

Nigeria - Teacher Development Programme In-Service Training Impact Evaluation 2017, Endline Survey

Oxford Policy Management Ltd

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Sampling

Sampling Procedure

The aim of the sampling design was to define a valid counterfactual (control group) from which comparisons could be made with the treatment group that participates in the Teacher Development Programme (TDP). The control group does not participate in the TDP in-service training but has background characteristics that are, on average, similar to those of the treatment group that does participate in TDP in-service training. The sampling design was based on a quasi-experimental 'constrained' randomisation approach. 'Constrained' is used because certain parameters of the impact evaluation were already fixed. For example, the Local Government Authorities (LGAs) where the TDP was to operate had already been selected by the TDP in agreement with the three states covered by the impact evaluation. In addition, pre-determined groups of schools fulfilling certain criteria (described below) constitute the sampling frame -- this is in contrast to a fully randomised design where one would expect the random drawing of groups (or clusters) of schools from a list of all state primary schools in the region under study. Randomisation was conducted only in allocating groups of schools to 'treatment' or 'control' status.

----- Sampling frame construction -----

The intended size of the sampling frame was 1,008 public primary schools eligible for the TDP (504 treatment and 504 control schools) in the three states. This would constitute the target population of eligible schools from which the sample of schools would be drawn for the survey. The sampling frame was constructed through the steps described below.

Step 1: LGAs -----

In each of the three states, 14 LGAs where the TDP would operate had been predetermined by the TDP in agreement with each state:

- Jigawa: 14 out of 27 LGAs.
- Katsina: 14 out of 34 LGAs.
- Zamfara: 14 out of 14 LGAs.

Step 2: Primary schools -----

To be eligible for the TDP, a school must have one head teacher and at least three other teachers and at least eight grade 3 pupils. In each of the 14 LGAs in each state, two sets of 12 eligible primary schools were to be selected. Schools within each set were identified according to geographical proximity to facilitate any training and periodic meetings of teachers, and to create a peer network within the locality. The two sets of schools within each LGA were meant to be selected to be broadly similar. State Education Boards (SUBEBs) were responsible for the selection of the schools and were provided guidelines for how to do this. For example, to take into account the location of schools (rural/urban), school size in terms of pupils enrolled and number of classrooms, condition of school infrastructure, and existence of a school-based management committee (SBMC).

Step 3: Teachers -----

Before the sampling of schools, the Local Government Education Authority (LGEA) and head teacher from each school in the two sets (see 2. above), were required to identify three teachers in addition to the head teacher, who would potentially receive the TDP support and training. These teachers were identified using the following criteria:

- They teach classes at early grade level (grades 1 to 3); and
- They teach classes in any of the three subjects of English, mathematics, and science.

Step 4: Random assignment of treatment/control status -----

After receiving the lists of the sets of eligible schools and teachers from the TDP coordinators, the impact evaluation team randomly assigned one set of schools among every pair of sets in each LGA to TDP treatment, and the other set to control status. This resulted in 42 (14 LGAs x 3 states) sets consisting of 12 schools each, for a total of 504 schools to receive the TDP, and 42 (14 LGAs x 3 states) sets consisting of 12 schools each for a total of 504 schools that would not receive the TDP.

The sample treatment and control schools were then selected from these two lists respectively. In the 504 schools that would receive the TDP, all head teachers and the teachers identified in step 3 (see above) would receive TDP support and training, while the head teachers and teachers in the schools on the list of 504 'non-TDP' schools would not.

 Sampling stages

Stage 1: Selection of schools

At the first stage, schools were selected using implicit stratification by state, LGA, and treatment/control status. That is, each of the school sets (see step 4 above), was considered a stratum. Four schools were randomly selected from each of these sets. This yielded an intended sample size of 56 (14 LGAs x 4 schools) treatment schools in each state and 56 (14 LGAs x 4 schools) control schools in each state, for an intended 168 treatment and 168 control schools across the three states, and a total intended sample size of 336 schools.

Stage 2a: Selection of teachers

At each selected school:

- The head teacher and the three teachers identified during the construction of the sampling frame (see step 3 above) constituted the sample to be interviewed, with a total intended sample size of 336 head teacher interviews and 1,008 (336 schools x 3 teachers) teacher interviews.
- The three selected teachers as well as the head teachers who teach any primary classes would also be observed while teaching (classroom observations), with a total intended sample size of up to 336 head teacher classroom observations and 1,008 (336 schools x 3 teachers) teacher classroom observations.
- All head teachers and selected teachers would also be administered the Teacher Development Needs Assessment (TDNA) in English, mathematics, and science, for a total intended sample size of 1,344 (336 schools x 4 teachers) head teachers and teachers.

Stage 2b: Selection of pupils

At each selected school, eight pupils who started grade 3 in September 2014 and who were being taught English, mathematics, or science by at least one of the selected teachers during that term, would be randomly selected for the pupil learning assessment. The pupils were drawn from a sampling frame consisting of all eligible grade 3 pupils present on the day of the survey. Eligible pupils were those in grade 3 who were being taught by at least one of the selected teachers. The intended pupil sample size was 2,688 (336 schools x 8 pupils).

 Survey longitudinal/panel design

The survey uses a panel design, that is, it aims to collect longitudinal data. This means the survey was implemented in the same sample of schools at baseline and endline, and that within these schools, it collected data from the same head teachers, teachers, and pupils over time. However, there was high head teacher, teacher, and pupil sample attrition between the baseline and endline surveys (see 'Sample attrition' section below).

 Replacements

1. School replacements

During the baseline fieldwork, five selected schools were found to be ineligible and one selected school could not be visited because of security concerns, these six schools were not replaced.

During the endline survey there were no school replacements because the survey uses a panel design.

2. Teacher replacements

There were three different cases of unavailability of selected teachers during the baseline fieldwork:

- A selected teacher was not present on the day of the survey due to short term absence, and data collectors attempted to re-visit the school at a later date;
- A selected school was found to be very small with fewer than four eligible teachers (including the head teacher), all teachers were interviewed when possible; and
- A selected teacher was on long leave, had been transferred, had passed away, or was unidentified, and data collectors would ask the head teacher to name a replacement teacher as per the teacher eligibility criteria (see step 3 above).

During the endline fieldwork there were no teacher replacements because the survey uses a panel design.

3. Pupil replacements

If one of the eight sampled pupils turned out to not be available, that pupil was randomly replaced with another pupil from the list of eligible pupils. If a selected school had eight or fewer grade 3 pupils present on the day of the baseline survey, all those eligible were selected for the pupil learning assessment.

During the endline fieldwork there were no pupil replacements because the survey uses a panel design.

Sample sizes

The actual sample sizes at baseline were:

- 330 schools (intended 336);
- 330 head teacher interviews (intended 336);
- 2,575 grade 3 pupils (intended 2,688);
- 908 teacher interviews (intended 1,008);
- 1,070 classroom observations (intended up to 1,344 depending on how many head teachers teach any primary classes); and
- 1,158 Teacher Development Needs Assessments (intended 1,344).

The actual sample sizes at endline were:

- 330 schools (intended 330 in actual BL sample);
- 329 non-panel (new head teachers were interviewed) and 134 panel head teacher interviews (intended 330 in actual BL sample);
- 1,566 panel grade 6 pupils (intended 2,575 in actual BL sample);
- 447 panel teacher interviews (intended 908 in actual BL sample);
- 460 panel and 574 non-panel classroom observations (intended 1,070 in actual BL sample); and
- 556 panel and 774 non-panel Teacher Development Needs Assessments (intended 1,158 in actual BL sample).

Sample attrition

There was substantial head teacher, teacher, and pupil sample attrition between baseline and endline. The main reasons for head teacher and teacher attrition were transfer to another school and for pupil attrition dropping out of school.

Sample attrition rates since baseline:

- Schools 0%;
- Head teacher interviews 0.3% non-panel sample and 59% panel sample;
- Pupils 39% (in grade 3 at baseline and in grade 6 at endline);
- Teacher interviews 51%;
- Classroom observations 57%; and
- Teacher Development Needs Assessments 52%.

NOTE: Head teachers that were new at a sample school were interviewed at endline yielding a sample of 329 head teachers (some non-panel and some panel), and a panel sample of 134 head teachers (only head teachers who were head teachers at the same school at baseline and endline).

To reduce teacher and pupil attrition due to temporary absences on the day of the survey, two main steps were taken:

- School revisits: state coordinators and field teams revisited schools in order to conduct missing interviews for teachers and pupils that were unavailable on the original day of visit; and
- Calling pupils from home: for the pupils that lived close to the school but were absent from school on the day of the visit, data collectors worked with the head teachers and teachers to ask pupils to come to the school to take the pupil learning

assessment if able to do so.

1. Overall pupil and teacher sample attrition

For the purposes of this impact evaluation, attrition for two units of analysis were of particular relevance: pupils and teachers. To understand attrition dynamics for those units of analysis in more detail, this evaluation assessed which characteristics of pupils and teachers at baseline help explain whether individuals dropped out of the sample or not since baseline. This means that baseline data were used to compare the group of individuals for which data were also collected at endline (the non-attriters) to the group of individuals for which data were not collected at endline (the attriters). The purpose of this analysis is to understand whether estimates of characteristics of pupils or teachers at endline can generally be thought of as being produced on a sample that is comparable to the original group of individuals sampled at baseline. The attrition analysis and statistics are produced taking into account the full sampling structure of the data (weights, clustering, stratification). Test statistics are also corrected for multiple hypotheses testing given that these tables are comparing many different indicators at the same time.

The baseline variables used to examine sample attrition are of three types:

- Pupil and teacher background characteristics, for example, gender;
- Pupil and teacher outcomes that the TDP seeks to influence, for example, pupil test scores and teacher subject knowledge scores; and
- School characteristics that are likely to be correlated with pupil and teacher behaviour and outcomes, for example, school size.

The results for pupils indicate that pupils who drop out of the sample are mainly older and poorer than pupils who stay in the sample. The results for teachers indicate that teachers who dropped out of the sample since baseline were significantly more likely to have Nigeria Certificate in Education (NCE) qualification or higher, and performed significantly better on the Teacher Development Needs Assessment (TDNA) than teachers who remained in the sample. These results indicate that the evidence for selective attrition is weak among pupils but slightly stronger for teachers. This means that taking overall attrition into account, the sample of pupils is still comparable to the original sample. While estimates generated using the teacher sample needs to be interpreted taking teacher attrition into account, and cannot necessarily be assumed to be representative of the target population of teachers at baseline.

2. Differential sample attrition for treatment and control pupils and teachers

This impact evaluation also examined whether there is differential attrition, which refers to situations where the background characteristics of individuals who drop out between survey rounds differ significantly between the treatment and control groups. This would mean that, after the sample attrition, the two groups are not comparable anymore and that the original assumption of the control group being an appropriate counterfactual to the treatment group for impact identification purposes is no longer correct. The analysis examining key characteristics and outcomes for non-attrited pupils and teachers at baseline across the TDP treatment and control groups indicates that differential attrition is generally not problematic. The estimates suggest that there are no significant differences between the control and treatment pupils who remained in the sample. For teachers there is also very limited indication of differential attrition.

----- Representativeness -----

The sample for this impact evaluation was selected to represent the eligible schools in the TDP clusters and corresponding control clusters for the three states. Therefore the sample is not designed to be representative at the state level and should not be treated as such. However, the survey does include schools with a wide range of characteristics, and statistics are likely to be broadly similar to those for the states as a whole.

Response Rate

See 'Sampling Procedure' section.

Weighting

***NOTE: THIS SECTION SHOULD BE READ IN CONJUNCTION WITH SECTION 3 OF THE 'Teacher Development Programme -

Endline Evaluation (Volume II)' AND THE TECHNICAL DOCUMENT 'Quantitative Analysis: Samples, Weights and Survey Settings' BOTH OF WHICH ARE PROVIDED UNDER RELATED MATERIALS***

In order to make inferences from the TDP baseline survey data, appropriate survey weights were calculated for each sample. The weights are equal to the inverse of the overall sampling probabilities taking into account each stage of selection. Given that the endline survey was conducted as a panel survey in 2017 and as a result all of the responding sample schools, pupils and teachers from the TDP Baseline Survey were included in the endline survey, the basic probabilities and weights are the same. However, it is necessary to adjust each set of baseline weights for the sample pupils, teachers and head teachers based on the attrition for the individual tests, interviews and observations in the endline survey. A comprehensive and detailed explanation of the construction of the baseline and endline survey weights can be found in Section 3 of 'Teacher Development Programme - Endline Evaluation (Volume II)' provided under Related Materials.

Note that at endline, the sample of schools as well as the sample of pupils and teachers interviewed/observed/tested represents both the cross-sectional and panel samples. That is because all schools, pupils and teachers included in our sample at endline are also included in the baseline sample (the sample of schools is exactly the same at baseline and endline, while the sample of pupils and teachers at endline is a subset of that sample at baseline due to attrition). For head teachers however, there are two different samples: 1) a cross-sectional sample that includes all head teachers who were interviewed/observed/tested at endline (this includes head teachers who were also included in the baseline sample as well as new head teachers who became head teachers of the school after the baseline survey) and 2) a panel sample that only includes those head teachers who were interviewed/observed/tested at both baseline and endline.

For the endline survey 12 sets of weights were calculated for the different samples. These are:

1. Endline school weight (for panel AND cross-sectional analysis of schools at endline; this is the same as the baseline school weight)
2. Endline head teacher interview weight (for cross-sectional analysis of all HTs at endline)
3. Panel head teacher interview weight (for panel analysis of HTs)
4. Panel head teacher motivation weight (for panel analysis of the motivation module for HTs)
5. Endline (panel) teacher interview weight (for panel AND cross-sectional analysis of teachers at endline)
6. Endline (panel) P6 pupil test weight (for panel AND cross-sectional analysis of pupils at endline)
7. Endline (panel) teacher observation weight - all lessons (for panel AND cross-sectional analysis of teacher observations at endline)
8. Endline (panel) teacher observation weight - excluding lessons that lasted < 9 minutes (for panel AND cross-sectional analysis of teacher observations at endline)
9. Panel head teacher observation weight - all lessons (for panel analysis of HT observations)
10. Panel head teacher observation weight - excluding lessons that lasted < 9 minutes (for panel analysis of HT observations)
11. Endline (panel) teacher tests (TDNA) weight (for panel AND cross-sectional analysis of teachers at endline)
12. Panel head teacher tests (TDNA) weight (for panel analysis of HTs)

The public use datasets include all these different sets of weights as well as the variables that account for stratification, clustered sampling and finite population corrections. Additionally, the datasets contain constructed variables that help identify the correct samples for each set of weights. For example, the panel head teacher interview weight must only be applied to the sample of panel head teachers. In the school level dataset, the dummy variable 'n_panel_int' identifies the sample of panel head teachers: it takes the value 1 if the head teacher was interviewed at baseline and endline (i.e. is in the panel sample) and 0 otherwise.

The technical document 'Quantitative Analysis: Samples, Weights and Survey Settings' provided under Related Materials lists the weight variable, sample identification variable and survey setting that must be used for each level/type of analysis.

Questionnaires

Overview

See 'Scope' section.

Data Collection

Data Collection Dates

Start	End	Cycle
2017-10-24	2017-11-17	Endline

Data Collection Mode

Computer Assisted Personal Interview [capi]

DATA COLLECTION NOTES

Oxford Policy Management's (OPM) Nigeria office conducted the endline survey of the TDP impact evaluation.

Personnel

The fieldwork was led by the OPM Nigeria office, with support from OPM Oxford. The fieldwork management team comprised six members, including a project manager, fieldwork managers, data manager, and survey coordinators. The team also included several members with very strong computer programming skills in the software (CSPro) in which the questionnaires were administered. The overall project manager for the impact evaluation, who is responsible for the content of the questionnaires, worked closely with the fieldwork team during pre-testing, training, and piloting. 61 trainees were invited to the training, who at the completion of training were assigned into their respective roles of state coordinators, supervisors, and enumerators.

Fieldwork preparation

The early fieldwork preparation consisted of pre-testing and refining the questionnaires and protocols, developing the fieldwork manual, and training and piloting.

Pre-test

A full pre-test of all questionnaires and protocols took place from 18 September to 5 October 2017 in Kaduna State. Members of the OPM fieldwork management team, as well as six data collectors, who would later become the state coordinators during the fieldwork, conducted the pre-test. The first seven days were dedicated to training the data collectors while in the remaining days 16 schools in eight LGAs were visited to administer and test all the questionnaires. The primary objectives of the pre-test were to test the changes to the baseline questionnaires that were made during the questionnaire development phase at endline, and to test the new pupil learning assessment questionnaire (at baseline grade 3 pupils were assessed, while at endline those same pupils, who were now in grade 6 were assessed and as a result a new learning assessment questionnaire was needed). The pre-test resulted in the refinement of the questionnaires and data collection protocols, as well as the improvement of the instrument programming in CAPI.

Fieldwork manual

Using the baseline fieldwork manual as a basis, an extensive fieldwork manual was developed that covered an introduction to the TDP, a description of the fieldwork management and data collection teams, basic guidelines on behaviour and ethics, the use of computer assisted personal interviewing (CAPI), instructions on fieldwork plans and procedures, and a detailed description of all instruments and protocols. The manual was updated on an ongoing basis during the training and pilot phase, where updated conventions or additional clarifications were needed. The final version of the manual was printed at the end of the pilot phase and copies were provided to the field teams.

Training and pilot

Data collection training and a field pilot took place from 9 to 21 October 2017. In order to maximise training efficiency and minimise distractions to trainees, the training was conducted in-house at a hotel in Kaduna City, Nigeria. A total of 61 trainees participated in the training. The training was delivered by the fieldwork management team and members of the impact evaluation team. The main objective of the training was to ensure that data collectors would be able to master the questionnaires, understand and correctly implement the fieldwork protocols, and be able to comfortably use CAPI. Supervisors were furthermore trained on their extra responsibilities of data management, fieldwork and financial

management, supervision of enumerators, and logistical tasks.

The training combined a variety of methods, including PowerPoint presentations, group sessions, mock interviews, role-play, and in-class scenarios to ensure that the training was comprehensive and interactive. The performance of trainees was assessed on an ongoing basis. Participants were quizzed at the beginning of each day to assess their level of understanding of the information they received the previous day, and to inform the training facilitators on areas where participants had knowledge gaps. Furthermore, participants were given daily evaluation forms in order to obtain their feedback on the day's training, with the aim of learning how facilitators could improve their delivery of the training.

Over the course of the training, two pilot surveys were conducted which provided a full-team rehearsal. The trainees were closely observed by the training facilitators, who assessed their understanding of the instruments as well as their ability to interact with the respondents, code responses appropriately, and use CAPI and the show cards for helping respondents identify the correct training received confidently.

At the end of the training and pilot phase, participants were assigned to their roles as supervisors and enumerators based on their language proficiency, level of understanding of the survey instruments, and its administration. Those who demonstrated desirable leadership and people management skills, in addition to mastery of the instruments and protocols, were appointed team supervisors.

A higher number of data collectors than needed for data collection were invited to and attended the training. This allowed for a selection of the best suited candidates at the end of the training and provided a pool of reserve additional trained staff that could be called upon in case of enumerator attrition during data collection.

----- Fieldwork implementation -----

Data collection commenced on 24 October and ended on 17 November 2017. The field teams completed the survey in all 330 schools that were visited at baseline in Katsina, Jigawa, and Zamfara. All interviews and assessments were administered in Hausa, except for sections of the pupil learning assessment and Teacher Development Needs Assessment (TDNA) that assess English skills.

----- Fieldwork model -----

For the first two days of fieldwork, the fieldworkers were collapsed into three teams per state. The state coordinators and fieldwork management team worked closely with the teams to make sure that data collectors were confident and were coding accurately. When it was confirmed that they could work independently, the data collectors were split into six data collection teams per state, with each team composed of one supervisor and two enumerators. Each team completed a school visit in one day.

There were two state coordinators in each of Katsina and Zamfara states, while there were three state coordinators for Jigawa. The state coordinators provided leadership in each state to ensure successful and high-quality fieldwork implementation. State coordinators were responsible for devising implementation plans for their assigned states, and for managing state teams and other survey resources. In addition to these roles, they provided technical support to state teams, and supported the supervisors to perform their roles: for example, by working with their various teams to address data quality issues identified by the data management team on a day-to-day basis.

Additionally, members of the fieldwork management team were present in every state to provide administrative and technical support, supervision and mentoring, while the data management and IT team provided continuous back-end support to field teams.

Data Collectors

Name	Abbreviation	Affiliation
Oxford Policy Management Nigeria	OPM Nigeria	

SUPERVISION

Quality control and data checking protocols

Several mechanisms were put in place in order to ensure high quality of the data collected during the endline survey.

Selection and supervision of data collectors

Each enumerator was supervised by the training team during the training, piloting, and first week of data collection. This allowed a well-informed selection of enumerators and their allocation to roles matching individual strengths and weaknesses.

CAPI built-in routing and validations

One important quality control mechanism in CAPI surveys is the use of automatic routing and checking rules built into the CAPI questionnaires that flag simple errors during the interview, that is, early enough for them to be corrected during the interview. In addition to having automatic skip patterns built into the design in order to eliminate errors resulting from wrong skips, the CAPI validations also checked for missing fields, out-of-range values, and inconsistencies within instruments. The latter checks if any related information collected in different questions of the instrument are consistent. A warning or error message was given if an entry was out of range, inconsistent, or left empty. The data collector would then try to understand why a warning or error message was showing up and reconfirm the information with the respondent.

Live observations

Live interviews were observed by state coordinators, the field manager, and members of the fieldwork management team. Any errors detected during observations were noted and discussed with the teams at the daily de-brief.

Daily and weekly reporting from the field

At the end of each working day, supervisors collected all interview files from their team members and transmitted the data to the data manager. The supervisors also sent their daily achievements to a WhatsApp group that was created for the survey. These reports were checked for consistency, completeness, and correctness by the field management team and they were cross-checked with the data received by the data manager. Any missing or inaccurate data identified were communicated to the data collection team. Additionally, a Google tracking sheet was developed that was used by the teams at the end of each work day to fill in their achievements and comments for each school. The information provided in the Google sheet was cross-checked with the information provided on WhatsApp to ensure accuracy. Whenever there were discrepancies, the survey management team contacted the state coordinators to clarify. At the end of each working week, the state coordinators collated all achievements and challenges recorded by their teams over the course of the week and shared those with the field management team. This allowed the field management team to keep track of weekly achievements and to ensure that there were no missing data.

Excel dashboard

An Excel dashboard was created by the fieldwork management team to track the uploaded data. This information was cross-checked with the Google tracking sheets. The dashboard was also used to check any inconsistent or missing data. In the event of missing data, the field team was informed, and revisits were conducted to ensure data completeness.

Secondary consistency checks and cleaning

The evaluation team exploited a key advantage of CAPI surveys, the immediate availability of data, by running a range of secondary consistency checks across all data on a daily basis in Stata. Data received from the field were exported to Stata the following day, and a range of do-files were run to assess the consistency and completeness of the data, and to make corrections if necessary. The checks comprised the following:

- Completeness and ID uniqueness: during this process, the data manager ensured that all the data reported in the daily field update were consistent with the data captured and sent in by the teams. Unique identification in each dataset and sound linkage between the datasets were also paramount and had to be checked on a daily basis.
- Consistency and out-of-range checks: a range of consistency and out-of-range checks that had not been included in the CAPI instruments were programmed into a checking Stata do-file. The data manager ran the checking do-file on a daily basis on the latest cleaned data. This returned a list of potential issues which the data manager would investigate, undertaking the necessary cleaning actions, if any. On a daily basis, all errors flagged were collated and shared with the survey management team in the field, as well as with the state coordinators and supervisors, so that the errors could be discussed with the data collectors. The purpose of these errors was to monitor the performance of data collectors and provide them with feedback to help them improve.

Data Processing

Data Editing

Given the data was electronically collected, it was continually checked, edited and processed throughout the survey cycle.

A first stage of data checking was done by the survey team which involved (i) checking of all IDs; (ii) checking for missing observations; (iii) checking for missing item responses where none should be missing; and (iv) first round of checks for inadmissible/out of range and inconsistent values. See section 'Supervision' for more details. Additional data processing activities were performed at the end of data collection in order to transform the collected cleaned data into a format that is ready for analysis. The aim of these activities was to produce reliable, consistent and fully-documented datasets that can be analysed throughout the survey and archived at the end in such a way that they can be used by other data users well into the future. Data processing activities involved:

- Computing and merging in the sampling weights,
- Reshaping datasets in order to produce data files for each unit of observation (school, teacher interview, pupil, lesson, teacher roster, classroom),
- Anonymising data by removing all variables that identify respondents such as names, address, GPS coordinates, etc.,
- Classifying non-response and coding them using a pre-determined classification scheme,
- Reviewing 'Other (specify)' responses by checking if any of the responses actually fall into existing response categories and can be recoded into the existing category or if there are multiple similar other responses that warrant the creation of a new response category (a decision to be made by the data analysts), and
- Properly naming and labelling the variables in each dataset.

The datasets were then sent to the analysis team where they were subjected to a second set of checking and cleaning activities. This included checking for out of range responses and inadmissible values not captured by the filters built into the CAPI software or the initial data checking process by the survey team.

A comprehensive data checking and analysis system was created including a logical folder structure, the development of a detailed data analysis guide and template syntax files (in Stata), to ensure data checking and cleaning activities were recorded, that all analysts used the same file and variable naming conventions, variable definitions, disaggregation variables and weighted estimates appropriately.

Other Processing

Because computer assisted personal interviewing (CAPI) was used to collect the data there was no data entry except for the teacher development needs assessment (TDNA), which was administered on paper. For this instrument, enumerators were trained to mark the TDNAs using the provided marking scheme and input the TDNA marks for each assessment item/question into an excel file.

Data Appraisal

No content available

Related Materials

Questionnaires

Classroom Attendance Instrument

Title Classroom Attendance Instrument
subtitle Excerpt from Enumerator Endline Manual
Author(s) Oxford Policy Management Ltd.
Date 2017-10-24
Country Nigeria
Language English
Filename TDP EL survey classroom attendance (CA) instrument.pdf

Classroom Observation Instrument

Title Classroom Observation Instrument
subtitle Excerpt from Enumerator Endline Manual
Author(s) Oxford Policy Management Ltd.
Date 2017-10-24
Country Nigeria
Language English
Filename TDP EL survey classroom observation (CO) instrument.pdf

Head Teacher Interview Instrument

Title Head Teacher Interview Instrument
subtitle Excerpt from Enumerator Endline Manual
Author(s) Oxford Policy Management Ltd.
Date 2017-10-24
Country Nigeria
Language English
Filename TDP EL survey head teacher interview (HT) instrument.pdf

Pupil Background and Test Instrument

Title Pupil Background and Test Instrument
subtitle Excerpt from Enumerator Endline Manual
Author(s) Oxford Policy Management Ltd.
Date 2017-10-24
Country Nigeria
Language English
Filename TDP EL survey pupil test (PT) instrument.pdf

Teacher Development Needs Assessment Mark Scheme - Altered Version

Title Teacher Development Needs Assessment Mark Scheme - Altered Version
Author(s) Oxford Policy Management Ltd.

Date	2017-11-10
Country	Nigeria
Language	English
Description	This document is the marking scheme for the Teacher Development Needs Assessment (TDNA) instrument. It provides an explanation to how the teachers' answers to the TDNA should be marked and the number of points assigned to each question. This is the second version (Nov 2017) that corresponds to the second version of the TDNA instrument that was developed after it was discovered that readiness sessions in preparation for the TDNA among teachers in TDP treatment schools who were part of the evaluation were conducted using actual copies of the baseline TDNA.
Filename	TDP EL survey TDNA Mark Scheme_Nov17_Altered.pdf

Teacher Development Needs Assessment Mark Scheme

Title	Teacher Development Needs Assessment Mark Scheme
Author(s)	Oxford Policy Management Ltd.
Date	2017-10-24
Country	Nigeria
Language	English
Description	This document is the marking scheme for the Teacher Development Needs Assessment (TDNA) instrument. It provides an explanation to how the teachers' answers to the TDNA should be marked and the number of points assigned to each question. This is the first version (Oct 2017) that corresponds to the first version of the TDNA instrument that was developed and administered in the first few weeks of fieldwork before it was discovered that readiness sessions in preparation for the TDNA among teachers in TDP treatment schools who were part of the evaluation were conducted using actual copies of the baseline TDNA.
Filename	TDP EL survey TDNA Mark Scheme_Oct17.pdf

Teacher Development Needs Assessment Instrument - Altered Version

Title	Teacher Development Needs Assessment Instrument - Altered Version
Author(s)	Oxford Policy Management Ltd.
Date	2017-11-10
Country	Nigeria
Language	English
Description	This is the second version of the TDNA questionnaire that was developed in Nov 2017 after it was discovered that readiness sessions in preparation for the TDNA among teachers in TDP treatment schools who were part of the evaluation were conducted using actual copies of the baseline TDNA. The mathematics section of the TDNA was revised and the new version was administered to the remaining sample schools. It must be read in conjunction with the 'TDP EL survey TDNA Mark Scheme_Nov17_Altered'.
Filename	TDP EL survey teacher development needs assessment (TDNA) instrument_Nov17_Altered.pdf

Teacher Development Needs Assessment Instrument

Title	Teacher Development Needs Assessment Instrument
Author(s)	Oxford Policy Management Ltd.
Date	2017-10-24
Country	Nigeria
Language	English
Description	This is the first version of the TDNA questionnaire that was developed in Oct 2017 and was administered in the first few weeks of fieldwork before it was discovered that readiness sessions in preparation for the TDNA among teachers in TDP treatment schools who were part of the evaluation were conducted using actual copies of the baseline TDNA. It must be read in conjunction with the 'TDP EL survey TDNA Mark Scheme_Oct17'.
Filename	TDP EL survey teacher development needs assessment (TDNA) instrument_Oct17.pdf

Teacher Interview Instrument

Title Teacher Interview Instrument
subtitle Excerpt from Enumerator Endline Manual
Author(s) Oxford Policy Management Ltd.
Date 2017-10-24
Country Nigeria
Language English
Filename TDP EL survey teacher interview (TI) instrument.pdf

Teacher Roster and Background Instrument (All Teachers)

Title Teacher Roster and Background Instrument (All Teachers)
subtitle Excerpt from Enumerator Endline Manual
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Reports

Teacher Development Programme - Endline Evaluation (Volume I)

Title Teacher Development Programme - Endline Evaluation (Volume I)
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Date 2018-06-20
Country Nigeria
Language English

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Teacher Development Programme - Endline Evaluation (Volume II)

Title	Teacher Development Programme - Endline Evaluation (Volume II)
Author(s)	Cameron, Stuart Pettersson Gelande, Gunilla Harb, Jana Jagmag, Mehjabeen Jasper, Paul Doyle, Alexandra Laufer, Hanna Hebban, Madhumitha Barbone, Lucia
Date	2018-06-20
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Technical documents

Quantitative Analysis: Samples, Weights and Survey Settings

Title Quantitative Analysis: Samples, Weights and Survey Settings
 Author(s) Oxford Policy Management Ltd.
 Date 2018-06-15
 Language English
 Description This document lists all the possible types of analyses that could be undertaken with the TDP endline quantitative data and describes the samples on which these analyses should take place and the weights and survey settings to use for each. It should be read in conjunction with section 3 of the 'Cameron et al. (2018) Teacher Development Programme. Endline Evaluation (Volume II)' report and with the Weighting section provided in this documentation.
 Filename TDP IE EL_Weights and survey settings for the different samples.pdf

List of Variables Excluded from Endline Survey Datasets

Title List of Variables Excluded from Endline Survey Datasets
 Author(s) Oxford Policy Management Ltd.
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 Language English
 Description This file lists variables collected during the TDP IE endline survey but that have been excluded from the public use datasets and reasons for exclusion (e.g. confidentiality).
 Filename TDP IE List of variables excluded from endline survey datasets.xls
