

Terms of Reference

Evaluating the Impact of an In-Service Teacher Training in Afghanistan

Baseline data collection

Background

The Ministry of Education is implementing the EQRA project which is funded by the International Development Association, Afghanistan Reconstruction Trust Fund, and Global Partnership for Education (GPE). Under the EQRA, the government wishes to train all secondary-school teachers that teach another subject than the one they have been trained for in the general two-year training. In this consideration, the government and the World Bank agreed to pilot the intervention in a first step: in 8 provinces, the Teacher Education Directorate (TED), will train up to 3,000 secondary-school teachers during the 2021 school year.

In order to evaluate the impact of such teacher training, the government and the World Bank agreed to perform a rigorous two-year impact evaluation based on a Randomized Control Trial (RCT). This Impact Evaluation (IE) will evaluate teacher knowledge, teaching practices and ultimately student achievement in the aim of scaling up the program across Afghanistan.

The IE will focus on eligible teachers and their students in 500 secondary schools located in 8 different provinces. As the IE is a RCT, half of the eligible teachers will be selected for the training, while the other half will constitute the control group, but teachers (and their students) from both groups will be surveyed.

The teacher training is expected to start at the beginning of the 2021 school year (around **September 2021**) and will last 8 months. Baseline data collection should happen at the beginning of the school year and be done before the start of the training (**Aug-sep2021**). This data collection involves to go directly to the 500 secondary schools included in the IEto survey teachers and their students. Depending on the sanitary situation and the school reopening framework, we also expect a piloting phase at the latest in February 2021 in order to test the validity of the numerous instruments designed to evaluate the impact of the training on teachers and students¹.

Purpose

The purpose of this consultancy is to develop and implement all components of the baseline data collection for the impact evaluation of the teacher training. The impact evaluation will be conducted in a subset of schools and districts in which the training program is implemented. A baseline survey of 500 schools will be fielded in **Aug- 2021** across 8 provinces. These terms of reference cover the task of tablet-based data collection and data entry activities related to the baseline survey only. Details of the survey are described in the following sections.

¹At the moment we are writing this TOR, there is no official decision regarding school reopening. In consequence, organization of a pilot will be conditional on this and will not happen if the school reopening scheme does not allow piloting of the data. At this time, we believe that a pilot will be possible only if schools reopen and will be functional during the winter break such that a pilot will be possible to organize in February, before baseline data collection at the start of the 2021 school year i.e end of March 2021



Program Description

The teacher training aims to train secondary-school teachers on a 8-month subject-content knowledge training. Those particular teachers actually received a 2-year teacher training in the past, but in another subject that they are actually teaching now (this distortion is usually due to a shortage of trained teachers or misallocations of teachers). The Ministry of Education estimates that around 50,000 teachers are in this position of teaching a subject in which they have not been trained to teach. The 8-month teacher training has been designed to remedy this issue through an in-service content knowledge training, after which, those teachers will be able to teach efficiently this subject to their students.

As a first step, the Ministry of Education and the World Bank agreed to develop a pilot that will train around 3,000 eligible teachers in 8 provinces (Badakhshan, Balkh, Bamyán, Hirat, Kabul, Kunar, Paktya and Parwan) across Afghanistan. This pilot has been agreed on in order to gauge for the organization capacity required for a large-scale in-service teacher training and evaluate its impact on i) teacher knowledge and practices and ii) student achievement. This Impact Evaluation (IE) relies on a rigorous two-year Randomized Control Trial (RCT) allowing to estimate the causal effects of the training at the end of the training (end of the 2021 school year) and one year after.

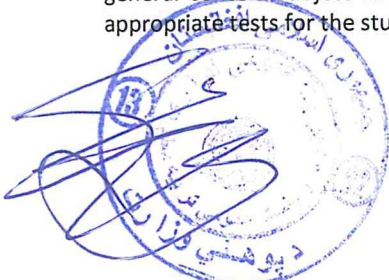
The IE will be based on a subsample of 500 schools² from the 8 provinces and we will randomly assign half of the teachers to receive the training (treatment group) and the other half to be part of the control group such that these teachers won't attend the training and will serve as a counterfactual for the treatment group. We will sample eligible schools based on their locations and will only select the ones that are not too far from the training center where teachers assigned to the training will have to go to. The secondary-school teachers of interest are the one that are currently teaching mathematics or science and need to attend the subject-content knowledge training³. Furthermore, we will also stratify the sample by taking into account the level of experience of eligible teachers.

The sampling procedure requires a lengthy process, associated to a clear protocol. The Teacher Education Directorate (TED) developed a short questionnaire that will be sent to the Province and District Education Departments of the 8 provinces of interest in April 2021. The collected information will allow to build a dataset with all eligible schools and teachers across the provinces and the final subsample from which the exact provinces, districts, schools and teachers will be available only by then. This final subsample will also take into account security assessments given by the Ministry of Education. We expect to have this sample finalized and ready for May-June 2021.

The teacher training and the related impact evaluation have to follow a strict timeline. At the immediate start of the 2021 school year, a baseline data collection in the 500 schools will be organized with questionnaires and classroom observations directed to the teachers enrolled into the IE as well as student tests of their knowledge in mathematics or science. At the end of this baseline data collection, the random assignment of teachers in the treatment or the control groups will be held, allowing to start the training straight after baseline data collection. At the end of the school year 2021, a new wave of data collection (midline) will be organized in order to collect the same

²At the time we are writing this TOR, our estimates suggest that, on average, only one teacher per school would be eligible for training, but this figure is subject to change when more precise data will be collected in the coming months

³ There are no requirements regarding the grade-level at which the teacher is teaching. The teacher training is a general content-subject knowledge for the whole secondary-school level. It will require however to create appropriate tests for the students.



information and then evaluate the impact of the teacher training in the really short-term, i.e at the end (or close to the end) of the training. Finally, at the end of the 2022 school year, a final data collection (endline) wave should be organized in order to evaluate the impact of the teacher training in the medium-term, i.e one year after teacher training completion. Figure 1 summarizes this timeline and Table 1 summarizes the number of provinces, schools, teachers and students that will be included into the IE.

Figure 1: Summary of the Teacher Training & Impact Evaluation timeline

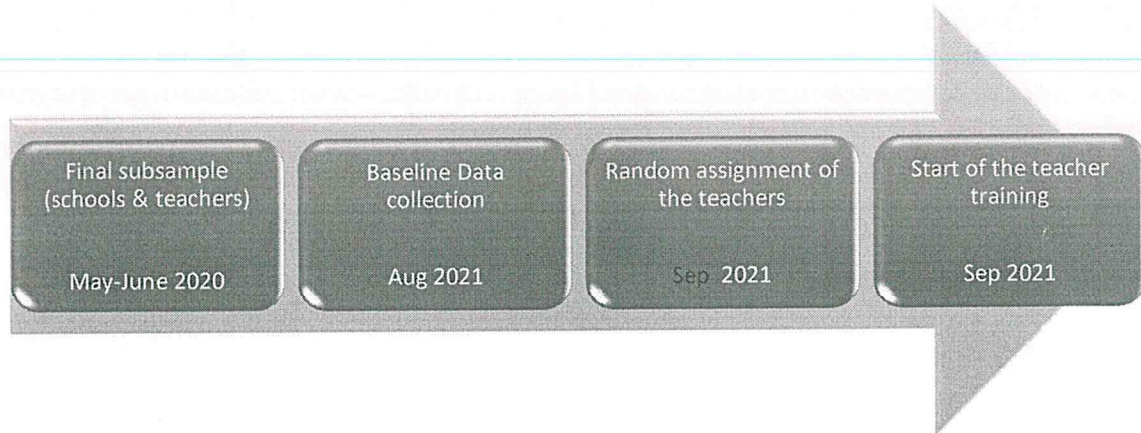


Table 1: Sampling⁴

Number of provinces	8
Number of schools	500
Number of teachers	To be determined (probably around 500-600)
Number of students	To be determined (probably around 18,000)

Scope of the work

The survey firm will be responsible for implementing tablet-based data collection and delivering quality data according to the agreed protocol, expectations and timeline defined by the IE team. The selected survey firm will work under the direct supervision of the IE team. Table 2 summarizes the scope of field data collection work.

We are expecting the survey firm to develop an appropriate field baseline data collection protocol designed for several instruments:

Preparation work

⁴ The sampling will be finalized once we get all the necessary information from the TED, expected in September 2021. At that moment, we will be able to give the exact number of schools, district and teachers and students within and across schools.



- **Principal phone survey.** In order to organize the school visit and collect the required information, the survey firm needs to agree with the principal on the day of this visit such that teachers and their students are present. This phone survey would be less than 10-minute long.

During the school visit

- **Principal questionnaire.** A short questionnaire to the principal is necessary in order to collect some information on the school, opinions of the principal over the IE teachers and students' roster
- **Teacher questionnaire.** Every IE teacher should answer to a 30-minute questionnaire in order to collect some background information (e.g education, age, gender, past experience etc.) and information regarding their teaching practices.
- **Teacher subject-knowledge test.** Every IE teacher should answer to a 1.5-hour content-subject knowledge test on the subject that he/she is teaching but for which he/she needs training.
- **Student achievement.** Students have to be tested in the subject on which their teacher needs to be trained on. The test should be around 1-hour long and cover the grade-level curriculum in the subject of interest. A few questions on student's background will be added to the test. This test has to be paper-based, and a precise protocol is required in order to collect quality data, linked with the student roster from the principal questionnaire.

Table 2: Summary of the field data collection⁵

Questionnaire	Duration (min)
Pre-work phone survey	10
Principal questionnaire	30
Teacher questionnaire	45
Teacher subject test	60
Student achievement test	70

Duties and Responsibilities

Data collection protocol

Firm:

- Producing a detailed protocol regarding data collection in line with the final sampling provided by the IE team and that will especially precise (but not limit to):
 - o Number of enumerators & supervisors
 - o Qualifications and training of all staff involved in the data collection

⁵ The durations in this table are potentially subject to change, depending on the final versions we will develop during in 2020.



- Organization of the teams on the field (e.g number of enumerators & supervisors per school, time spent within a school)
- A precise protocol regarding the collection of student achievement tests that are paper-based and the protocol for manual data entry (e.g double-check, frequency)
- Travel and lodging logistics, especially for schools in remote areas
- How to confirm that the schools and the teachers are actually the one from the sample
- Individual identification protocol (that needs to be replicated on subsequent data collection waves in order to create panel data)
- Substitution rules, when required

An agenda is required from the survey firm, and that will illustrate the whole activity protocol. This protocol will need to be approved by the IE team.

Instrument Design and Preparation

Responsibilities will be shared between the IE team and the firm in the following way:

IE team:

- Provide English-language drafts of the mentioned questionnaires, including informed consents to be used. The instruments will be designed for a well-trained and experienced enumerator to administer
- Work closely with the firm following each of the English language and the local language pilots of the questionnaires, to make any necessary revisions, including to the programming
- Review draft and work with the firm to finalize survey training manual

Firm:

- Program tablets with the questionnaires, initially in drafts of the English-version; later in drafts of the local languages; and ultimately the final versions of both English and local languages in consultation with the IE team. The IE team strongly prefers the use of Survey CTO. The IE team will work closely with the survey firm to develop the electronic-version of the questionnaires and we expect the survey firm to give access to the IE team to the server used to collect data.
- Prepare a standardized protocol and data template for data entry of the student paper-based achievement test, which also contains information on double-check procedures in order to guarantee quality of the data.
- Procurement of tablets for data collection. Quality of this equipment must be sufficient to cover the needs of the impact evaluation and requires approval from the IE team (e.g tablets need to collect GPS points).
- Program 'soft checks' and 'hard checks' into the software, so that if answers that are not plausible are being entered during enumeration, or questions are being skipped when they should not be, the software will immediately catch these errors, during the course of the interview, and the enumerator will be prompted to correct his mistake on the spot.
- The firm will work with the IE team to guarantee that the tablets used for data collection use secure World Bank approved software. The information should be fully and permanently deleted from the tablets after it is transferred to the server.
- Translation:
Translation of questionnaires into the required local languages (e.g Dari and Pashto)



- Back-translation into English
- Producing a revised translation if any questions identified by the IE team as requiring revised translation
- Survey Training Manual: Prepare draft survey training manuals for training all field staff involved in data collection with each survey instrument; submit these to the IE team review; and create final versions that IE team approves.
- Pilot: Pilot the electronic, tablet-based English-version and local language version of the survey instrument in schools that resemble the study sample but are not part of the study sample (and according to the sanitary conditions from Covid-19). Otherwise, pilot several times the survey instruments in-house.

Data collection

Responsibilities will be shared between the IE team and the firm in the following ways:

IE team:

- Provide the final sample of the schools to be visited and the teachers of interest within each school. The IE team will provide as much information as possible regarding the geographical locations and contact information of the schools' principals when available.

Firm:

- Recruitment, hiring, training, and supervision of survey enumerators and managers, ensuring that survey questionnaires are administered accurately and consistently across all respondents in a language they understand. This will require that the language skills of the enumerators match the needs of the sampled population. It is mandatory for data managers and data collection supervisors, and preferable for enumerators, to be certified in conducting research with human subjects. The number of enumerators and supervisors per province, district and schools should be approved by the IE team
- Managing survey logistics, including transport and other support to interviewers, supply of materials, and other required goods and services.
- Administering all surveys using tablet devices and the student achievement test on paper-version
- Printing and photocopying of questionnaires as necessary
- Locating the schools and ensure that the interviews are conducted with true respondents (e.g use identity verification question)
- Ensure data quality by having a supervisor observe each enumerator administer the survey at least once.
- Organization of quality control procedures in order to ensure the quality of the data collected. The survey firm is expected to list the quality controls that will be adopted to ensure good quality of data collection.
- Prepare and run an "enumerator check code" while data collection is in progress, to identify any problems with particular enumerator's survey administration.
- Ensure proper correction and/or recollection of enumerator and data problems identified by the "enumerator check code"
- While data collection is in progress, provide bi-weekly updates to the IE team on data collection progress, including timely notification of potential delays and bottlenecks in the process.
- Provide a final implementation report for each of the survey that documents the data collection process.



Data management

Responsibilities will be shared between the IE team and the firm in the following way:

IE team:

- Raw data will be downloaded every day and the work of data cleaning and check for collected data quality will be done by the IE team. We will require flexibility with the main contact of the survey firm for anything that needs clarification (e.g outliers, duplicates, GPS points etc.) in order to produce final and clean dataset ready for analyses.

Firm:

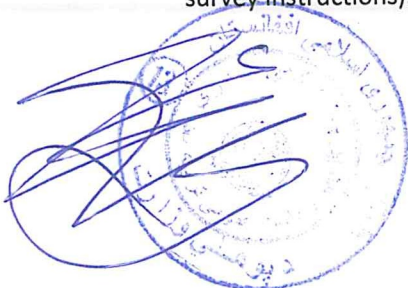
- Translation of any non-English "other, specify" responses.
- The IE will have access to the server created for this data collection and will download independently raw data. We expect the firm to upload raw data on the server on a daily basis (conditional on internal availability)
- Enumerators or their supervisors are expected to sync their tablets daily (conditional on internet availability); in case of emergency, up to two days before syncing would be tolerated.
- Ensure electronic data security by keeping all devices that contain data password protected at all times.
- Ensure data security of any paper data that contains identifying information or survey data from survey participants in locked file cabinets.
- Store any paper data that contains identifying information or survey data for a minimum of five years, and grant the IE team access to this data upon request. Should the firm not be able to store the data for this duration, they will notify the IE team so that plans can be made for moving and storing the data.
- Resolve problems that come up during the check-backs conducted by the IE team.
- The firm will work with the World Bank team to ensure that the server used to store, transfer and manage the data collected, as well as any hardcopies of paper based surveys, should be stored following the minimum standards of the local law for data protections.

Ethical considerations, data ownership and data privacy

The collected data will be the property of the World Bank IE team. The Firm may not use the data for their own research purposes, nor license the data to be used by others, without the written consent of the World Bank IE team.

The Firm will protect the confidentiality of all individuals from whom it collects data as part of this TOR. Electronic data will be password protected; paper data will be kept in locked cabinets. In addition to this, procedures to follow include:

- Following informed consent procedures provided by the IE team for each individual from whom data is collected.
- The firm will protect the confidentiality of those participating in the survey at all stages. All data are to be treated as confidential. The firm will also ensure that respondents have a clear understanding of the survey objectives, render their participation in the survey willingly.
- Conducting individual interviews privately (not overheard by other members according to survey instructions).



- Interviewers must be able to assure participants that they will not be forced to answer any questions, and that their participation in the project does not depend on their willingness to answer questions or on the answers they give.
- Interviewers must be able to discuss sensitive issues with care and objectivity.
- Not discussing content of interviews with any other parties, except with one's supervisor when necessary for ethical, logistical, or data quality concerns.

Deliverables

1. Protocols for data collection & logistics *(by beginning July 2021,)*
2. Survey training manual and preliminary versions of the programmed questionnaires *(by July 10, 2021)*
3. Pilots' raw data (in-house) *(by mid-July, 2021)*
4. Translations, back-translations, and final versions of the questionnaires *(by end July, 2021)*
5. Training report to assess how the training went overall *(by beginning August, 2021)*
6. Piloting instruments in (out-of-the-sample) schools (ideally urban and rural areas) *(by end of July, 2021)*
7. Weekly updates on data collection preparation and progress for data collection activities
8. Raw data from the selected study sample, as well as translations when needed *(final data collected not later than Oct 10 2021)*
9. Final implementation report for the data collection *(by end of Oct , 2021)*

Proposed payment schedule

This will be a deliverables-based contract, with payment in tranches, upon receipt of particular deliverables.

To measure performance, the IE team will take into account the following (this is a non-exclusive list): (i) the timely submission of the deliverables and their quality, and (ii) the implementation of convincing strategy to ensure that surveys are administered with quality to the good schools, teachers and their students, (iii) the implementation of convincing strategy to keep non-response rates close to zero, and (iv) proven ability to implement the surveys in very close collaboration with the IE team.

Payment	% of the contract sum	Activity/Deliverable
1	10%	On delivery on initial field plan or report Deliverables number 1
2	50%	Upon satisfactory delivery of: 1. Pilot's raw data and documentation reports for the survey instruments.



		<p>2. Translations, back-translations, and revised final translations of the questionnaires. Local language Pilot's reports.</p> <p>3. Survey training manual for survey instruments.</p> <p>Deliverables number 2, 3, 4, 5 and 6.</p>
3	40%	<p>Upon satisfactory delivery of:</p> <p>4. Survey data.</p> <p>5. Final implementation report for the data collection.</p> <p>6. Weekly updates on data collection preparation and progress for data collection.</p> <p>Deliverables number 7, 8 and 9.</p>

Qualifications and experience of key personnel

The selected survey firm should possess the following qualifications:

- At least five years of existence
- A recognized legal status by the Government of Afghanistan, enabling the organization to perform the above-mentioned tasks.
- Demonstrated experience of organizing large scale large-scale school (or household) surveys in Afghanistan or the South Asian region, within the past ten years.
- Demonstrated strong capacity and experience in planning and organizing survey logistics.
- Good network of experienced enumerators, and supervisors.
- Demonstrated strong capacity in data management and statistics.
- Strong knowledge in the following software: SurveyCTO (or similar), Stata.
- Strong interpersonal skills and a team oriented spirit.
- Computer Assisted Personal Interviewing (CAPI) and management. The survey firm needs to prove the belonging of numeric devices of good quality (such as tablets or phones).

The Firm should, at a minimum, assign the following staff to the project:

Key staff (CVs and experiences enclosed in the application that will be reviewed)

- Survey Manager with a post master's degree in a relevant field (such as economics, social studies, Human Resources etc.) and at least 5 years of experience in data collection management (10 years without post master's degree)
- Data management expert/trainer/supervisor with an undergraduate degree and at least 5 years of post-graduation experience.

Non-key staff (no CVs required for the application)

- 25 (or an appropriate number) enumerators (survey takers) with at least completed high school (some university education preferred).
 - 5 (or an appropriate number) field supervisors for enumerators with previous experience in survey-taking and a university degree (5 years of experience without a university degree).
- These do not have to be permanent staff but can be hired for the duration of data collection.



Conditions of tender

As a condition for this tender, a detailed proposal indicating how the work will be carried out should be submitted, inclusive of the milestones, resources involved, time frames and the methodology to be applied in the project. The proposal should also clearly demonstrate relevance of the proposed work plan to the TOR as well as indicating a clear demonstration of the interpretation of the TOR in line with the project deliverables. It must comprise a detailed work plan including:

- a) A schedule of deliverables (Gantt chart).
- b) A list of the project team, project leader and each member's CV. A typical survey team including number of enumerators and supervisors for this work.
- c) Participation of project team: Each team member's role must be clearly outlined in the project plan.
- d) Reference of similar/related work undertaken previously in the past 1-5 years.
- e) Describe past experience on surveys of this magnitude in Uganda and/or Sub-Saharan Africa, particularly with rural households.
- f) Describe the process of recruiting and training enumerators.
- g) Describe the Firm's process of administering questionnaires and consistency checks.
- h) Describe in detail what steps the Firm will take to ensure high quality and accurate data in this project.
- i) Describe the steps proposed to minimize non-response rates.

Supervision

The survey firm will respond to Principle Investigators and all related staff of the IE team.

Contractual period

The contractual period is linked to the deliverable schedule described in the related section, and the project should thus be completed by May, 2021.

Downstream work

It is anticipated that downstream work will be required. Upon agreement of both parties, a midline and endline survey may be awarded to the firm that has implemented the baseline survey on a single-source basis. Quality assessment of baseline survey will be realized before awarding midline and/or endline survey. If the quality is good, the contract can be extended for the remaining activities (Midline/Endline data collection phases will be similar to the baseline data collection for which this TOR is created)..

