school models (Banerjee et al. 2023).

Structured Pedagogy

Structured pedagogy is a coordinated approach to improving classroom instruction that involves provision of student materials and lesson plans, training, and continuous support for teachers. In line with the science of learning, structured pedagogy interventions introduce skills gradually, building incrementally on the skills and knowledge students already have. Many structured programs follow an approach in which teachers model the target skill, then help the student practice this skill, give them time to practice independently and review what the students have learned. Programs often also include guidance for continuous assessment, with the intention that teachers will adapt their teaching as needed. The degree of structure in these materials can vary, with teachers usually given teachers' guides or lesson plans with routines, concepts and step-by-step activities or more general scaffolding to guide their instruction. Some programs may go so far as to script everything a teacher is

[4] See the TaRL website for the full list of countries.

expected to say, while others may only suggest activities; this degree of prescription is reflected across the range of resources that make up a structured pedagogy program (Piper and Dubeck, n.d.).

There is strong evidence of the impact of structured pedagogy, which is considered a "great buy" by the Global Education Evidence Advisory Panel for its cost-effectiveness (Banerjee et al. 2023). Notably, the large effect sizes associated with some structured pedagogy programs may be due in part to the combination of low learning levels and widespread implementation; where learning levels are low and programs are widely implemented, the effect size may appear large even if learning gains are more moderate. Even so, modest gains matter. Notably, the evidence of impact also appears stronger in lower performing contexts, where such programs can help boost the instructional capacity of low-skilled educators. Interestingly, structured pedagogy programs targeted at all students appear to have bigger benefits for girls' learning than programs specifically targeting girls, especially for lower primary literacy (Piper and Dubeck, n.d.).

The evidence also raises key considerations about *how* structured pedagogy programs should be designed. Some evidence suggests that overly scripted lessons may actually have negative effects (Piper and Dubeck, n.d.). It appears that the dual investment in materials and teachers' skills to use these materials is central to structured pedagogy's impact. A study of the PRIMR program in Kenya, which targeted literacy and mathematics in grades 1 and 2, found that just providing professional development and instructional support to teachers had little impact on learning, while a combination of TPD, instructional support and revised student books on literacy and numeracy had statistically significant positive impacts on learning. Furthermore, a package of TPD, instructional support, revised student books *and* teachers' guides was found to have the biggest impact on learning. Though this latter intervention was also the most expensive, its high impact meant that it was also the most cost-effective of the three combinations studied (Piper et al. 2018).

While structured pedagogy is supported by a strong body of evidence, structured pedagogy can face resistance in adoption and complications in implementation. Teachers unions and others sometimes see structured pedagogy as undermining teacher autonomy and deprofessionalizing the teacher career, particularly where programs are highly scripted. Moreover, structured pedagogy is sometimes perceived as neocolonial, with programs often developed in the West and imposed through large internationally funded projects. Structured pedagogy programs need to operate

within the context (and constraints) of the existing curriculum. Many countries' national curricula are not designed in ways that facilitate early learning, and program design needs to consider how structured pedagogy could be approached within the context of the national curriculum.

Finally, as a culmination of many of these considerations—particularly those around teacher autonomy—is the consideration of how long term a solution structured pedagogy can be (Piper and Dubeck, n.d.). Structured pedagogy works best in settings where teachers need the most support, but it can pose challenges for teacher autonomy. Ideally education systems will, over time, build up a more highly skilled workforce that requires less rigorous guidance and is more capable of implementing responsive, high-quality instruction with more autonomy.

More evidence is needed on the long-term impact of structured pedagogy, and program design needs to take both short- and long-term views on the intensity of prescription and scaffolding. One possible adaptation suggested by Piper and Dubeck (n.d.) is to change the degree of autonomy in teachers' guides as teacher skill levels change. All of the considerations above require substantial buy-in and input from a wide range of stakeholders, persistent attention to political economy constraints and rigorous planning within the context of the education system.

Student Books

Textbooks and other student books are one of the ingredients that can be included in high-impact structured pedagogy packages. Even beyond the context of a full structured pedagogy program, evidence indicates that a 1:1 ratio of student books to students is beneficial for student learning. The study of the PRIMR program in Kenya mentioned above found that a 1:1 ratio, coupled with TPD and instructional support, had a much larger effect size on student learning than only TPD and instructional support. This may be in part because especially in some contexts, including many sub-Saharan African countries, textbooks are a major driver of instruction. The research on PRIMR, which targeted grades 1 and 2, suggests that student books have a moderate impact on student outcomes and can be a cost-effective way to raise learning, though the largest impacts come from the combination of interventions discussed in the previous section (Piper et al. 2018).

Research from several other countries also points to a link between textbooks and learning, with students doing better when they have their own books (Global Education Monitoring Report Team 2016). Notably, evidence suggests that a 1:1 ratio of books to

students is more important for children's development of reading skills than having access to a larger number of titles that students then must share. Of course, quality of books matters, as the language, level, scaffolding and other features must be appropriate to facilitate student learning.[5] And, critically, supplying textbooks alone without also working to address other issues is considered a "bad buy," with a strong body of evidence showing that doing so does not raise learning or is not cost-effective, likely because provision of more inputs alone will not yield transformative changes in how teachers teach (Banerjee et al. 2023).

While student books are well linked to learning, one-to-one access to textbooks and other student books remains unrealized in many contexts. Exact data on textbooks are often limited, but many countries struggle to supply books to all students, sometimes with substantial inequalities in book access within countries. A variety of factors appear to contribute to insufficient access, often related to cost. High prices are driven by issues at all stages of the book supply chain, including book development, procurement, distribution and use. Corruption can also contribute heavily to costs, as can damage and loss to books because of poor storage. With regard to usage and relevance, books may not always exist in L1 languages, and teachers may not be well versed in how to use student books to teach well (Global Education Monitoring Report Team 2016; de Guzman 2022). In some contexts, families may need to pay for textbooks, with implications for access and equity (de Guzman 2022).

Addressing these supply and procurement challenges is an important strategy for working toward greater access to high-quality books for early grade learning. Where capacity exists, domestic publishing could be considered as an avenue to bring down costs (Global Education Monitoring Report Team 2016). The Global Book Alliance (GBA) was launched in 2018 to bring together global education partners to end illiteracy through a coordinated effort to shape the book market to better address the growing book gap challenge. The alliance, whose steering committee includes GPE, is working toward market-based transformation across the book supply chain.[6] Supporting more efficient supply chains and greater relevance and use of high-quality student books, with the caveats noted in this section, will be a valuable ingredient for raising foundational learning, given the evidence about the importance of one-to-one access to early literacy skills.

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[5] "Reading Programs That Work," EducationLinks, USAID, September 7, 2018, https://www.edu-links.org/learning/reading-programs-work.

[6] "Our Approach," Global Book Alliance, https://www.globalbookalliance.org.

Instructional Time

Sufficient time spent on teaching and learning is critical at every level of schooling (IIEP-UNESCO 2023), including in the early grades as students and teachers work to develop foundational learning. To develop early grade reading skills, children need sufficient instructional time to see and engage with print and use the skills and knowledge they have acquired. In some low-income countries, time constraints limit children's learning to read (Barnes and Pallangyo 2019). Ensuring sufficient time for teaching reading will require policy that lays out sufficient instructional time (both for literacy instruction and more broadly) and monitoring and accountability measures for ensuring that instructional time is used effectively in the classroom (which, as a starting point, requires that teachers are present in their classrooms).

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