

# Ghana - Strengthening Teachers Accountability to Reach All Students Project Impact Evaluation, 2019

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## Identification

### SURVEY ID NUMBER

GHA\_2019\_STARSIE-EL\_v01\_M

### TITLE

Strengthening Teachers Accountability to Reach All Students Project Impact Evaluation, 2019

### SUBTITLE

Endline Survey

### COUNTRY/ECONOMY

Name	Country code
Ghana	GHA

### STUDY TYPE

Other Household Survey [hh/oth]

### SERIES INFORMATION

This is the endline survey of the Strengthening Teachers Accountability to Reach all Students (STARS) project. The baseline was conducted in May/June 2018. Two observational studies were conducted in October 2018 and Feb 2019. The baseline data and documentation can be found on the World Bank Microdata Library here:

<https://microdata.worldbank.org/index.php/catalog/5792>. The follow-up survey (endline) was conducted in May 2019 and is documented here.

### ABSTRACT

The Strengthening Teachers Accountability to Reach all Students (STARS) project is a randomized evaluation that tested whether teachers would be more likely to adopt a new pedagogy known as differentiated instruction, with additional support from their managers. The RCT had 3 treatment arms: T1) Pure control; T2) "DI + Instructional Management" - Training and learning materials on differentiated instruction (DI) for teachers, their supervisors (head teachers, or principals), and circuit supervisors (i.e., the supervisors of the head teachers); T3) "DI + Instructional + People Management"- Everything in T2 plus additional management training for head teachers and circuit supervisors on people management skills to transform their role and be seen as supportive coaches. The baseline survey conducted surveys with circuit supervisors, head teachers, teachers, and students. Students were also assessed on their English and math competencies.

### KIND OF DATA

Sample survey data [ssd]

### UNIT OF ANALYSIS

Circuit, school, individual

## Version

### VERSION DESCRIPTION

v01: Edited, anonymous datasets for public distribution

## Scope

### NOTES

This study covers the following topics: primary education, teacher attendance, math assessment, English assessment, management of schools, teaching and learning materials, skills, development and labor market

### KEYWORDS

Keyword
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Randomized Controlled Trial, Primary Education, School Management, Teacher Attendance, Targeted Instruction, Educational Outcomes, Ghana

## Coverage

### GEOGRAPHIC COVERAGE

20 UNICEF supported districts in Ghana

### GEOGRAPHIC UNIT

District

### UNIVERSE

145 circuits (groups of schools) in the 20 districts that UNICEF supports

## Producers and sponsors

### PRIMARY INVESTIGATORS

Name	Affiliation
Anne Fitzpatrick	University of Massachusetts Boston
Adrienne Lucas	University of Delaware
Sabrin Beg	University of Delaware

### PRODUCERS

Name	Affiliation
Strategic Impact Evaluation Fund	The World Bank Group

### FUNDING AGENCY/SPONSOR

Name	Abbreviation
Strategic Impact Evaluation Fund	SIEF

## Sampling

### SAMPLING PROCEDURE

The sample universe is 145 circuits (groups of schools) in 20 UNICEF supported districts in Ghana. Circuits were to be randomly assigned to the treatment of additional management training, with district as the stratification unit. Additional management circuits required one school and non-management circuits required two schools. Schools within each circuit were chosen using a randomly ordered list of all target schools. Schools were contacted in the order in which they appeared on the list and a screening questionnaire was administered to determine their eligibility for the program. To be eligible for the STARS project, a school must have non-zero enrollment in primary 4, primary 5, and primary 6 classes, non-shift in primary 4 through primary 6, and non-multigrade in primary 4 through primary 6. Overall, five of the circuits were dropped because they did not have any schools that met the eligibility criteria for inclusion.

The study was then conducted in 210 schools in 140 circuits across 20 districts in Ghana. Within each randomly sampled school, 210 head teachers and all P4-P6 teachers (671) were selected. At baseline, 15 students (30 per school) were randomly selected per class (P4 and P5). If a particular class had more than 15 students, only 15 were randomly sampled. If less than 15 students, all students were automatically included. The final sample size is 5,893 students.

## Data Collection

### DATES OF DATA COLLECTION

Start	End	Cycle
2019-06-04	2019-07-17	Endline

## DATA COLLECTION MODE

Computer Assisted Personal Interview [capi]

## SUPERVISION

Data collection activities were monitored to assess the (a) performance of the fieldwork teams in administering the various instruments and (b) quality of the data being collected. Field teams were monitored using IPA's standardized monitoring tool, hosted on SurveyCTO. On average, at least two different monitors monitored each field staff during the data collection period. The results from the monitoring largely showed the field staff strictly adherence to the established protocols. This was partly due to the use of experienced enumerators, feedback-based training, and the provision of timely feedback to the fieldwork team.

## DATA COLLECTION NOTES

Data were collected using CAPI based on the SurveyCTO platform and Samsung tablets, incorporating Innovations for Poverty Action (IPA)'s data management system. IPA Ghana's research quality team programmed the questionnaires. The programmed instruments included constraints, skip patterns, relevant commands to automate the administration process and automatically check inconsistencies or errors associated with the administration of the instruments on the field. The CAPI application was bench-tested during the training field practice. Modifications of the questionnaires based on the pilot and field practice were incorporated into the electronic versions of the questionnaires. All survey instruments were administered in English. Data were collected through direct observations of classrooms and interviews conducted in-person and/or via phone.

This study has four respondent types: circuit supervisors, head teachers, teachers, and students. Each respondent type completed a different survey. Circuit supervisors completed a survey over the phone that covered a range of topics from their personal background to their circuit management practices. Head teachers' surveys were conducted in-person and covered a range of topics from information on their school and characteristics, to their personal background and school management practices. Teacher surveys were conducted in-person and covered a range of topics from information on their personal background to the support that they received from their managers.

Students completed two instruments: a short demographic survey and a student assessment on their math and English skills. We based the student assessment on previous national, international, and study tests. The majority of questions came from the examinations used in Duflo, Kiessel, and Lucas (2019). Those tests were developed by education stakeholders in the Ministry of Education to reflect grade 1-3 material. Based on the piloting and findings from that study, many students in P4 and P5 still tested at that level. We added additional questions that were inspired by questions from the National Education Assessment P3 and P6 exams. Finally, we added questions inspired by the Ghana versions of the EGRA and EGMA. Trained enumerators conducted the student assessments one-on-one. Enumerators either read the question aloud or showed questions to students to read, depending on the specific instructions for each question. Tests were semi-adaptive: all students started with the same questions. Those who performed poorly on these answered a set of easier questions. Students who performed well on the early questions answered a set of harder questions. Itemized response theory was used to convert each students' score to a common scale.

## DATA COLLECTORS

Name	Abbreviation
Innovations for Poverty Action enumerator teams	IPA

## Questionnaires

## QUESTIONNAIRES

The following 7 research instruments were used in this study:

- School Arrival Survey Questionnaire: covers background information for respondent identification and a teacher roster
- Non-Study School Arrival Survey Questionnaire: administered to non-study schools only and covers background information for respondent identification
- Home Arrival Survey Questionnaire: covers background information for respondent identification

- Circuit Supervisor Questionnaire: covers background characteristics, management and supervision, participation in professional development activities, perceptions about the role as a circuit supervisor, work stress and burnout, and technology use
- Head Teacher Questionnaire: covers background characteristics, school characteristics and activities, participation in professional development activities, perceptions about their role, work stress/burnout, technology use, and implementation of targeted instruction pedagogy
- Teacher Questionnaire: covers background characteristics, teacher supervision, support, teacher satisfaction, work stress/burnout, and implementation of targeted instruction pedagogy
- Pupil Questionnaire: captures information on the students' background characteristics and aspirations, students' feedback on classroom teaching, and enumerator information about the quality of students' uniform (as a proxy for socioeconomic status)

The questionnaires are provided in English and are available for download.

## Data Processing

### DATA EDITING

Using the Innovations for Poverty Action's Data Management System, high-frequency checks were run daily to identify inconsistencies, electronic programming errors, and enumerator errors. The high-frequency checks indicated a minimal violation of the data quality checks such as duplicate IDs, missing values, constraints, skip patterns and survey logic or inconsistencies. Also, 10% each of the completed Head Teacher Survey, Teacher Survey, and Circuit Supervisor Survey were audited to establish whether there were variations in key outcome variables. The audit checks showed that discrepancies were largely within the acceptable range. During data collection and following the completion of fieldwork, data were edited and cleaned using STATA do-files. Data were encrypted using BoxCryptor from the point of collection to storage.

## Access policy

### CONTACTS

Name	Affiliation	Email
Strategic Impact Evaluation Fund	The World Bank Group	siefimpact@worldbank.org

### ACCESS CONDITIONS

Public Access

### CITATION REQUIREMENTS

Use of the dataset must be acknowledged using a citation which would include:

- the identification of the Primary Investigator
- the title of the survey (including country, acronym and year of implementation)
- the survey reference number
- the source and date of download

Example:

Anne Fitzpatrick (University of Massachusetts Boston), Adrienne Lucas (University of Delaware) and Sabrin Beg (University of Delaware). Ghana - Strengthening Teachers Accountability to Reach All Students Project Impact Evaluation, 2019. Ref: GHA\_2019\_STARSIE-EL\_v01\_M. Dataset downloaded from [URL] on [date].

### ACCESS AUTHORITY

Name	Affiliation	Email	URL
Strategic Impact Evaluation Fund	The World Bank Group	siefimpact@worldbank.org	<a href="#">Link</a>

### LOCATION OF DATA COLLECTION

World Bank Microdata Library

## Disclaimer and copyrights

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### DISCLAIMER

The user of the data acknowledges that the original collector of the data, the authorized distributor of the data, and the relevant funding agency bear no responsibility for use of the data or for interpretations or inferences based upon such uses.

## Metadata production

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### DDI DOCUMENT ID

DDI\_GHA\_2019\_STARSIE-EL\_v01\_M\_WB

### PRODUCERS

Name	Abbreviation	Affiliation	Role
Development Economics Data Group	DECDG	The World Bank Group	Documentation of the study

### DATE OF METADATA PRODUCTION

2023-07-25

### DDI DOCUMENT VERSION

Version 01 (July 2023)

## Data Dictionary

Data file	Cases	Variables
<b>arrival_survey.dta</b> This dataset includes data from the STARS School Arrival Survey Questionnaire.	209	158
<b>circuit_supervisor_survey.dta</b> This dataset includes data from the STARS Circuit Supervisor Questionnaire.	135	133
<b>head_teacher_survey.dta</b> This dataset includes data from the STARS Head Teacher Questionnaire.	210	249
<b>non_stars_home_arrival.dta</b> This dataset includes data from the STARS Non-Study School Arrival Survey Questionnaire.	94	23
<b>stars_home_arrival.dta</b> This dataset includes data from the STARS Home Arrival Survey Questionnaire.	385	19
<b>student_data.dta</b> This dataset includes data from the STARS Pupil Questionnaire.	5609	230
<b>teacher_data.dta</b> This dataset includes data from the STARS Teacher Questionnaire.	803	255