

BRIEF

Teach Primary

*Our **vision** is to revolutionize how education systems track and improve teaching quality*



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WORLD BANK GROUP
Education

What is Teach?

Teach is an open access classroom observation tool that provides a window into one of the less explored and most important aspects of student learning: what goes on in the classroom. The tool has been designed to help countries track and improve teaching quality.

This brief focuses on *Teach Primary* (for grades 1–6). *Teach* is also available for the early childhood education context through *Teach ECE*. *Teach Secondary* and *Teach Remote* are currently under development and are coming soon.

Why Is It Important to Measure Teaching Practices?

A growing body of research indicates teaching is the most important school-based determinant of student learning, and the difference between the impact of a weak teacher or a great teacher on student test scores is equivalent to one to two years of schooling. Moreover, evidence suggests several consecutive years of effective teaching can offset learning shortfalls and help students reach their full potential (Bau and Das 2017; Buhl-Wiggers et al. 2017; Hanushek and Rivkin 2010; Nye, Konstantopoulos, and Hedges 2004; Snijlsteit et al. 2016).

Evidence shows, however, that many teachers today do not receive the support they need to be effective in the classroom (Popova et al. 2018). Teachers require ongoing feedback, practice, and support to improve their teaching, and it is essential that all teachers around the world have access to continuous and high-quality learning opportunities to improve their practice.

The first step toward offering better support to teachers so they can improve their teaching is to track current teaching practices. *Teach Primary* was developed with this goal in mind.

Teach Primary's Value Proposition

- **Teach Primary holistically measures what happens in the classroom.** It does so by considering time spent on learning as well the quality of teaching practices. Importantly, the tool captures teaching practices that contribute to students' cognitive skills as well as their socioemotional skills.
- **Teach Primary has a cross-cutting focus on inclusion.** The tool provides a common language to encourage inclusive and responsive teaching that facilitates whole-child development. In 2021, the tool was revised to strengthen the way it captures inclusive teaching practices.
- **Teach Primary uses evidence-based teaching practices from countries around the world and has been tried and tested in diverse contexts.** *Teach Primary* underwent a rigorous development and validation process over a two-year timeframe, including being piloted in over 1,000 classrooms across Mozambique, Pakistan, the Philippines, and Uruguay, to ensure that the tool measures teaching practices that have been shown to be associated with student learning.¹ Since its initial piloting, *Teach Primary* has been used in 30 countries, and further analysis has shown consistently high levels of reliability among observers using the tool.²
- **Teach Primary is adaptable to different contexts.** The tool is designed to be modular, which allows users to create additional elements that are relevant for the local curriculum and standards of effective teaching practices, or to exclude irrelevant elements.³ *Teach Primary* also includes the use of local video footage to train observers, which ensures that the tool is contextualized and anchored in the local setting.⁴
- **Teach Primary comes with a suite of free resources to support its use.** These resources are meant to provide support in every step of the tool's implementation, including initial conversations with relevant stakeholders, training observers, using the tool to collect data in the field, cleaning and analyzing the data, and producing and sharing results. The *Teach Primary* Observation Tool and Observer Manual (Second Edition, 2021) are currently available in Arabic, English, French, Portuguese, Russian, Spanish, and Swahili via the *Teach* website.

How Can Teach Primary Be Used?

Teach Primary can be used for different purposes depending on the country context and project goals.

Teach Primary can be used as a **system diagnostic**, allowing governments to get a clear snapshot of the current state of teaching practices and teaching quality in classrooms. In this capacity, *Teach Primary* can be leveraged as a **monitoring and evaluation (M&E) tool** to assess the results of a specific education policy or program that targets teacher practices, such as the deployment of a new curriculum or a new instructional model.

Teach Primary can also be used as part of a teacher professional development system to identify individual teachers' strengths and weaknesses and **to provide targeted support to teachers**.

Please note that *Teach Primary* was not developed to be used in high-stakes teacher evaluation or decision-making processes.

What Does Teach Primary Measure?

Teach Primary captures:

- 1 The *time* teachers spend on learning and the extent to which students are on task;
- 2 The *quality* of teaching practices that help develop students' socioemotional and cognitive skills; and
- 3 Other *aspects of the learning environment* such as the accessibility of the physical environment, including the classroom set-up and materials available.

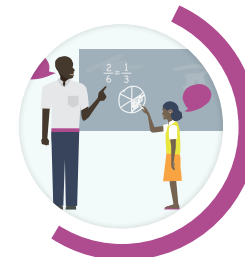
As part of the **Time on Task component**, three *snapshots* of 1–10 seconds are used to record both the teacher's actions and the number of students who are on task throughout the observation.

The **Quality of Teaching Practices component** is organized into three primary areas: Classroom Culture, Instruction, and Socioemotional Skills. These areas have nine corresponding elements that point to twenty-eight behaviors. The behaviors are characterized as low, medium, or high, based on the evidence collected during the observation. These behavior scores are translated into a 5-point scale that quantifies teaching practices as captured in a series of two, 15-minute lesson observations.



CLASSROOM CULTURE:

The teacher creates a culture that is conducive to learning. The focus here is not on the teacher's correction of students' negative behaviors but rather the extent to which the teacher creates a **supportive learning environment** and sets **positive behavioral expectations**.



INSTRUCTION:

The teacher instructs in a way that deepens student understanding and encourages critical thought and analysis. The focus here is not on content-specific methods of instruction, but rather, the extent to which the teacher **facilitates the lesson, checks for understanding, provides feedback, and encourages students to think critically**.



SOCIOEMOTIONAL SKILLS:

The teacher fosters socioemotional skills that encourage students to succeed both inside and outside the classroom. To develop students' social and emotional skills, the teacher instills **autonomy**, promotes **perseverance**, and fosters **social and collaborative skills**.

Finally, *Teach Primary* is accompanied by a **checklist** to assess additional aspects related to educational quality, including the accessibility of the physical environment, which can be used together with classroom observation tool.

Teach Primary Framework

TIME ON TASK	TIME ON LEARNING			
	+			
QUALITY OF TEACHING PRACTICES	CLASSROOM CULTURE	SUPPORTIVE LEARNING ENVIRONMENT	POSITIVE BEHAVIORAL EXPECTATIONS	
	INSTRUCTION	LESSON FACILITATION	CHECKS FOR UNDERSTANDING	FEEDBACK CRITICAL THINKING
	SOCIOEMOTIONAL SKILLS	AUTONOMY	PERSEVERANCE	SOCIAL & COLLABORATIVE SKILLS

Teach Primary's Focus on Inclusion

In 2020 and 2021, *Teach Primary* underwent a revision process to strengthen the way the tool measured inclusive teaching practices.

Inclusive teaching practices are defined as those that create increased opportunities **for all children to access learning**.

The vision for inclusion in *Teach Primary* is grounded in the Universal Design for Learning (UDL) framework and considers additional dimensions of inclusion including the physical environment.⁵ The updated version of the tool (2021) reflects some important adjustments from the original version released in 2019. These adjustments include:

- 1 The addition of a new behavior, Behavior 1.4b, to measure disability bias;
- 2 Revisions to existing Behaviors to better capture inclusive teaching practices; and
- 3 Revised examples to accompany each Behavior to reflect a stronger focus on inclusion.



Development and Validation

Teach Primary underwent a rigorous development and validation process over a two-year timeframe to ensure that the tool captures teaching practices associated with student learning, and that it met the appropriate psychometric criteria of reliability and validity.

Throughout the implementations of *Teach Primary* since its launch in 2019, more than 500 enumerators have been trained on the tool. **More than 92 percent of all enumerators trained have passed the certification exam**, which involves coding three videos accurately (for each video, successful participants score within one point of the expert-developed codes at least 80 percent of the time). Further analyses have shown that **less than 6.2 percent of the variation in *Teach Primary* scores is due to enumerator effects**. The tool's high reliability can be credited to the structured training material, intense and practical training, and use of local videos to train local observers.

For more information on the theoretical and empirical foundations for the tool's content, please see "Evidence-Based Teaching" (Molina et al. 2018). For more information on the tool's reliability and validity, please consult "Measuring the Quality of Teaching Practices in Primary Schools: Assessing the Validity of the Teach Observation Tool" (Molina et al. 2020), which shows that *Teach* scores are internally consistent and present good inter-rater reliability, and higher *Teach* scores are associated with higher student outcomes, using data from 800 schools in Punjab, Pakistan. Please also consult "A Generalizability Study of Teach, A Global Classroom Observation Tool" (Luna-Bazaldua, Molina, and Pushparatnam 2021) for additional information on the tool's psychometric properties.

>92%

*of enumerators trained
passed certification*

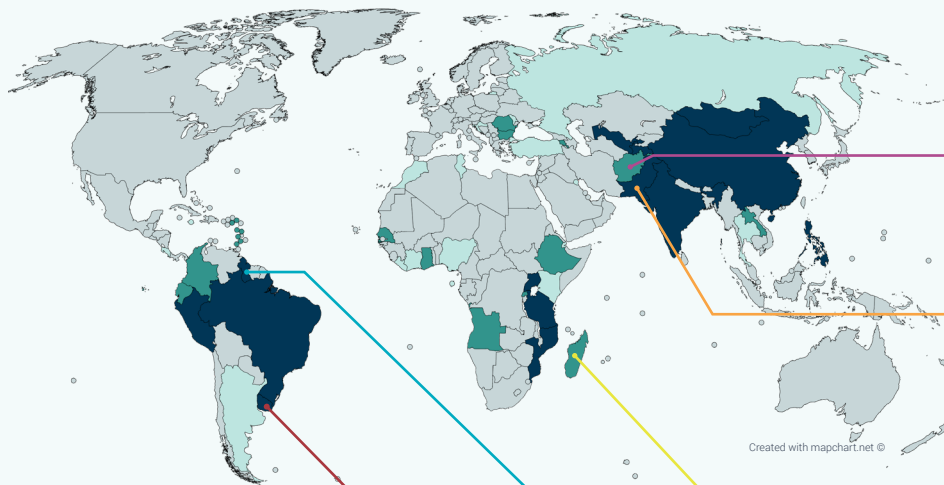
<6.2%

*of variation is due to
enumerator effects*

Teach Primary Implementation to Date

Teach Primary has been applied thirty-five times in 30 countries, and it is in the process of being applied in another 16 countries. As of December 2021, we estimate that *Teach Primary* has been or is being implemented in over 42,500 schools worldwide, involving almost 180,000 teachers, more than 3.6 million students, and 25 organizations.

Figure 1: Map of Countries with Past, Ongoing, and Early-Stage Teach Primary Applications



Teach Primary Applications

- Applied
- Ongoing
- Early stages

Teach Primary has been implemented by the World Bank and by external organizations, including J-PAL, IDinsight, IRC, Save the Children, and Education World Trust, as well as individual schools.

Teach Primary is highly versatile and has been adapted to the different contexts and project needs of every implementation. For example:

- **In Afghanistan**, *Teach Primary* was included as part of a larger reform effort to transform the role of inspectors to pedagogical leaders, who provide ongoing support and feedback to teachers as part of a coaching pilot.
- **In Punjab, Pakistan**, an adapted version of *Teach Primary* is currently being used as part of Punjab's in-service teacher professional development system to conduct thousands of classroom observations a day and to provide targeted feedback and coaching support to teachers on specific teaching skills.
- **In Mozambique**, *Teach Primary* was used as part of a system diagnostic to understand the teaching practices in use in primary classrooms around the country and to inform the design of a new teacher professional development program.
- **In Guyana**, *Teach Primary* was used to evaluate the effectiveness of a new curriculum program at the national level.
- **In Uruguay**, *Teach Primary* was leveraged to support in the evaluation of the country's new teacher professional development system for full-time schools.

Implementing Teach Primary: From Conception to Completion

This roadmap provides a detailed timeline, cost estimate, and list of complementary resources needed to apply *Teach Primary* in a new setting. The roadmap captures the implementation process from start to finish and outlines the recommended steps teams should follow to ensure timely and accurate data collection. The overall process takes a minimum of three months. For more detail, see the [Teach Implementation Guide](#).

1. Consult with stakeholders

EXPECTED TIME: 2 WEEKS
Consult with stakeholders on what *Teach Primary* measures and discuss its applicability in the local setting.

1

2

2. Collect video footage

EXPECTED TIME: 2 WEEKS
Collect video footage from the country where *Teach Primary* will be applied. These videos need to reflect the diversity of the target sample, as they will be used in the training to prepare observers to apply the tool within a given context.

3

3

3. Option 2: Direct Observer Training⁷

STEP A) CREATE MASTER CODES AND PREPARE TRAINING / EXPECTED TIME: 7 DAYS
The *Teach Primary* trainer and the master coder(s) certified on *Teach Primary* develop the training materials.

STEP B) CONDUCT OBSERVER TRAINING / EXPECTED TIME: 5 DAYS
The *Teach Primary* trainer conducts the observer training. The training lasts 5 days (a four-day training with 1 day for reliability testing).

3. Option 1: Implementor Training⁶

STEP A) CREATE MASTER CODES / EXPECTED TIME: 7 DAYS
The *Teach Primary* trainer (with optional help from a master coder or coders) prepares local master codes for the implementor training.

STEP B) TRAIN IMPLEMENTORS / EXPECTED TIME: 5 DAYS
The *Teach Primary* trainer trains 5–8 local implementors on the tool. At the end of the implementor training, the *Teach Primary* trainer will choose 1–2 implementors to conduct the observer training.

STEP C) CREATE MASTER CODE JUSTIFICATIONS / EXPECTED TIME: 7–14 DAYS
Implementors who successfully passed the *Teach Primary* training will create master code justifications for the 6 practice videos, and master codes for the 6 exam videos.

STEP D) CONDUCT OBSERVER TRAINING / EXPECTED TIME: 5 DAYS
The implementor(s) conducts the observer training. The training lasts 5 days (a four-day training with 1 day for the reliability testing).

4. Observers collect data

EXPECTED TIME: 21–28 DAYS
After the observers are trained, they proceed to conduct classroom observations using *Teach Primary*. Data collection is either done by the government or an external entity, depending on the context. In either scenario, observers collect data using pen and paper interviewing (PAPI) or computer-assisted personal interviewing (CAPI). The *Teach* team provides a do-file (Stata) that automatizes the data cleaning process and generates a report that highlights potential mistakes in the data.

4

5. Clean, analyze, validate, and present results

EXPECTED TIME: 10 DAYS
After the data have been cleaned, another do-file (Stata) automatically analyzes the data, which generates descriptive statistics and confirms the validity of the *Teach Primary* scores, producing Excel/Stata graphs and tables. These outputs are then input into a preformatted Microsoft Word file or a text file (LaTeX).

5

Minimum time needed for execution, from conception to completion:
3 months

How Much Does Teach Primary Cost?

The cost to implement *Teach Primary* varies significantly by context.⁸

The cost of *Teach Primary* training, including costs for video editing, adapting the training material to use local videos of classroom teaching, and trainer travel and accommodation, are estimated at approximately US\$8,000. These costs may vary based on the consultancy rate of the *Teach Primary* trainer, which ranges from US\$300–US\$400 per day. This estimate does not include facilities for the training or data collection costs, which will vary depending on the sample size and location. It also does not include additional translation costs.

The *Teach Primary* Observation Tool and Observer Manual (Second Edition, 2021) are currently available in Arabic, English, French, Portuguese, Russian, Spanish, and Swahili via the [Teach website](#). The original version of the tool (2019) is available in English, Spanish, French, Portuguese, Bulgarian, Swahili, Russian, Mongolian, Uzbek, Mandarin, Brazilian Portuguese, and Dari/Pashto.

Translating the manual to another language costs US\$1,500–US\$2,000. For more guidance on translating the revised manual (2.0), please consult the Complementary Resources page on the [website](#).

Table 1: Teach Primary cost options

	IN-PERSON TRAINING		VIRTUAL TRAINING	
	No translation	Translation	No translation	Translation
Staff time (video editor, coder, and trainer) 1 video editor's time x 1 day	✓	✓	✓	✓
1 roundtrip airline ticket	✓	✓		
1 accommodation x 7 days	✓	✓		
1 per diem x 7 days	✓	✓		
1 translator's time x (10 days translating manual + 8 days transcribing video footage + 7 days translating master codes)		✓		✓
1 designer's time x 2 days designing manual		✓		✓
	\$8,000–9,000*	\$14,000–16,000*	\$6,000–7,000*	\$12,000–13,000*

*Approximate costs provided in US\$.

What World Bank Users are Saying about Teach

Ease and relevance of implementation process

"For our new project, we had to produce a baseline of teaching practices in a very tight timeframe—our counterparts put a large emphasis on both the quality of the instrument and its adaptation to the local context. *Teach* allowed us to meet both of these requirements and our deadline in a very cost-effective way."

Francisco Haimovich Paz, Uruguay

"At first, I was skeptical to use a high inference tool in Mozambique. However, the simplicity of *Teach* and the fact it uses local videos made it possible to implement with a high degree of reliability."

Marina Bassi, Mozambique

"Preparing for the *Teach* training involves collecting videos and creating master codes using the tool. The process of master coding local videos is a crucial step in the implementation of *Teach*... Through this process, we were much more knowledgeable of the tool and were able to convince our partners and observers that this was done in the right way."

Koen Martijn Geven, Pakistan

"*Teach* is the tool that can improve teaching practices in every country when adapted and widely used."

Alina Sava, Romania

Impact on policy dialogue

"*Teach* provided the evidence needed to have a real conversation regarding the challenges teachers' face in classrooms. With this information we were able to engage the government on specific ways the Bank can support these teachers to strengthen their competencies and pedagogical skills."

Franco Russo, Philippines

"*Teach* gave us the chance to discuss several issues with the government, including the importance of observing teachers, which was relevant to introduce a culture of monitoring and feedback. It helped us to identify gaps in the teacher professional development component of our project and plan innovations for the future."

Helena Rovner, Uruguay

"The value-add [of *Teach*] is that it provides a framework for us to interact with governments on these projects that go all the way from the science of learning and reaches down into the classrooms, and that is really powerful. We don't have many tools in our toolbox that do that."

Shawn Powers, Guyana

Endnotes

- 1 *Molina et al. (2018) provide the theoretical and empirical foundations for the tool's content. Molina et al. (2020) show that Teach scores are internally consistent and present good inter-rater reliability, and higher Teach scores are associated with higher student outcomes, using data from 800 schools in Punjab, Pakistan.*
- 2 *For more on the tool's reliability, please see, "A Generalizability Study of Teach, A Global Classroom Observation Tool" (Luna-Bazaldua, Molina, and Pushparatnam 2021).*
- 3 *For example, an additional feature was piloted in primary schools in Uruguay, where the local assessment agency developed two new elements for the tool focused on teaching reading and writing.*
- 4 *This practice ensures that the elements and behaviors described in the manual are contextualized and anchored in the local setting. For example, while Teach states that the teacher should treat all children respectfully, evidence of what is respectful may vary depending on the country and can be adapted.*
- 5 *CAST is an organization that has led the development of UDL. Its website is rich with resources that make it feasible for teachers to incorporate UDL for students with or without disabilities. For more information, please visit <https://www.cast.org/impact/universal-design-for-learning-udl>.*
- 6 *There are two approaches to preparing Teach coders: implementor training or direct observer training. Implementor training, which is preferred, involves hiring a member of the core Teach team, who will train an implementor, who will then train observers, in a cascade model.*
- 7 *In direct observer trainings a member of the core Teach team directly trains observers, working with least one certified master coder on master codes for local videos prior to the local Teach trainings for observers.*
- 8 *The timeline and cost may vary slightly based on the sample size, survey, and/or context-specific realities.*

References

- Bau, Natalie, and Jishnu Das. 2017. "The Misallocation of Pay and Productivity in the Public Sector: Evidence from the Labor Market for Teachers." Policy Research Working Paper 8050, Education Global Practice, World Bank Group. <http://hdl.handle.net/10986/26502>.
- Luna-Bazaldua, Diego & Molina, Ezequiel & Pushparatnam, Adelle. 2021. A Generalizability Study of Teach, a Classroom Observation Tool. 10.1007/978-3-030-74772-5_42.
- Buhl-Wiggers, Julie, Jason T. Kerwin, Jeffrey A. Smith, and Rebecca Thornton. 2017. "The impact of teacher effectiveness on student learning in Africa." Paper presented at the RISE Annual Conference, Washington, DC. <https://riseprogramme.org/sites/default/files/inline-files/Buhl-Wiggers%20The%20Impact%20of%20Teacher%20Effectiveness%202017-04-30.pdf>.
- Hanushek, Eric A., and Steven G. Rivkin. 2006. "Teacher Quality." In *Handbook of the Economics of Education, Vol. 2*, edited by Eric A. Hanushek and Finis Welch, 1051–78. Amsterdam: Elsevier.
- . 2010. "Generalizations About Using Value-Added Measures of Teacher Quality." *American Economic Review* 100, no. 2 (May): 267–71. <https://doi.org/10.1257/aer.100.2.267>.
- Molina, Ezequiel, Adelle Pushparatnam, Sara Rimm-Kaufman, and Keri Ka-Yee Wong. 2018. "Evidence-Based Teaching: Effective Teaching Practices in Primary School Classrooms." Policy Research Working Paper 8656, Education Global Practice, World Bank Group. <http://hdl.handle.net/10986/30929>.
- Molina, Ezequiel, Syeda Farwa Fatima, Andrew Dean Ho, Carolina Melo, Tracy Marie Wilichowska, and Adelle Pushparatnama. 2020. "Measuring the Quality of Teaching Practices in Primary Schools: Assessing the Validity of the Teach Observation Tool in Punjab, Pakistan." *Teaching and Teacher Education* 96 (November): 103–71. <https://doi.org/10.1016/j.tate.2020.103171>.
- Nye, Barbara, Spyros Konstantopoulos, and Larry V. Hedges. 2004. "How Large Are Teacher Effects?" *Educational Evaluation and Policy Analysis* 26, no. 3 (September): 237–57. <https://doi.org/10.3102%2F01623737026003237>.
- Popova, Anna, David K. Evans, Mary E. Breeding, and Violeta Arancibia. 2018. "Teacher Professional Development around the World: The Gap between Evidence and Practice." Policy Research Working Paper 8572, Education Global Practice, World Bank Group. <http://hdl.handle.net/10986/30324>.
- Snilstveit, Birte, Jennifer Stevenson, Radhika Menon, Daniel Phillips, Emma Gallagher, Maisie Geleen, and Heather Jobse. 2016. *The Impact of Education Programmes on Learning and School Participation in Low and Middle-Income Countries: 3ie Systematic Review Summary Report, Systematic Review Summary 7*. London: International Initiative for Impact Evaluation (3ie). https://www.3ieimpact.org/sites/default/files/2019-05/SR24-education-review_2.pdf.

What Experts Are Saying About Teach

"[*Teach*] is the single most important thing the World Bank has done in the last 30 years."

Eric Hanushek

Paul and Jean Hanna Senior Fellow, Hoover Institution, Stanford University

"Before *Teach*, the lack of open source, flexible, easy-to-learn observational measures that can be used systematically in classrooms has stood as a major stumbling block in international efforts to improve education."

Sara Rimm-Kaufman

Professor of Education, Center for Advanced Study of Teaching and Learning, Curry School of Education, University of Virginia

"*Teach* represents a major innovation in our efforts to improve education for all. It will be catalytic for enhancing learning all around the world."

Oon-Seng Tan

Director, Centre for Research in Child Development, National Institute of Education, Singapore

"The revision of *Teach Primary* is hugely welcomed as an essential tool that brings new knowledge on how to measure inclusive teaching practices that will be important for observing learners with disabilities in the classroom and making *Teach* truly a valuable tool for all learners."

Charlotte Vuyiswa McClain-Nhlapo

Lead Social Development Specialist, World Bank

"*Teach* provides excellent guidance for observing and rating global classroom instruction. It is impressive not only for its comprehensiveness, but also its specificity, naming key classroom practices, and describing concrete examples of how those practices occur at different levels of quality."

Heather Hill

Jerome T. Murphy Professor in Education, Harvard Graduate School of Education; Creator of the Mathematical Quality of Instruction (MQI) instrument

"*Teach* provides a practical tool for educators around the world who are serious about improving the quality of classroom practice."

Pam Grossman

Dean and George and Diane Weiss Professor, Graduate School of Education, University of Pennsylvania; Creator of the Protocol for English Language Arts Teaching Observation (PLATO) instrument

"*Teach* has clearly been designed with the realities of the Global South in mind. The clear explanations, well-crafted examples, and FAQs ease interpretation and ensure commonality of understanding between observers."

Sara Ruto

Director, People's Action for Learning (PAL) Network

Contact us at teach@worldbank.org and
visit us at www.worldbank.org/education/teach

