TETRA TECH
International Development

Independent Evaluation of the Girls' Education Challenge Phase II - Evaluation Study 3: Aggregate impact of GEC-T projects between baseline and midline

Annexes

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This document has been approved for submission by Tetra Tech International Development Project Director, based on a review of satisfactory adherence to our policies on:

Quality management;

HSSE and risk management;

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Performance Management and Monitoring and Evaluation (M&E)

Simon Griffiths

Project Director

Signature:

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Acronyms

ALP	Adult Learning Programme
BL	Baseline
CBE	Community Based Education
CS	Cross-sectional
DIBELS	Dynamic Indicator of Basic Early Literacy Skills
DID	Difference in differences
DRC	Democratic Republic of the Congo
EDT	Education Development Trust
EE	External Evaluators
EGMA	Early Grade Mathematics Assessment
EGRA	Early Grade Reading Assessment
ESWG	Evaluation Studies Working Group
FCDO	Foreign, Commonwealth and Development Office
FM	Fund Manager
GEC	Girls' Education Challenge
GEC II	Girls' Education Challenge Phase II
GEC-T	Girls' Education Challenge – Transition
GS	Girls Survey
GWD	Girls with Disabilities
HHS	Household Survey
IE	Independent Evaluation
IO	Intermediate Outcome
IP	Implementing Partner
ISG	In-School Girls
LA	Learning Assessment
LNGB	Leave No Girl Behind
MEL	Monitoring, Evaluation and Learning
M&E	Monitoring and Evaluation

ML	Midline
OLS	Ordinary Least Squares
OOS	Out-of-School
OPM	Oxford Policy Management
OSG	Out-of-School Girls
PCG	Primary Caregiver
PISA	Program for International Student Assessment
PwC	PricewaterhouseCoopers
RTI	Research Triangle Institute
RQ	Research Question
SeGMA	Secondary Grade Mathematics Assessment
SeGRA	Secondary Grade Reading Assessment
TIMSS	Trends in International Mathematics and Science Study
ToC	Theory of Change
ToR	Terms of Reference
TVET	Technical and Vocational Education and Training
UNESCO	The United Nations Educational, Scientific and Cultural Organization
USA	United States of America
WPM	Words per Minute

Project Acronyms

Project name	Acronyms used in report	Project location(s)
Aga Khan Foundation	AKF	Afghanistan
Avanti	Avanti	Kenya
Bangladesh Rural Advancement Committee	BRAC	Afghanistan
Camfed International	Camfed (International)	Tanzania, Zimbabwe, Zambia
Camfed Tanzania	Camfed (ex-BRAC)	Tanzania
CARE International	CARE	Somalia
ChildHope UK	ChildHope	Ethiopia
Cheshire Services Uganda	CSU	Uganda
Discovery Learning Alliance	DLA (Discovery)	Nigeria, Ghana, Kenya
Education Development Trust	EDT	Kenya
Health Poverty Action	HPA	Rwanda
I Choose Life-Africa	ICL	Kenya
Leonard Cheshire	LC	Kenya
Link Community Development	LCD (Link)	Ethiopia
Mercy Corps	MC Nepal/ MC Nigeria	Nepal and Nigeria
Opportunity International UK	Opportunity	Uganda
Promoting Equality in African Schools	PEAS	Uganda
Plan International	Plan	Sierra Leone
Relief International	Relief	Somalia
Save the Children (DRC)	STC DRC	DRC
Save the Children (Mozambique)	STC MOZ	Mozambique
Varkey Foundation	Varkey	Ghana
Viva	Viva	Uganda
Voluntary Service Overseas	VSO	Nepal
World Vision	WV	Zimbabwe
World University Service of Canada	WUSC	Kenya

Annex 1: Terms of Reference (ToR) for GEC II Independent Evaluation (IE) Study 3

Version 4 (final): 29 November 2021

Evaluation Study 3: Quantitative assessment of the aggregate impact of GEC-T projects on learning between baseline and midline

Background and Purpose

1. The Independent Evaluation (IE) of the GEC II submitted a high-level, draft Terms of Reference (ToR) for Evaluation Study 3 in January 2021 (in annex to the IE Inception Report). Since then, discussions on the scope of the study have taken place with the Fund Manager (FM) and with the FCDO. On 11 June 2021 the IE met with Emma Sarton, Stuart Johnson and Iram Zahid from the FM and Caroline Carney from the FCDO to agree together the scope of work and key outputs needed for this study. The representatives from the FM and the FCDO also fed back on behalf of the wider FM team and FCDO colleagues.
2. The agreed **primary objective of Study 3** is to quantitatively assess what aggregate impact the portfolio of GEC Transitions (GEC-T) projects had on learning outcomes (as well as transition outcomes, to the extent possible) between their baseline and midline external evaluations. The study timelines are set out in the "Work Plan" section later in this document.
3. The **purpose** of this study is, using baseline and midline data gathered by external evaluators for the GEC-T projects, to conduct research on:
    a) the extent to which GEC-T projects as a whole have been successful or not in improving the learning (and transition) outcomes of target girls between baseline and midline (over and above the comparison groups, whose data was collected from girls living in neighbouring areas but who did not receive GEC interventions);
    b) the extent to which changes in learning outcomes vary across contexts, subgroups, as well as girls' individual, household-level, and school-level characteristics; and
    c) statistical correlations between changes in learning outcomes and variables /factors that may influence these changes (among a list of characteristics and potential 'predictor' or 'barrier' variables), as well as differences across contexts and subgroups.
4. The **primary stakeholder audiences** for this study are the FCDO (GEC II Programme Team, FCDO Education Advisors, Regional Education Advisors, Girls' Education Department), the FM, and project Implementing Partners (IPs). The **secondary stakeholder audiences** for this study are other international donors, agencies and stakeholders working in and investing in girls' education.

Scope of Work

5. The IE will update the reanalysis (previously carried out by OPM) of the GEC-T baseline data and will replicate it with the GEC-T midline data. This will involve producing a single dataset for a specific set of standardised variables that include:
    - **Variables from the learning assessments** (EGRA / SeGRA and EGMA / SeGMA item and subtask scores);
    - **Key characteristics:** country and project area, treatment status, age, enrolment status, school level and grade when relevant;
    - **Other core variables available from the *girls survey***, either related to the individual girl *herself* (disability status, orphan status, language spoken at home different from language of instruction, 'life-skill' question) or to the girl's school *experience* (time it takes to go to school, main school facilities, teachers' behaviour, absenteeism, and teaching quality); and
    - **Other core variables available from the *household survey (HHS)*,** for example: head of household characteristics (gender, ethnicity, religion, occupation, highest level of education attained); girl's primary

caregiver (gender, occupation, highest level of education attained); distance to school; and the girl's opinion and behaviour towards school and learning in general.

6. **Additional variables from other girl or household survey sections** (school management and governance, economic empowerment, teaching quality, life skills for out-of-school girls) may be included where relevant and if showing enough data quality, availability and consistency across projects. The final list of suggested variables for inclusion in the merged midline dataset will be refined during the scoping phase (Phase 1) and the cleaning /merging phase (Phase 2) then included as part of the analytical plan (Phase 3) for discussion and approval.
7. **The IE will explore how and to what extent IPs have consistently tracked and measured transition outcomes** through their external evaluations to determine the extent to which we are able to analyse transition outcomes at the portfolio level; and link these to the learning data. Data quality and availability will be a key determinant in the extent to which a secondary focus on transition outcomes adds to the scope of work and focus on learning outcomes as well as the feasibility of conducting this analysis in the first instance.
8. **The consistency between the baseline and midline datasets will be key** to assessing the changes between the two waves. The analysis relies on the availability of the same variables at both baseline and midline. The variable names, labels and values will be harmonised within and across projects to ensure comparability. As much as possible, midline data will be aligned to the GEC-T merged dataset created at baseline. In specific cases, however, it may prove more efficient and meaningful to modify the baseline dataset in order to harmonise it with midline data. Such situations will be kept to a minimum and documented as part of the Study Final Report.
9. **The IE will seek to include as many girls as possible into the merged dataset** to form the largest samples possible (thereby providing higher opportunity for 'statistically significant' analysis). All midline girls will therefore be considered, including substitution girls who have been integrated into the midline sample to account for the loss of baseline girls (due to failure of recontacting the girls interviewed at baseline, unavailability to be interviewed, or unwillingness to take part into the midline survey). As part of this process, we will explore attrition levels and investigate the projects' sample substitution strategies. However, some types of analysis (such as regression models) might be restricted to 'cohort girls', who have been successfully interviewed at both baseline and midline, and for which two data points are available. The approaches and sample bases to the different types of analysis will be discussed in more details as part of the analytical plan that will be developed over the course of Phase 3 (see the *Methodology Section* below for further details).
10. **A codebook (or data dictionary) will be developed to accompany the unique midline dataset.** It will include an overview of the structure of the data and a list of all the variables, including their names, labels (variable label and value labels) and a quick description of analytical variables where relevant.

Methodology proposed

11. The **main data sources** used for this Study will be GEC-T midline projects' datasets provided by their external evaluators and uploaded on DevResults by the FM. These have been saved securely by the FM into the IE working folders as part of previous studies and will be reviewed along with any relevant project documentation (midline report and annexes, survey tools, codebooks, any other M&E document) and FM documentation (M&E guidance, girls and household survey templates, etc.). Baseline datasets and accompanying documents will be consulted for reference and used as appropriate.
12. The **study approach and methodology** will be staged across four phases:

    - ***Phase 1: Scoping of projects' midline datasets.*** The study will begin with a thorough exploration of the existing data and a documentation review to understand 'what's there and what can be done', that is the availability and quality of projects' midline datasets, the possibility of linkages within and across projects, and the comparability with baseline data. This phase will include consultation with the Evaluation Studies Working Group (ESWG) to validate the ToR and inform the scope of the study. It may also include, to the extent that is needed for the sake of fully comprehending the data, consultations with the FM and /or with the Implementing Partners (IPs) as well as the projects' external evaluators (EEs).
    - ***Phase 2: Cleaning and merging individual datasets within and across projects.*** Datasets will be harmonised together and aligned with baseline data to allow merging and appending them into a single dataset. This will first happen within projects (linking and merging different survey datasets – learning assessment, girls survey, household survey – from the same project) and across projects (merging the project-level single datasets generated as part of the previous step into one unique GEC-T dataset). Through this process, variables will be cleaned and modified, which may include but not be restricted to

renaming, relabelling, recoding them, and removing blank or irrelevant observations. The structure of project datasets may also be amended (their shape may be changed from 'long' to 'wide', or conversely) and only relevant variables will be included in final versions.

- ***Phase 3: Drafting of the progress note and analytical plan.*** Throughout this phase, a detailed note will be developed that will document the scoping, cleaning, and merging processes, the issues found, the assumptions made, and *what can be done* with the dataset. The note will include an analytical plan that sets out what type of analysis will be conducted and what project datasets /variables will be included in the models and as part of the final merged dataset. More details on what the analytical plan will include are provided in the next section.
- ***Phase 4: Data analysis and reporting.*** Once the unique GEC-T midline dataset has been created, we will conduct descriptive and exploratory analysis of the midline learning levels and how these have changed since baseline (see next point for further details). As part of the portfolio analysis, weights will be used to account for the varying sample sizes across projects and subgroups. Conditional to the availability and quality of the data, we will also try to explore transition outcomes based on the variables present in the girls and household survey datasets (enrolment, attendance, grade levels, etc.).

13. Upon completion of Phase 2, the IE will prepare a **detailed analytical plan** (Phase 3) that will provide further details on the scope and methodology of the Study, especially regarding the variables included in the analysis and the techniques that will be used as part of Phase 4. This analysis is likely to include:

    a) A descriptive analysis of the midline literacy and numeracy levels of treated girls across the portfolio. This will be done by looking at the average and median EGRA / SeGRA and EGMA / SeGMA learning levels at midline, and the percentage of girls meeting the minimum mathematics benchmark[1] and percentage of girls meeting the minimum reading benchmark[2]. Other learning indicators will be developed where relevant on the basis of the outputs from the first two phases.

    b) A comparison between the baseline and midline learning levels of girls. The progress of girls' literacy and numeracy levels between baseline and midline will be assessed for girls in both the treatment and comparison groups and compared against each other. First, we will ensure that the treatment and comparison groups share similar characteristics which make comparing them valid. Then, difference-in-difference indicators will be created, equal to the difference between, on the one hand, the change between baseline and midline in the learning scores of girls in the treatment group, and on the other hand, the change in the learning scores of girls in the comparison group.

    The significance of these indicators will be assessed statistically using linear regression models where learning scores (maths or reading) will be used as the dependent variable. The initial specification of the models will include no predictor (or independent variable) except a single binary variable equal to the girls' treatment status (1 if they belong to the treatment group, 0 if they belong to the comparison group). They will be used to assess whether girls have significantly improved or not between baseline and midline, and if treatment girls have done so over and above girls from the comparison group.

    c) An analysis of predictors of change in learning. Predictors of learning (and of changes in learning) can in theory be any variable that might correlate, positively or not, with girls' capacity to effectively learn mathematics and reading. Predictors can include key girl characteristics or subgroup variables (country/fragility context, age, grade and school level, disability status, marital status, motherhood status, etc.) or any other girl-, household-, community- and school-level characteristics that might act either as a 'barrier' or as a 'facilitator' to learning (such as the language spoken at home being different or the same as the language of instruction). Predictors will be integrated into a multivariate regression model, drawing from the variables available as part of the baseline and midline merged datasets (variables will need to be available for a sufficiently large sample of projects, and girls, to be included in the model). This will be done using a stepwise approach with forward selection, through which only variables that show statistically significant effects on changes in learning are included.

14. **Where relevant, the analysis will be conducted separately for specific subgroups,** to explore the patterns of changes among them. This will be conditional on the availability of variables defining these subgroups in the baseline and midline data, and to sufficiently large sample sizes. The detailed analytical plan drafted as part of

[1] Defined at baseline as being able to respond correctly to at least half of the EGMA word problems.
[2] Defined at baseline as being able to respond correctly to at least half of the EGRA (first option) or SEGRA (where EGRA was not available) reading comprehension questions.

Phase 3 will provide a final list of the subgroups included in the descriptive analysis (as 'cross-tabulation' variables) and in the regression analysis (as independent variables / predictors) for discussion and approval.

15. **Data cleaning, processing and analysis will be conducted in Stata.** When project datasets have been submitted in another format (usually with Excel *.xls(x)* or SPSS *.sav* extensions), they will be converted into Stata *.dta* format using Stata's internal conversion commands or Statransfer.

Research Ethics

16. Midline (and baseline) project datasets should already be anonymised and do not contain personal information, but the IE will ensure that the final merged GEC-T midline dataset is fully anonymised.
17. Data sharing protocols with the FM have already been agreed as part of a broader Memorandum of Understanding between the IE and FM. Access to any further data required for the analysis, including any contextual information that sheds light on the way data has been collected, cleaned, and coded, may be sought directly from IPs or EEs.

Key Risks

18. The key risks identified at this stage and potential mitigating actions are set out below:

Table 1: Key risks identified

Risk	Likelihood	Impact	Mitigating actions	Impact following mitigation
Project data not available or useful.	Moderate	High	The study team will liaise with the FM and IPs to obtain all the relevant data. After approval of the TOR, the first phase will be exploring the data to be able to frame what can and can't be done as part of this study.	High
Some baseline project datasets that have been used to create the unique baseline dataset are now outdated / different to ones shared with the IE and so need updating. The study team is then required to go back to the baseline dataset and reclean/ recode/ remerge some of the project data to create an updated version of the unique baseline dataset. This would be time consuming and distract from the midline data task.	Moderate	Moderate	The study team will explore this as part of scoping phase and will liaise with the FM to verify which data is most up to date.	Low
IPs or EEs are not able (or readily available) to address inconsistencies in the data and/or to provide additional information needed for the analysis, therefore resulting in delays.	Moderate	High	The study team has built in resources to conduct extra checks of data if required. Early and ongoing engagement with the FM and any relevant IPs should create early warning of potential delays. This will be written up in the analytical note where we will look at what we can and cannot do with the data, and what filters should be taken into account for different analysis.	Moderate

Risk	Likelihood	Impact	Mitigating actions	Impact following mitigation
Three projects (Link Community Development, Save the Children DRC And Save the Children Mozambique) may not be able to be included if the midline data they collected during/after Covid-19 varies in quality and scope (the data has not yet been shared with the IE team).	High	Moderate	The analytical note will examine the impact of the reduced number of projects on the dataset.	Low / Moderate

19. A full, study-level risk register will be developed after approval of the TOR.

Work Plan

20. An indicative workplan is set out below:

Table 2: ToR workplan

Activities:	2021			2022				
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
TOR submitted to FCDO and ESWG								
ESWG Meeting for verbal feedback								
Update TOR								
Final TOR submitted								
Phase 1: Scoping of projects' midline datasets								
Phase 2: Cleaning and merging individual datasets within and across projects								
Phase 3: Drafting of the progress note and analysis plan								
Phase 4: Data analysis and reporting								
Draft report								
Submit report v1 to FCDO, ESWG and IAG								
Emerging findings workshop / ESWG meeting								
FCDO, ESWG and IAG provide comments								
Update report								
Submit report v2 (final) to FCDO								

21. On approval of the ToR for this study, the analysis phase will commence, as detailed in paragraph 12 above.

Expected Deliverables

22. On approval of this ToR, the study team will commence the scoping of projects' midline datasets then proceed with cleaning and merging datasets within and across projects, and with the unique baseline dataset. The team will then produce a progress note including a detailed analytical plan. This will provide the final questions framing the study and the final methodology.

23. The first draft of the study report will be submitted in April 2022 and the final version in May 2022. The unique merged midline dataset and its accompanying codebook will be submitted along with the final version of the report.

24. We will produce PowerPoint presentations on the: (1) the emerging findings; and (2) final reported findings, conclusions, and recommendations for the FCDO, IPs and FM and wider stakeholder audiences as per the FM's GEC Learning Strategy.

Team Composition

25. This evaluation study will be led by a core study team under the guidance of the Principal Investigator and Lead Author (Florian Poli) and Synthesis and Quantitative Lead (Maria Jose Ogando). The study will be managed by the Programme Manager (Janki Rajpura).

26. In addition to the core study team, a wider team will be assembled to support with the data cleaning and analysis.

Stakeholder Engagement

27. The IE will predominantly interact with the following categories of stakeholders[3] during the study (where relevant, some of these stakeholders will be consulted through the Evaluation Studies Working Group):

    FCDO UK including:

        GEC II Programme Team;

        FCDO Education Advisors;

        FCDO Regional Education Advisors; and

        Girls' Education Department;

    GEC II Fund Manager; and

    Implementing Partners (IPs) and their External Evaluators (EEs).

    The IE will also consult with the projects' External Evaluators throughout Phases 1 and 2 as and when required to get clarifications on any queries on the data.

[3] Given the proposed time periods of interest for the study (from baseline to midline, up until March 2020), it is intended as a retrospective research study. As such, we feel it may not be appropriate to identify and engage with beneficiaries who have not been involved in the project for a considerable period of time, and at such we do not envisage engaging with them. However, we would encourage project implementing partners to share and disseminate any relevant findings with those beneficiaries whom they have retained relationships with from this study.

Deviation from the TORs

The IE deviated from the TORs in three instances. These are explained in full bellow, along with the rationale for such change.

1. The programme manager changed to Louise Cathro during the course of the Study.
2. Bullet point 12.

The TORs mentioned that as part of the portfolio analysis, weights would be used to account for the varying sample sizes across projects and subgroups. To account for the former, two types of weights were applied: population and projects weights. These are described in the Methodology section. However, because the population for each subgroup is unknown, specific weights for subgroup analysis were not calculated.

3. Bullet point 13a. A descriptive analysis of the midline literacy and numeracy levels of treated girls across the portfolio.

In the TORs, we mentioned we will look at the percentage of girls meeting the minimum mathematics benchmark and percentage of girls meeting the minimum reading benchmark. At baseline, such benchmarks were defined as being able to respond correctly to at least half of the EGMA word problems, for numeracy, being able to respond correctly to at least half of the EGRA (first option) or SEGRA (where EGRA was not available) reading comprehension questions, for literacy. However, these measures were not based on any standard guidelines, and were not associated with any wider benchmarks or threshold scores that would have allowed to define the value of a "good enough" score. In this study, we have conducted a literature review and used international benchmarks of oral reading fluency and reading comprehension from RTI and UNESCO's Global Education Coalition.

4. Bullet point 13c. An analysis of predictors of change in learning

In the TORs we detailed that one of the purposes of the study is to look at statistical correlations between changes in learning outcomes and variables /factors that may influence these changes (among a list of characteristics and potential 'predictor' or 'barrier' variables) (bullet point 3 of the TORs). Intermediate outcomes underpin how the change in learning outcomes happen according to project theories of change, and this analysis has shown a positive impact of the GEC-T (see Learning headline 7 in 3. Changes in girls' learning). To test this link, on bullet point 13 of the TORs, we proposed building a model integrating various predictors into a multivariate regression model drawing from the variables available as part of the baseline and midline merged datasets. This was proposed to be done using a stepwise approach with forward selection. Still, we also highlighted the analysis relied on the availability of the same variables at both baseline and midline (bullet point 8 of the TORs).

To look at change, we use the sample of panel girls (those tracked at baseline and midline). To look at how intermediate outcomes correlate to changes in learning, we need information on learning and on intermediate outcomes at both data rounds (baseline and midline). Furthermore, to build a multivariate model, girls assessed for learning must have information on various intermediate outcomes (which are mostly tracked through comprehensive girls' surveys and household/primary caregiver questionnaires). However, as shown in Methodology, we lose more than 90% of the sample and various projects when we try to fit such a model. This happens because some projects de-linked the learning cohort from the household and extended girl surveys and administered different questionnaires to different sets of girls. Therefore, very few girls in the sample have information on learning and variables tracking intermediate outcomes, which limits the possibility of fitting a multivariate model that remains representative at the portfolio level and, to some extent, of the projects included.

Instead, it was possible to examine the change in intermediate outcomes over and above the comparison group. Individual correlations for each variable mapped to intermediate outcomes were also reported. These look at change – examining specifically how a positive change in IO between baseline and midline correlates with a change in learning.

Annex 2: Process for Creating the Unique Dataset and Additional Methodological Details

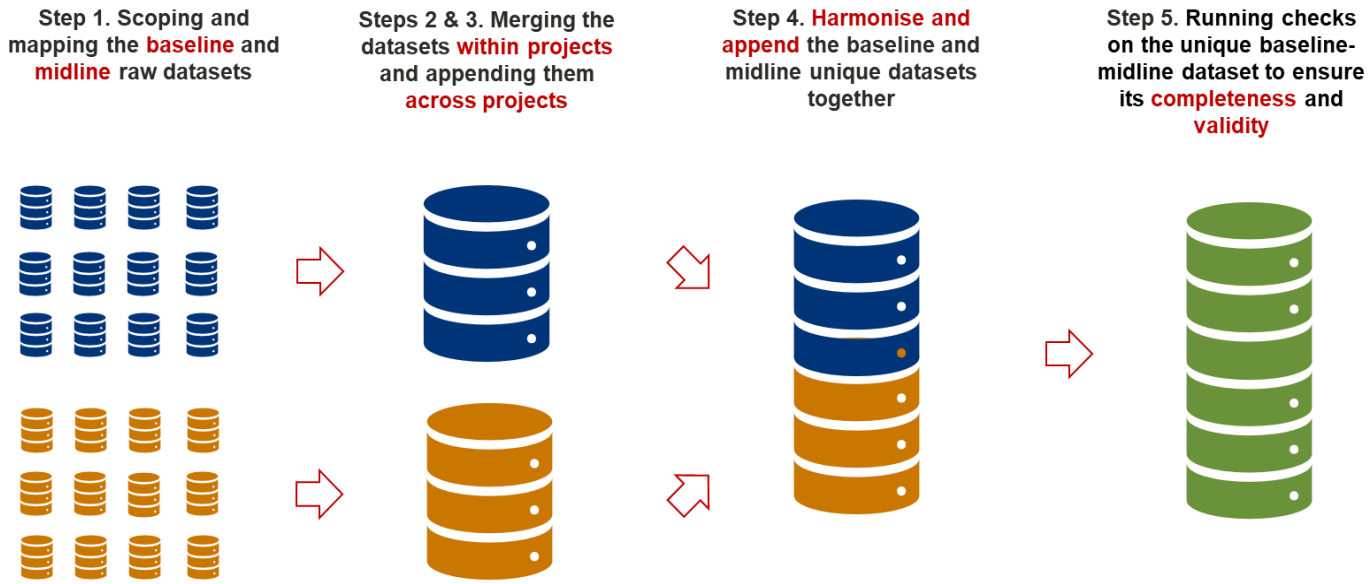
The unique baseline-midline dataset combines data from four instruments: i) the EGRA, EGMA, SeGRA and/or SeGMA Learning Assessments (LA); ii) the Girl Surveys (GS); iii) the Household Surveys (HHS); and iv) the Primary Caregiver Surveys (PCG).

This followed a six-step process:

1. Map the raw datasets available for each GEC-T project;
2. Merge the datasets together for each project using girls' unique identifiers – at baseline /midline;
3. Append the project-level datasets to create two portfolio datasets (baseline /midline) ;
4. Harmonise variables into comparable codes and categories across projects and rounds (baseline and midline); and
5. Append the two datasets together to create a unique baseline-midline portfolio-level dataset,
6. Data-quality and consistency checks to ensure its completeness and validity.

Figure 9 shows a graphic overview of these steps.

Figure 1: Overview of the steps followed to create the unique baseline-midline GEC-T dataset

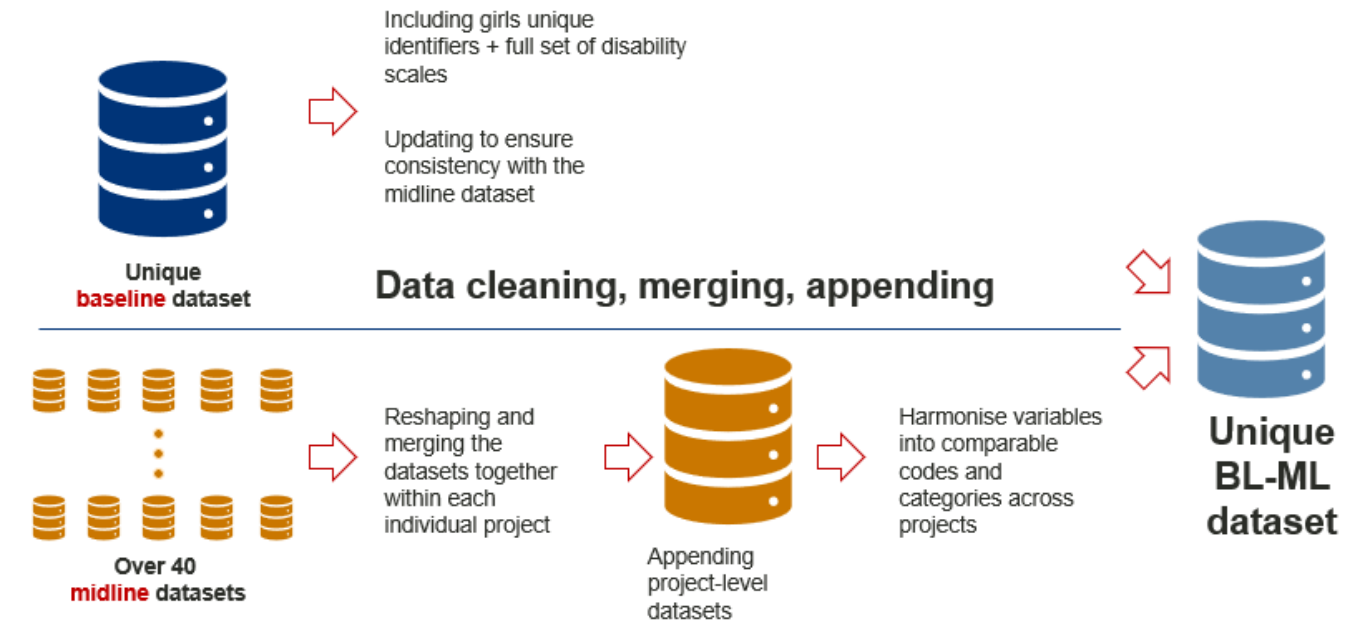


As shown on the diagram above, the creation of the *baseline* and of the *midline* portfolio-level datasets followed the same process: as a first step, the scoping and mapping excises was done with baseline and midline datasets separately. This includes mapping baseline and midline learning assessments (Annex 8). The scorecards rated and reported by the FM were reviewed and mapped during the initial mapping phase (See Annex 6 for an overview of GEC-T Projects' Midline Results). This exercise enabled us to get to understand how each project defined learning and transition and what their targets/achievements were, and therefore, use this as a reference. Then, we merged different types of datasets (e.g. girls survey and learning assessments) within projects so that each project has a single midline dataset and appended these datasets to make a single midline dataset at a portfolio level. Having harmonised and added the baseline and midline datasets, we checked their validity and completeness.

Please note that, a baseline portfolio-level dataset already existed at the start of Study 3. Because it was lacking some key data (such as girls' unique identifiers and project-specific data), the Study 3 team amended and augmented it by going back to the projects' raw baseline datasets. They subsequently generated an updated version of the baseline portfolio-level dataset. This was done in parallel to the work on the midline portfolio-level dataset. For midline, the data from over 40 midline datasets were mapped, then reshaped and merged, and subsequently

appended to create a unique midline dataset. After harmonising variables, the baseline dataset and the midline dataset were appended into a unique dataset. This process is summarised in Figure 10 below.

Figure 2: High-level overview of the data cleaning process followed in Study 3



This yielded about 77,000 girls at baseline and 60,700 at midline for the overall dataset**.** The data includes boys[4], who are not included in our analysis. The sample distribution by treatment status is shown in Table 21.

Table 3: Sample distribution of the unique baseline-midline GEC-T dataset

Number of girls per group		Baseline	Midline
Treatment	Girls	46,484	38,056
	Boys	11,402	6,814
Comparison	Girls	30,883	22,599
	Boys	10,020	5,814
Total	**Girls**	**77,367**	**60,655**
	Boys	**21,422**	**12,628**

The baseline data includes all 27 GEC-T projects, while the midline data only includes 23*. Four GEC-T projects, namely Avanti (Kenya), Link (Ethiopia), Save the Children (DRC) and Save the Children (Mozambique) did not collect suitable midline evaluation data due to the COVID-19*

[4] Data on boys was included when submitted combined with data on girls. Projects that submitted separate datasets, such as AKF, have not been included as it was out of the scope of this study to prepare this data.

outbreak[5] and therefore have no midline data in the unique dataset. This largely explains (along with attrition) why the midline sample size is smaller than the baseline sample size in our unique baseline-midline dataset.

Out of 27 GEC-T projects available in the GEC-T dataset, 20 projects were selected for learning analysis and 17 projects for transition analysis as explained in the Methodology section. Box 5 below contains a list of the excluded projects along with explanations as to why each project was not suitable for Study 3.

Box 1: Projects excluded from the baseline and midline analysis

Out of 27, four projects were excluded due to the absence of midline evaluation data: Avanti (Kenya), Link (Ethiopia), Save the Children (DRC), and Save the Children (Mozambique).

For Link and both Save the Children projects, this is due to the absence of midline data collected prior to the Covid-19 pandemic[6]. Study 3 is focusing on the impact of the GEC-T portfolio on learning (and transition) before the start of the pandemic, and Link, Save the Children (DRC), and Save the Children (Mozambique) adapted their evaluation as a result of the pandemic. Therefore, they were not included within the scope of this study.

Avanti did not submit a valid midline dataset. The learning data was submitted, but it was not consistent with the standard reporting requirements for a GEC midline evaluation[7]. Instead, three non-standard assessments were administered during the midline period. With these constraints and limitations, the external evaluator did not assess learning achievement between baseline and midline. It is also unclear how learning scores were created at midline, as there are no subtask/item level variables in the midline dataset. In the absence of evidence of the comparability and consistency of Avanti midline data, the midline data is excluded from the analysis of changes between baseline and midline learning levels.

Three additional projects were excluded as their learning progress was deemed inconclusive by the FM: ChildHope (Ethiopia), Opportunity International (Uganda) and Plan International (Sierra Leone). This means that the baseline data was not deemed of sufficient quality and validity to assess progress in learning and transition outcomes between baseline and midline.

For **ChildHope,** a new external evaluation team was introduced at midline and raised questions about the validity and reliability of baseline learning data. Besides, the baseline data did not include valid unique identifiers, which made it impossible to track the same cohort of participants over time. In light of these challenges, the FM and external evaluator decided not to assess changes in literacy and numeracy (except for the written subtask, which was not affected by enumerator errors).

The baseline data from **Opportunity International** was shown to include "irregularities in unique IDs, data entry errors, difficulties to merge datasets."[8] A new external evaluator was contracted at midline, and comparison between baseline and midline was deemed inconclusive "due to baseline data issues, changes to sample and tools."

Similarly, the external evaluator from **Plan** was replaced between baseline and midline, and the validity of baseline data cannot be ensured. Inconsistencies were noted in the administration of the learning assessment, as well as important ceiling effects in SeGRA and SeGMA. Our own review of the baseline learning data from the project also identified several gaps in its completeness and consistency (see the mapping of learning data in Annex 8, Mapping of baseline and midline learning assessment data). The baseline data from these three projects will therefore be excluded from the analysis of changes between baseline and midline learning levels.

Three more projects were excluded only for transition analysis: Varkey (Ghana,), VSO (Nepal), CSU (Uganda).

Both Varkey and VSO datasets do not include individual unique identifiers at baseline and midline, which is a crucial requirement for transition analysis. For CSU, only less than 50% of the data collected was successfully merged between baseline and midline, therefore the project was deemed not suitable for the analysis.

[5] Link (Ethiopia), Save the Children (DRC) and Save the Children (Mozambique) did not collect any midline data before the Covid-19 outbreak. Avanti (Kenya) submitted learning monitoring data which was not consistent with the standard reporting requirements for a GEC midline evaluation. For further details, see *Annex 1*.

[6] This has been confirmed with the FM. Save the Children (DRC) used pre-Covid-19 monitoring data that has not been primary collected and does not include standard learning assessments. It therefore cannot be used for the purpose of this Study.

[7] This is mainly because the methodological approach was adapted due to some constraints identified on the programme and the desire to obtain insight regarding the technology-specific aspects of iMlango. Also, the midline did not administer the EGRA and EGMA/SeGMA tests "with the controlled conditions required for evaluation standards". More specifically, due to inconsistency of student ID, numeracy learning assessment results were matched manually to Maths-Whizz portal usage data based on the students' name, date of birth and school data. As a result, there may be some students' data with "mismatched learning assessment results".

[8] Opportunity International UK's midline evaluation report.

Step 0. Collating datasets

All relevant files, including baseline and midline datasets, reports, scorecards, tools, syntax etc, were downloaded from the DevResults platform, where they had been uploaded by the projects and their external evaluators at baseline and midline. The initial dataset mapping exercise (see Annex 7, Mapping of relevant midline project datasets) revealed some gaps, such as missing learning tools and/or syntax. The identified gaps and other issues identified in the later stages were collated and the FM contacted for additional datasets or relevant guidance.

Step 1. Scoping datasets

The baseline-midline unique dataset combines data from four instruments:

The EGRA, EGMA, SeGRA and/or SeGMA Learning Assessments (LA);

Girl surveys (GS);

Household surveys (HHS); and

Primary Caregiver surveys (PCG).

The scoping exercise provided information about the projects' reported results, their evaluation designs, including the samples and tools they used as well as the number, structure, and content of their quantitative datasets. This investigation was done for both baseline and midline to assess the validity of the baseline datasets and their comparability with the midline datasets.

The data mapping exercise **for learning variables** focused on understanding which subtasks each project conducted, in what form (percentage scores, weighting, etc), and at what level (e.g. item level, subtasks level and/or aggregate scores), including the name or variables, highest scores achieved in each subtask variable, maximum scores based on reports, tools, or labels in the datasets, and availability of item and/or & correct variables.

Box 2: Cleaning learning variables

- **When a project has item level scores in the midline dataset, aggregated subtask level scores were re-created, compared with the original subtask level scores and cleaned if necessary.** There were some cases where the number of observations in item variables was smaller than the number of observations in subtask variables. When identified, the evaluation team assumed that the subtask variables were accurate and therefore replaced the missing values in item variables with 0.
- **All item variables were checked to ensure they were scored according to the tools.** An item variable was cleaned if, for example, it scored 2 (instead of 1) in a letter sound identification task.
- **If a project conducted several subtasks within the same topic, one subtask variable was created by combining some subtasks**. For example, AKF administered two types of invented word subtask at midline, one for lower grades and the other for all grades. Therefore, there were two related variables for the invented word subtask. This was identified during the mapping exercise and cleaned at a later stage by taking the mean of the scores for lower grade students who took both tasks.
- **Item scores with many missing values were reconsidered and cleaned.** Within the same subtask, some item scores had missing values. For example, some girls have missing values for item 2 within subtask 1 but have a valid score for item 3. When such cases were identified, the evaluation team cleaned scores for item 2 assuming they skipped the question and therefore provided score 0[9]. A similar approach was applied to the subtask level. For example, when the oral reading fluency score is 0, and the reading comprehension score is missing, the score for reading comprehension is replaced with 0 assuming that the girls would have the wrong answer.
- The oral reading fluency capped at 100 variables was created from two variables (time variable and word count variables); therefore, it is imperative that the two variables correspond to each other (e.g. the number of observations for each variable should be the same). When discrepancies were identified, the cleaning process was done based on the original capped variable. For example, when a word count variable and a capped variable were recorded but a time variable was not, the cleaning process was based on the assumption that the girls spent the entire time (e.g. 60 seconds).

[9] This was applied only when the dataset has subtask score corresponding to our approach.

The GEC-T Girls Survey, Household Survey, and Primary Caregiver Questionnaire templates, which were developed by the FM as a guiding reference for the external evaluation data collection, were used to inform the breadth of common variables across projects. They also informed the main criterion for selecting variables for the dataset, which was to include all variables present in the Fund Manager (FM) girl, household and primary caregiver survey templates.[10] The bespoke variables collected by individual projects as part of their external evaluation were excluded.

The variables selected were mapped across projects for girl survey and household survey. Table 22 and Table 23 show the different data availability in each project. Projects such as CSU, PEAS, Viva, and World Vision (transition) have very limited girl survey data. Some projects did not administer household survey, and hence data is missing for all variables (World Vision and WUSC). Table 22 and Table 23 below show a more detailed mapping.

Almost all variables included in the templates were included in the datasets (cleaned and homogenised). In total, 100 girls' survey and 107 household/ PCG survey variables were mapped – this process was undertaken in combination with the midline evaluation reports and tools available from the DevResults platform whenever required (e.g. when labels were missing from the datasets or variable name did not match the FM Templates).

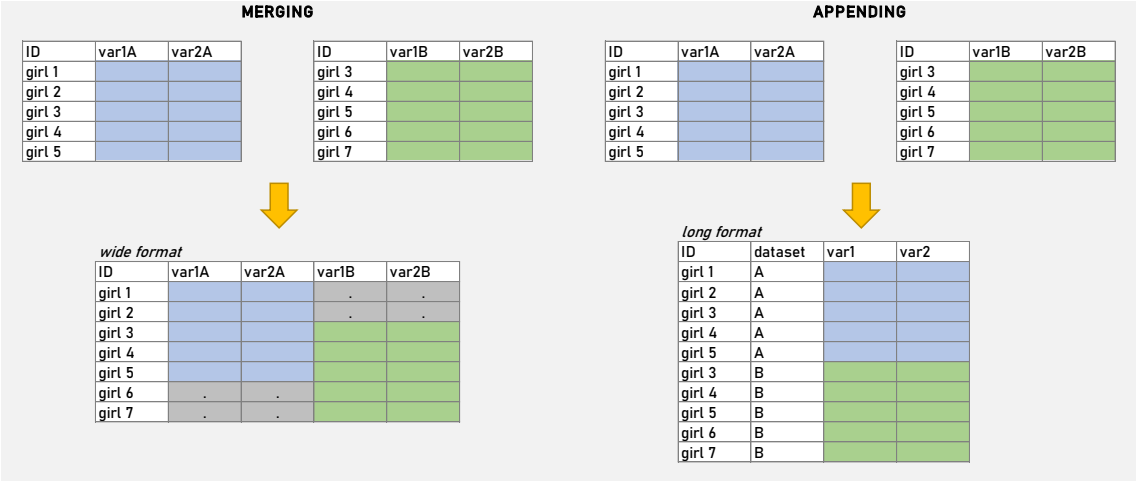
Steps 2 to 4. Merging, appending, and harmonising variables

Datasets were merged within projects (within round). This implies merging the girl survey, learning assessment data, household and primary caregiver survey into a single dataset when they were provided by the FM separately to create one merged dataset per project with each girl represented on a separate row. For each project, the main identification variables were created. These are for example, project, round, enrol, etc. (see Codebook for more detail).

Then, these identification variables and variables selected in Step 1 were kept while other irrelevant variables were dropped. The project-level datasets were appended together to create a unique dataset at the portfolio level for each round.

After having a unique dataset for each round, cleaning was conducted to homogenise the data values. This step is crucial as some projects ask questions in a slightly different way. For example, time it takes for girl to go to school is recorded as intervals in some projects, and as actual minutes in other projects. These were homogenised so that the values correspond with the survey template, or to the least granular level of the data. For the time to school example, the values were coded as intervals as some projects do not have actual minutes. Additionally, survey codebooks of each project were referred to in checking the variables' values. Variable names were also homogenised. After data cleaning, additional variables were created for analysis. The final datasets include one baseline and one midline dataset that include girl-level data from all projects.

Figure 3: Merging and appending – a visual comparison



[10] The templates, for example, included questions for screening eligibility of participants that were only relevant for recruiting participants at baseline. These questions were excluded. This means that key variables such as household size could not be included as the template questions only collected information on number of children or young people aged 8-18 rather than the whole household.

Step 5. Appending datasets

The final step was to generate a unique dataset by appending datasets from both rounds. This step also includes running data quality and consistency checks to ensure the completeness and validity of the combined portfolio-level dataset. These checks are the following.

Whether variables are available in both rounds for each project: Variables that were available in one round but not the other were investigated if they were indeed legitimately missing. For example, in WUSC, the answers to the questions of "How many adults (people aged 18 or over) normally live and eat their meals together in this dwelling?", "Is [GIRL]'s father a member of the household?", and "Is [GIRL]'s father alive?" are available in baseline but not midline.

Validity of skip pattern: For example, some questions such as those regarding time taken to get to school should only be asked to in-school girls. When there were answers on the skipped questions (such as out-of-school girls answering school-related questions), values were cleaned and recoded as missing.

Consistency among the variables enrol (enrolment), grade, and OOS (out-of-school girls): This includes checking whether girls who recorded enrolled in the enrol variable are in-school girls in the OOS variable and girls who are in-school girls in the OOS variable have grade values in the grade variable. Projects reporting working with out-of-school children were double-checked to ensure these girls were tagged correctly (as out-of-school girls should not have grade levels).

The number of panel girls is the same for baseline and midline.

Unique IDs are truly unique among panel girls. When the evaluation team identified an issue with unique IDs, they found out how many and which IDs were duplicates and resolved them.

Primary and secondary grade levels are coded in the same way for projects operating in the same country: For example, students in the same grade (e.g. grade 7) and same country (e.g. Uganda) should not be coded as primary in one project and secondary in another.

Table 4: Mapping of midline girl survey data

Variable Name	Variable Description	AKF	BRAC	Camfed - Tan	Camfed Zam	Camfed - Zim	Camfed (ex-BRAC)	CARE	CSU	ChildHope	DLA	EDT	HPA	I Choose Life	LC	MC Nepal	MC Nigeria	Opportunity	Plan	PEAS	Relief	Varkey	Viva	VSO	World Vision	WV (Transition)	WUSC
CS_4s	Ask or record: How old are you?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y
CS_9s	Who lives with you in your household? [Tick all that apply}	Y	Y	N	N	N	N	Y	N	Y	N	Y	Y	Y	Y	Y	N	Y	Y	N	N	Y	N	Y	N	N	Y
CS_10s	What is the main language that you speak at home? Do not prompt.	Y	Y	N	N	N	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	N	N	Y
CS_W1s	How long does it usually take you to get to school?	Y	Y	N	N	N	N	Y	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	N	N	Y
CS_W2s	When at school, can you use books or other learning material that you need?	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	Y	N	N	Y
CSG_2s	Are there computers at your school for you to use?	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	Y	N	N	Y
CS_W5s	Are there seats for every student in your class?	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	Y	N	Y	Y
CS_W6s	Are you able to move around the school easily?	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	Y	N	Y	Y
CS_W7s	Do you use drinking water facilities at school?	Y	Y	N	N	N	N	Y	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	Y	N	Y	Y
CS_W9s	Do you use a toilet at school?	Y	Y	N	N	N	N	Y	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	Y	N	Y	Y

Variable Name	Variable Description	AKF	BRAC	Camfed - Tan	Camfed Zam	Camfed - Zim	Camfed (ex-BRAC)	CARE	CSU	ChildHope	DLA	EDT	HPA	I Choose Life	LC	MC Nepal	MC Nigeria	Opportunity	Plan	PEAS	Relief	Varkey	Viva	VSO	World Vision	WV (Transition)	WUSC
CS_W11s	Do you use areas at the school where children play and socialize?	Y	Y	N	N	N	N	Y	N	Y	N	Y	Y	Y	Y	Y	N	Y	Y	N	Y	Y	N	Y	N	Y	Y
CS_W13s	Do you feel safe travelling to and from school?	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y
CS_W14s	Do you feel safe at school?	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y
CS_WA	My teachers make me feel welcome in the classroom	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y
CS_1s	My teachers treat boys and girls differently in the classroom	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y	N	Y	Y
CS_2s	My teachers are often absent for class	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y
CS_D1s - CS_D7s	Disability questions	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	Y
LSCO_s1 or LSCU_s1	I am able to do things as well as my friends	N	N	N	N	N	Y	Y	N	N	N	Y	N	Y	N	N	N	N	Y	N	N	N	N	N	N	N	N
LSCO_s1a or LSCU_s1a	I can read as well as my friends.	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	Y	N	Y	Y	Y	N	Y	Y	N	Y	Y	N	Y
LSCO_s1b or LSCU_s2b	I am as good at maths as my friends.	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	Y	N	Y	Y	Y	N	Y	Y	N	Y	Y	N	Y
LSCO_s2 or LSCU_s2	I want to do well in school	N	N	N	N	N	Y	Y	N	Y	N	Y	Y	Y	Y	N	N	N	N	N	N	Y	N	N	Y	N	N
LSCO_s3 or LSCU_s3	I get nervous when I have to read in front of others	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	Y	Y	N	Y	Y	N	Y
LSCO_s4 or LSCU_s4	I get nervous when I have to	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	Y	Y	N	Y	Y	N	Y

Variable Name	Variable Description	AKF	BRAC	Camfed - Tan	Camfed Zam	Camfed - Zim	Camfed (ex-BRAC)	CARE	CSU	ChildHope	DLA	EDT	HPA	I Choose Life	LC	MC Nepal	MC Nigeria	Opportunity	Plan	PEAS	Relief	Varkey	Viva	VSO	World Vision	WV (Transition)	WUSC
	do maths in front of others																										
LSCO_s5 or LSCU_s5	I feel confident answering questions in class	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	Y	Y	N	Y	Y	N	Y
LSCO_s6	I can stay focused on a goal despite things getting in the way	Y	N	N	N	N	Y	Y	N	Y	N	N	Y	Y	Y	N	N	Y	Y	N	N	Y	N	N	Y	N	N
LSCO_s7 or LSCU_s6	I would like to continue studying/ attending school after this year	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	Y	Y	N	Y	Y	N	Y
LSCO_s8	I can put a plan in place and stick with it	Y	N	N	N	N	Y	Y	N	N	N	N	Y	Y	N	N	N	Y	Y	N	N	Y	N	N	N	N	N
LSCO_s9	I recognise when choices I make today about my studies can affect my life in the future.	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y
LSCO_s10 or LSCU_s7	I can describe my thoughts to others when I speak	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	Y	Y	N	Y	Y	N	Y
LSCO_s11	If someone does not understand me I try to find a different way of saying what is on my mind	Y	Y	N	N	N	Y	Y	N	N	N	N	N	Y	N	N	N	Y	N	N	N	Y	N	N	N	N	N
LSCO_s12	When others talk I pay attention to their body language, gestures and	N	N	N	N	N	Y	Y	N	Y	N	N	N	Y	N	N	N	N	N	N	N	Y	N	N	N	N	N

Variable Name	Variable Description	AKF	BRAC	Camfed - Tan	Camfed Zam	Camfed - Zim	Camfed (ex-BRAC)	CARE	CSU	ChildHope	DLA	EDT	HPA	I Choose Life	LC	MC Nepal	MC Nigeria	Opportunity	Plan	PEAS	Relief	Varkey	Viva	VSO	World Vision	WV (Transition)	WUSC
	facial expressions																										
LSCO_s13 or LSCU_s8	I can work well in a group with other people	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y
LSCO_s14 or LSCU_s9	When I have the opportunity, I can organise my peers or friends to do an activity.	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	Y	Y	N	Y	Y	N	Y
LSCO_s15	I often feel lonely at school	N	N	N	N	N	Y	Y	N	Y	N	Y	Y	Y	Y	N	N	N	N	N	N	Y	N	N	N	N	N
LSCO_s15a	I have trusted friends I can talk to when I need to	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	Y	N	Y	N	Y	Y	Y	N	Y	Y	Y	Y	Y	N	N
LSCO_s15b	I have trusted adults I can talk to when I need to	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	Y	N	Y	N	Y	Y	Y	N	Y	Y	Y	Y	Y	N	N
LSCO_s16 or LSCU_s10	I ask the teacher if I don't understand something	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	N	Y	Y	Y	N	Y	Y	N	Y	Y	N	Y
LSCO_s17 or LSCU_s11	When I succeed at school it is because I worked hard	N	N	N	N	N	Y	Y	N	Y	N	N	Y	Y	N	N	N	N	N	N	N	Y	N	N	Y	N	N
LSCO_s18 or LSCU_s12	If I do well in a test it is because I am lucky	N	N	N	N	N	Y	Y	N	Y	N	N	Y	Y	N	N	N	N	N	N	N	Y	N	N	Y	N	N
LSCO_s20 or LSCU_s13	Whether or not you will go to school	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y
LSCO_s21 or LSCU_s14	Whether or not you will continue in	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	Y	N	N	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y

Variable Name	Variable Description	AKF	BRAC	Camfed - Tan	Camfed Zam	Camfed - Zim	Camfed (ex-BRAC)	CARE	CSU	ChildHope	DLA	EDT	HPA	I Choose Life	LC	MC Nepal	MC Nigeria	Opportunity	Plan	PEAS	Relief	Varkey	Viva	VSO	World Vision	WV (Transition)	WUSC
	school past this year																										
LSCO_s22 or LSCU_s15	When/ at what age you will get married	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	Y	Y	N	Y	Y	N	Y
LSCO_s23 or LSCO_s16	If you will work after you finish your studies	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	Y	N	N	Y	Y	Y	N	Y	Y	N	Y	Y	N	Y
LSCO_s24 or LSCO_s17	What type of work you will do after you finish your studies	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y
LSCO_s25	How you spend your free time	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	N	Y	Y	Y	N	Y	Y	N	Y	Y	N	Y
LSCO_s26 or LSCU_s18	How often you spend time with your friends	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y
TQ_1s	Does your teacher(s) ask more questions to:	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	Y
TQ_2s	Does your teacher(s) ask harder questions to:	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	Y
TQ_3s	If you don't understand something, do your teachers use a different language to help you understand?	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y	N	Y	Y	Y	Y	N	Y	Y	N	Y	Y	N	Y
TQ_4s	Does your teacher(s) encourage students to participate	Y	Y	N	N	N	N	Y	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	Y	Y	N	Y

Variable Name	Variable Description	AKF	BRAC	Camfed - Tan	Camfed Zam	Camfed - Zim	Camfed (ex-BRAC)	CARE	CSU	ChildHope	DLA	EDT	HPA	I Choose Life	LC	MC Nepal	MC Nigeria	Opportunity	Plan	PEAS	Relief	Varkey	Viva	VSO	World Vision	WV (Transition)	WUSC
	during lessons, for example by answering questions?																										
TQ_5s																											
	Does your teacher(s) suggest ways you can continue to study after school/at home?	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	Y	Y	N	Y
TQ_6s	Do your teachers discipline or punish students who get things wrong in a lesson?	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	Y
TQ_7sa - TQ7sd	How do the teachers punish students?	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	Y
TQ_8s	In that week, did you see a teacher use physical punishment on other students?	Y	N	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	Y
TQ_9s	In that week, did the teacher use physical punishment on you?	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	Y

Table 5: Mapping of midline household head and primary caregiver data

Variable name	Variable Description	AKF	BRAC	Camfed - Tan	Camfed Zam	Camfed - Zim	Camfed (ex-BRAC)	CARE	CSU	ChildHope	DLA	EDT	HPA	I Choose Life	LC	MC Nepal	MC Nigeria	Opportunity	Plan	PEAS	Relief	Varkey	Viva	VSO	World Vision	WV (Transition)	WUSC
HH_1	How many adults (people aged 18 or over) normally live and eat their meals together in this dwelling?	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	N	Y	Y	Y	N	Y	Y	Y	N	N	N
HH_3	Ask or record: Are there any children or young people aged from 8 to 18 in the household?	Y	Y	Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y	Y	N	N	Y	Y	Y	N	Y	Y	Y	N	N	N
HH_4	How many of these (aged 8-18) are girls?	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y	Y	N	N	Y	Y	Y	N	N	N
HH_11	What is the main occupation of [HOH], what kind of work does X do most of the time?	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	N	N	Y
HH_12	If employed, is the [HoH] paid in cash or in kind (goods and services)?	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	N	N	N	N	Y
HH_13	What was the highest school grade or class that [HOH] completed?	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	N	N	Y
PCG_5	What is your main current occupation, that is what kind of work do you do most of the time?	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y	N	N	N	Y
PCG_6	What was the highest school grade or class that [CARER] completed?	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y
PCG_9	How safe or unsafe is it for girls to travel to schools in this area?	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y
PCG_10	How safe or unsafe is it for boys to travel	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y

Variable name	Variable Description	AKF	BRAC	Camfed - Tan	Camfed Zam	Camfed - Zim	Camfed (ex-BRAC)	CARE	CSU	ChildHope	DLA	EDT	HPA	I Choose Life	LC	MC Nepal	MC Nigeria	Opportunity	Plan	PEAS	Relief	Varkey	Viva	VSO	World Vision	WV (Transition)	WUSC
	to schools in this area?																										
PCG_11a - PCG_11k	Reasons for journey to school being unsafe	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	N	N	Y
PCG_10g	Ask or record: Is [GIRL]'s mother a member of the household?	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	N	N	N	N	Y
PCG_11g_alive	Ask or record: Is [GIRL]'s mother alive?	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	N	N	N	N	Y
PCG_12g	Ask or record: Is [GIRL]'s father a member of the household?	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	N	N	N	N	N
PCG_13g	Ask or record: Is [GIRL]'s father alive?	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	N	N	N	N	N
PCG_20g	What is the main language that [GIRL] speaks at home? Do not prompt.	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	N	Y	N	N	Y
PCG_22g	Is [GIRL] married?	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y
PCG_23g	Is [GIRL] a mother?	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y	N	N	Y
PCG_1tc	Is [GIRL] enrolled at school?	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	N	Y	Y	N	Y	N	N	Y
PCG_TQC1	Have you ever been inside your daughter's current school or classroom?	Y	Y	Y	Y	Y	Y	N	Y	N	N	Y	N	Y	N	Y	N	N	N	N	N	N	N	Y	N	N	N
PCG_1enr	What is the main language of instruction that [GIRL] is taught in at school? Do not prompt.	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	N	N	N	Y	Y	N	Y	Y	N	Y	N	N	Y
PCG_2enr	Record: Is the main language of instruction at school different from the main language girl speaks at home?	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	N	Y	Y	Y	N	Y	Y	N	Y	N	N	N	N	N	Y
PCG_3enr	Can [GIRL] speak [LANGUAGE OF	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y	N	Y	Y	N	Y	N	N	N	N	N	Y

Variable name	Variable Description	AKF	BRAC	Camfed - Tan	Camfed Zam	Camfed - Zim	Camfed (ex-BRAC)	CARE	CSU	ChildHope	DLA	EDT	HPA	I Choose Life	LC	MC Nepal	MC Nigeria	Opportunity	Plan	PEAS	Relief	Varkey	Viva	VSO	World Vision	WV (Transition)	WUSC
	INSTRUCTION]? {prompt as necessary}																										
PCG_4enr	Can you speak [LANGUAGE OF INSTRUCTION]? {prompt as necessary}	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y	N	Y	Y	N	Y	N	N	N	N	N	Y
PCG_5enr	Since the start of the most recent school year, has [GIRL] attended her (main) school on most days that the school was open?	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	N	N	Y
PCG_7enr	Is it difficult to afford for [GIRL] to go to school?	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	N	Y	N	Y	N	N	Y
PCG_5tc	Was [GIRL] enrolled in school last year?	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y	N	Y	N	N	Y
PCG_6tc	Is [girl] currently repeating her class from the previous year?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	Y	N	N	N	N	Y
PCG_7tc	What was [girl] doing in the previous year?	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	N	N	N
PCG_15tc	Was [girl] enrolled in school last year?	N	N	N	N	N	N	Y	N	N	N	N	Y	N	Y	Y	N	Y	Y	N	N	N	Y	N	N	N	N
PCG_16tc	What school grade or class was the [GIRL] enrolled in?	N	N	Y	Y	Y	Y	Y	N	N	N	N	Y	Y	Y	N	N	Y	Y	N	Y	N	Y	Y	N	N	N
PCG_notenr1	Since age five, has [GIRL] ever attended school? {prompt as necessary}	N	N	N	Y	Y	N	Y	N	N	N	Y	Y	N	Y	Y	Y	Y	Y	N	N	N	Y	Y	N	N	Y
PCG_26g	How much time does [GIRL] typically spend on a normal school day on doing all these things?	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	N	Y
PCG_27g	Does this stop [GIRL] from going to school?	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	N	Y
PCG_29g	What level of schooling would you	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y

Variable name	Variable Description	AKF	BRAC	Camfed - Tan	Camfed Zam	Camfed - Zim	Camfed (ex-BRAC)	CARE	CSU	ChildHope	DLA	EDT	HPA	I Choose Life	LC	MC Nepal	MC Nigeria	Opportunity	Plan	PEAS	Relief	Varkey	Viva	VSO	World Vision	WV (Transition)	WUSC
	like [GIRL] to achieve?																										
PCG_31g	Do you listen to the views of [GIRL] when you make decisions about her education or are these decisions made by adult members of the family only?	Y	Y	N	N	N	N	Y	N	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	N	N	Y	N	N	Y
PCG_32g	To what extent do you agree that "even when funds are limited it is worth investing in [GIRL]'s education"	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y
PCG_33g	To what extent do you agree "a girl is just as likely to use her education as a boy"	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y
PCG_5econ	Please tell me which of the following phrases best suits your household situation:	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	N	N	Y	Y	N	Y	N	N	Y	N	N	Y
PCG_7econ - PCG11econ	Household economic situation	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y	Y	N	Y	Y	N	Y	N	N	Y
PCGEW_1a - PCGEW_1i	Household payment of school-related fees	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	N	Y
PGD_Ov12_1 - PGD_Ov12_7	Disability questions (short scale)	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N	N	N	N	Y	N	Y	Y	Y	N	N	N	Y
WG_CF1 - WG_CF19	Disability questions (long scale)	Y	Y	N	N	N	N	Y	N	Y	N	N	N	N	Y	Y	N	Y	N	N	N	N	N	Y	N	N	N
SM_4h	Does the school have a council/SMC/PTA that helps with school-related matters?	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	N	N	Y	N	Y	Y	N	Y	N	N	Y
SM_5h	Are you a member/involved?	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	N	Y	Y	N	Y	Y	N	Y	N	N	Y

Variable name	Variable Description	AKF	BRAC	Camfed - Tan	Camfed Zam	Camfed - Zim	Camfed (ex-BRAC)	CARE	CSU	ChildHope	DLA	EDT	HPA	I Choose Life	LC	MC Nepal	MC Nigeria	Opportunity	Plan	PEAS	Relief	Varkey	Viva	VSO	World Vision	WV (Transition)	WUSC
TQ_1h	Have you been informed about [girls] progress at school in the last 12 months?	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	N	N	Y

Annex 3: Additional Methodological Tables

Table 6: Availability of GEC-T projects' data for the analysis of learning outcomes

Project Name	Country	Valid baseline learning data	Valid midline learning data	In BL-ML learning analysis	Has a comparison group
AKF	Afghanistan	✓	✓	✓	✓
Avanti	Kenya	✓	x	x	✓
BRAC	Afghanistan	✓	✓	✓	✓
Camfed	Tanzania; Zambia; Zimbabwe	✓	✓	✓	✓
Camfed (ex-BRAC)	Tanzania	✓	✓	✓	✓
CARE International	Somalia	✓	✓	✓	✓
Cheshire Services	Uganda	✓	✓	✓	✓
ChildHope UK	Ethiopia	x	✓	x	✓
Discovery	Kenya; Nigeria; Ghana	✓	✓	✓	✓
EDT	Kenya	✓	✓	✓	✓
HPA	Rwanda	✓	✓	✓	✓
I Choose Life	Kenya	✓	✓	✓	✓
Leonard Cheshire	Kenya	✓	✓	✓	✓
Link	Ethiopia	✓	x	x	✓
Mercy Corps Nepal	Nepal	✓	✓	✓	✓
Mercy Corps Nigeria	Nigeria	✓	✓	✓	✓
Opportunity	Uganda	x	✓	x	✓
PLAN International	Sierra Leone	x	✓	x	✓
PEAS	Uganda	✓	✓	✓	✓
Relief International	Somalia	✓	✓	✓	x
Save the Children	DRC	✓	x	x	✓
Save the Children	Mozambique	✓	x	x	✓
Varkey Foundation	Ghana	✓	✓	✓	✓
Viva	Uganda	✓	✓	✓	✓
VSO	Nepal	✓	✓	✓	✓
World Vision	Zimbabwe	✓	✓	✓	✓
WUSC	Kenya	✓	✓	✓	x
Total (out of 27 GEC-T projects)		**24 (89%)**	**23 (85%)**	**20 (74%)**	**25 (93%)**

Table 7: Definitions of indicators used for subgroup analyses throughout the study

Indicator	Question / Variable / Definition
Age	*Q: How old are you? [CS_4s]* Girl's age: girls aged 6 to 8 / 9 to 11 / 12 to 13 / 14 to 15 / 16 to 19 / >19
Enrolment status	Enrolment status of a girl in any of the school types. Enrolled girls are those who have a valid value in the grade variable. Where possible, this variable is double-checked with other relevant variables, such as one that asks whether girl goes to school. Subgroup analysis separates formal and alternative means of education: girls in school / alternative education / out-of-school;
Grade	*Q: Grade which girl is in [Pre_16s]* Grade of girl, starting from 0 (pre-primary) to grade 14
School level	*Derived from the grade variable* School level that girl attains (primary / secondary)
Being overage	*Derived from the grade and age variable* Girls who are more than two years above the correct age for any grade
Being underage	*Derived from the grade and age variable* Girls younger than the correct age for any grade
Correct age	*Derived from the grade and age variable* Girls attaining correct grade for their age
Girl with disability (girl)	Following the guidance for Washington Group definitions of disability and utilising the WG Short Set on Functioning (WG-SS), girls were classified as having a functional disability whenever they answered 'Yes, a lot of difficulty' or 'Cannot do at all' in any of the six domains in the scale. Conversely, girls were classified as not having a functional disability if they answered 'No, no difficulty' or 'Yes, some difficulty'. The six domains (asked directly to girls) are: - Seeing - Difficulty seeing *Q. Do you have difficulty seeing even if wearing glasses? [CS_D1s]* - Hearing - Difficulty hearing *Q. Do you have difficulty hearing even if using a hearing aid? [CS_D2s]* - Walking - Difficulty walking *Q. Do you have difficulty walking or climbing stairs? [CS_D3s]* - Cognitive - Cognitive difficulty *Q. Do you have difficulty remembering or concentrating? [CS_D4s]* - Self-care - Self-care difficulty *Q. Do you have difficulty with (self-care such as) washing all over or dressing? [CS_D5s]* - Communicating - Difficulty communicating *Q. Using your usual language, do you have difficulty communicating (for example understanding or being understood by others)? [CS_D6s]* The variable was then categorised into three groups: No disability, have one type of disability and have more than one type of disability (multiple).

Indicator	Question / Variable / Definition
Girl with disability (PCG)	Following the guidance for Washington Group definitions of disability and utilising the WG Short Set on Functioning (WG-SS) and corresponding questions from WG Long Set on Functioning (WG-LS), girls were classified as having a functional disability whenever their primary caregivers answered 'Yes, a lot of difficulty' or 'Cannot do at all'. The WG-SS and WG-LS sets were combined, and girls were classified as having a functional disability if their primary caregivers answered 'Yes, a lot of difficulty' or 'Cannot do at all' in either the WG-SS or WG-LS sets. Conversely, girls were classified as not having a functional disability if their primary caregivers answered 'No, no difficulty' or 'Yes, some difficulty' in either of the two sets. Girls who were classified to have a functional disability in any of the six domains below (asked to PCG): - Seeing - Difficulty seeing *Q(ss). Does [GIRL] have difficulty seeing, even if she is wearing glasses? [PGD_Ov12_1]* *Q(ls_1). When wearing her glasses or contact lenses, does [GIRL] have difficulty seeing? [WG_CF1]* *Q(ls_2). Does [GIRL] have difficulty seeing? [WG_CF2]* - Hearing - Difficulty hearing *Q(ss). Does [GIRL] have difficulty hearing, even if she is using a hearing aid? [PGD_Ov12_2]* *Q(ls_1). When using her hearing aid, does [GIRL] have difficulty hearing sounds like peoples' voices or music? [WG_CF5]* *Q(ls_2). Does [GIRL] have difficulty hearing sounds like peoples' voices or music? [WG_CF6]* - Walking - Difficulty walking *Q(ss). Does [GIRL] have difficulty walking or climbing steps? [PGD_Ov12_3]* *Q(ls_1). Without her equipment or assistance, does [GIRL] have difficulty walking 100 yards/meters on level ground? That would be about the length of 1 football field. [WG_CF8]* *Q(ls_2) Without her equipment or assistance, does [GIRL] have difficulty walking 500 yards/meters on level ground? That would be about the length of 5 football fields. [WG_CF9]* *Q(ls_3). Compared with children of the same age, does [GIRL] have difficulty walking 100 yards/meters on level ground? That would be about the length of 1 football field. [WG_CF12]* *Q(ls_4). Compared with children of the same age, does [GIRL] have difficulty walking 500 yards/meters on level ground? That would be about the length of 5 football fields. [WG_CF13]* - Cognitive - Cognitive difficulty *Q(ss). Does [GIRL] have difficulty remembering things or concentrating? [PGD_Ov12_4]* *Q(ls_1). Compared with children of the same age, does [GIRL] have difficulty remembering things? [WG_CF18]* *Q(ls_2). Does [GIRL] have difficulty concentrating on an activity that she enjoys doing? [WG_CF19]* - Self-care – Self-care difficulty *Q(ss). Does [GIRL] have difficulty with self-care such as washing all over or dressing? [PGD_Ov12_5]* *Q(ls). Does [GIRL] have difficulty with self-care such as feeding or dressing herself? [WG_CF14]* - Communicating - Difficulty communicating *Q(ss). Using your usual language, does [GIRL] have difficulty communicating; for example understanding or being understood? [PGD_Ov12_6]* *Q(ls_1). When [GIRL] speaks, does she have difficulty being understood by people inside of this household? [WG_CF15]* *Q(ls_2). When [GIRL] speaks, does she have difficulty being understood by people outside of this household? [WG_CF16]*

Indicator	Question / Variable / Definition
Single orphan	*Q. Ask or record: Is [GIRL]'s mother alive? [PCG_11g_alive] and Is [GIRL]'s father alive? [PCG_13g]* Single orphan if one of the parents is not alive
Double orphan	*Q. Ask or record: Is [GIRL]'s mother alive? [PCG_11g_alive] and Is [GIRL]'s father alive? [PCG_13g]* Double orphan if both mother and father are not alive
Girl who is married	*Q. Is [GIRL] married? [PCG_22g]* Girls who are married
Girl who is a mother	*Q. Is [GIRL] a mother? [PCG_23g]* Girls who gave birth to a child
Mother not in household	*Q: Who lives with you in your household? Tick all that apply [CS_9s]* Girls' mother does not live in the household
Father not in household	*Q: Who lives with you in your household? Tick all that apply [CS_9s]* Girls' father does not live in the household
Household poverty	*Q. Does your household own any land either alone or jointly with someone else? [PCG_11econ]* *Q. Over the past twelve months, how many days, if ever, have you or anyone in your family experienced the following:* *- Gone to sleep at night feeling hungry? [PCG_7econ]* *- Gone without enough clean water for home use? [PCG_8econ]* *- Gone without cash income? [PCG_10econ]* *Q. Please tell me which of the following phrases best suits your household situation: 1 "Unable To Meet Basic Needs w/o charity", 2 "Able To Meet Basic Needs", 3 "Able, With Some Non-Essential Goods", 4 "Able To Purchase Most Non-Essential Goods", 5 "Plenty Of Disposable Income"* *Q. Is it difficult to afford for [GIRL] to go to school? [PCG_7enr]* All questions are coded to 1 or 0, where 1 indicates not having any land, went without cash income on most days in the past year, went without enough clean water for use at home on most days, went to sleep at night feeling hungry on most days, unable to meet basic needs (financially), or having a difficulty paying to send girl to school. A poverty index is constructed taking the average across the non-missing values of the questions. Then, two subgroups are derived: households that rank less or more than 50% on the poverty index.
Household education (PCG)	*Q. What was the highest school grade or class that [CARER] completed? [PCG_6]* Primary caregiver did not attain any education
Household education (HOH)	*Q. What was the highest school grade or class that [HOH] completed? [HH_13]* Head of household did not attain any education

Table 8: Sample size at baseline and midline, recontacted and attrition rates by project and treatment/comparison group

		All Sample					Treatment					Comparison				
Project Name	**Country**	**Sample at BL**	**Recontacted at ML**	**Share recontacted**	**Attrition**	**Sample at ML**	**Sample at BL**	**Recontacted at ML**	**Share recontacted**	**Attrition**	**Sample at ML**	**Sample at BL**	**Recontacted at ML**	**Share recontacted**	**Attrition**	**Sample at ML**
AKF	Afghanistan	1,964	1,487	76%	24%	2,082	1,427	1,086	76%	24%	1,538	537	401	75%	25%	544
BRAC	Afghanistan	1,469	1,158	79%	21%	1,464	972	771	79%	21%	964	497	387	78%	22%	500
Camfed	Tanzania	7,997	4,091	51%	49%	4,091	4,154	2,185	53%	47%	2,185	3,843	1,906	50%	50%	1,906
Camfed	Zambia	3,912	2,485	64%	36%	3,110	2,026	1,356	67%	33%	1,618	1,886	1,129	60%	40%	1,492
Camfed	Zimbabwe	6,465	2,683	42%	58%	2,683	3,454	1,429	41%	59%	1,429	3,011	1,254	42%	58%	1,254
Camfed (ex-BRAC)	Tanzania	4,126	4,046	98%	2%	4,046	2,047	2,020	99%	1%	2,020	2,079	2,026	97%	3%	2,026
CARE International	Somalia	1,741	648	37%	63%	807	872	343	39%	61%	431	869	305	35%	65%	376
CSU	Uganda	617	253	41%	59%	275	267	130	49%	51%	143	350	123	35%	65%	132
DLA	Ghana	1,863	1,758	94%	6%	2,246	1,003	961	96%	4%	1,214	860	797	93%	7%	1,032
DLA	Kenya	2,319	2,179	94%	6%	2,601	1,226	1,136	93%	7%	1,305	1,093	1,043	95%	5%	1,296
DLA	Nigeria	2,187	2,107	96%	4%	2,359	1,140	1,099	96%	4%	1,186	1,047	1,008	96%	4%	1,173
EDT	Kenya	6,899	2,800	41%	59%	9,506	5,406	2,182	40%	60%	7,583	1,493	618	41%	59%	1,923
HPA	Rwanda	863	598	69%	31%	882	436	288	66%	34%	400	427	310	73%	27%	482
ICL	Kenya	2,642	688	26%	74%	3,296	1,810	471	26%	74%	2,210	832	217	26%	74%	1,086

		All Sample					Treatment					Comparison				
Project Name	**Country**	**Sample at BL**	**Recontacted at ML**	**Share recontacted**	**Attrition**	**Sample at ML**	**Sample at BL**	**Recontacted at ML**	**Share recontacted**	**Attrition**	**Sample at ML**	**Sample at BL**	**Recontacted at ML**	**Share recontacted**	**Attrition**	**Sample at ML**
LC	Kenya	586	289	49%	51%	597	329	289	88%	12%	338	257	-	0%	100%	259
MC Nepal	Nepal	1,000	846	85%	15%	989	750	648	86%	14%	746	250	198	79%	21%	243
MC Nigeria	Nigeria	1,846	866	47%	53%	2,091	923	440	48%	52%	1,042	923	426	46%	54%	1,049
PEAS	Uganda	2,062	1,249	61%	39%	1,870	1,308	756	58%	42%	1,227	754	493	65%	35%	643
Relief	Somalia	2,157	1,420	66%	34%	1,818	2,157	1,420	66%	34%	1,818	-	-	N/A	N/A	-
Varkey	Ghana	2,653	-	-	-	2,454	1,317	-	-	-	1,257	1,336	-	0%	100%	1,197
Viva	Uganda	1,100	791	72%	28%	901	777	595	77%	23%	646	323	196	61%	39%	255
VSO	Nepal	1,735	-	-	-	1,286	1,104	-	-	-	794	631	-	0%	100%	492
World Vision	Zimbabwe	3,331	2,148	64%	36%	3,002	1,651	1,006	61%	39%	1,549	1,680	1,142	68%	32%	1,453
WUSC	Kenya	1,808	457	25%	75%	2,273	1,808	457	25%	75%	2,273	-	-	N/A	N/A	-
Portfolio	Total	63,342	35,047	55%	45%	56,729	38,364	21,068	55%	45%	35,916	24,978	13,979	56%	44%	20,813
	Total (exc. VSO & Varkey)	58,954	35,047	59%	41%	-	35,943	21,068	59%	41%	-	23,011	13,979	61%	39%	-

Note: Varkey Foundation and VSO are not included in the overall attrition rates reported in the main report.

Table 9: Differences in reporting attrition

Project Name	Country	Attrition as per ML report[11]	Attrition calculated from data	Differences in reporting
AKF	Afghanistan	24%	24%	N/A
BRAC	Afghanistan	31%	21%	BRAC considers girls who transferred schools and were no longer enrolled in BRAC schools as not re-contacted (n=140) even when they surveyed them. In contrast, we consider them re-contacted because they are included in the midline sample. Consequently, our attrition rate is lower at 21% (compared to 31%).
Camfed International	Tanzania	15%[12]	49%	Sampled two grades at baseline (Forms 2 and 4) but it only tracked one grade for learning at midline (Form 2). Whilst baseline report indicated that the evaluation would track the Form 4 cohort to Form 6, the midline report indicated that the older girls were not tracked using the justification that they had completed schooling 'up to the grade of education available to her or the grade at which the project stops working directly with girls'. Furthermore, they only tracked transition and calculated attrition for marginalised girls from younger cohorts. As a result, reported attrition rates are substantially lower than when we use our criteria
Camfed International	Zimbabwe	28%[13]	58%	
Camfed International	Zambia	29%[14]	36%	While both Grades 5 and 7 were tracked for learning, only the younger cohort was tracked for transition.
Camfed (ex-BRAC)	Tanzania	13%[15]	2%	The project excludes Form 3 girls from transition calculation, noting that their data is collected at midline rather than baseline. However, we were able to identify and merge those girls in baseline, making our attrition rates lower.
CARE International	Somalia	21%	63%	CARE sampled a "cohort" and "non-cohort"[16] of girls at baseline, which both received learning assessments. In the midline evaluation, the project tracked cohort girls who were in school at the baseline and excluded out-of-school girls as well as non-cohort girls. 13 schools were excluded from the midline tracking sample because they are outliers (schools with English-speaking teachers that scored disproportionately well on English assessment), and due to security and other reasons.
CSU	Uganda	23%	59%	This data presents data quality issues. Due to this, attrition is higher than reported.

[11] Attrition is reported differently by project. Some projects reported attrition by treatment and comparison group. In some cases, attrition is reported separately for transition and learning cohort. Some projects work with both girls and boys, and attrition is sometimes reported for both sexes. The numbers presented here take into account girl attrition only, averaged between treatment and comparison, as well as transition and learning cohort (when there are separate transition and learning cohorts). This is so that attrition rates are comparable with our data. In the case that the projects adopted a joint cohort approach, meaning the same girls are tracked for both transition and learning, attrition is higher for learning cohort as some girls could be tracked at home, but were not administered learning assessments. The numbers presented here correspond to transition cohort attrition, as the girl has been successfully re-contacted, even though she had not taken learning assessments.
[12] Weighted: 6% for transition cohort; 18% for learning cohort.
[13] Weighted: 19% for transition cohort; 33% for learning cohort.
[14] Weighted: 30% for transition cohort; 29% for learning cohort.
[15] Weighted: 8% for transition cohort; 15% for learning cohort.

Project Name	Country	Attrition as per ML report[11]	Attrition calculated from data	Differences in reporting
DLA	Ghana	6%[17]	6%	N/A
DLA	Kenya	6%	6%	
DLA	Nigeria	4%	4%	
EDT	Kenya	56%	59%	N/A
HPA	Rwanda	30%	31%	N/A
I Choose Life	Kenya	46%	74%	This data presents data quality issues. Due to this, attrition is higher than reported.
LC	Kenya	11%	51%	Only estimated attrition for their treatment group due to changes to their sampling protocols— as they modified their definition of the comparison group and replaced the entire comparison group at midline[18]. Our attrition estimation for the treatment group (12%) is similar to the one reported (11%).
Mercy Corps Nepal	Nepal	13%[19]	15%	N/A
Mercy Corps Nigeria	Nigeria	53%	53%	N/A
PEAS	Uganda	39%[20]	39%	N/A
Relief International	Somalia	27%	34%	While Relief International employs a similar definition to the one we used, based on "the ability to locate and collect data from the respondent", they exclude from the attrition calculations all girls from Banadir (Mogadishu) region and two schools who were dropped at midline due to on-the-ground accessibility.
Viva	Uganda	24%	28%	N/A
World Vision	Zimbabwe	30%[21]	36%	OOS treatment girls were not used to calculate attrition in the project report.
WUSC	Kenya	40%[22]	75%	This data presents data quality issues. We were not able to merge girls in transition cohort. Due to this, attrition is higher than reported.

[17] DLA adopted a joint cohort approach and reported different attrition rates for transition and learning cohorts. The numbers presented here correspond to transition cohort attrition. Attrition rates for the learning cohorts are 18%, 22%, and 8% for DLA Ghana, Kenya, and Nigeria respectively.
[18] The comparison group consisted of non-disabled girls from the target schools in the baseline. These were replaced in the middle by non-disabled girls from other comparable schools.
[19] Similar to DLA, Mercy Corps Nepal adopted a joint cohort approach. Attrition rate for the learning cohort is 32%.
[20] Weighted: 27% for transition cohort; 56% for learning cohort.
[21] Weighted: 27% for transition cohort; 34% for learning cohort; 34% for OOS comparison girls.
[22] Weighted: 14% for transition cohort; 58% for learning cohort.

Table 10: Reasons for attrition mentioned in project documents

Reasons	Project
Migration to new schools outside project area	AKF, BRAC, DLA Kenya, Camfed International, Camfed (ex-BRAC), CARE international, CSU, Mercy Corps Nepal, Mercy Corps Nigeria, I Choose Life, HPA, PEAS, Relief International, Viva, World Vision
Dropping out of school for unknown reasons	AKF, BRAC, EDT, I Choose Life, Leonard Cheshire, PEAS, Relief International
Dropping out of school for known reasons (such as marriage and being older – older girls are more likely to drop out)	BRAC, Mercy Corps Nigeria, PEAS, Relief International , Varkey Foundation
Changes in sample composition (including replacing whole schools)	AKF, Relief International, Mercy Corps Nigeria
Data quality	AKF
Girls completing a programme cycle; transitioning to next cycle	EDT, I Choose Life, Mercy Corps Nepal, Mercy Corps Nigeria, PEAS, Viva
Fieldwork timing	Camfed (ex-BRAC), Mercy Corps Nepal
Intervention in a complex refugee context	WUSC

Attrition bias

As we cannot observe lost girls at midline, the effect of attrition cannot be tested directly. However, we can get a long way toward ruling out selective attrition by comparing lost and recontacted girls in terms of the baseline characteristics we can observe for all of them.

First, we check whether the characteristics of girls lost at baseline differ from the characteristics of recontacted girls within the treatment and comparison group. On average, lost girls from treatment group performed two percentage points lower in literacy, eight percentage points lower in numeracy, were one year older, less likely to be enrolled, overaged for their grade, attending higher grades, married, mothers, and less disabled than those who were recontacted (Table 29). As the table shows, the comparison group displays the same trend and a similar magnitude as the treatment group across all subgroups but literacy (i.e., comparison group girls who were not recontacted are somewhat more marginalised relative to those who were recontacted). In addition, we test the differences in attrition determinants including a binary variable indicating treatment status (Table 30).

Given the differences identified within the treatment and comparison groups, we next check whether the levels of the bias are different between the treatment and comparison groups. For this, we deploy a difference-in-difference estimator which utilises the difference between the treatment groups (first difference) and recontact status (second difference). As we do not find any statistically significant differences in any of the girl characteristics[23], we conclude that the above finding of more marginalised girls not being recontacted ***does not present a concern regarding the difference-in-difference estimates in learning*** (Table 31). This is because while there is some form of selective attrition present (less marginalised girls are more likely to be recontacted), it does not differ between the treatment and the comparison group.

[23] No statically significant differences were identified for the non-weighted model or when using project level weights. When beneficiary population weights are deployed, a difference is identified for age and grade in favour of the comparison group girls (i.e. the comparison group girls who were lost were about half a year older and attended higher grade, on average).

Table 11: Attrition bias overview

Attrition bias		Overall literacy [%]	Overall numeracy [%]	Age	Grade	Enrolment status [%]	Being overage [%]	Being underage [%]	Being single orphan [%]	Married [%]	Is a mother [%]	Girl with disability [%]
Treatment	BL lost mean	37.44	34.11	14.88	7.97	94.58	46.25	4.67	13.99	2.71	3.08	8.58
	BL lost sample size	13,932	14,031	16,623	16,216	17,148	15,670	15,670	9,560	8,814	7,540	12,530
	BL recontacted mean	39.28	41.64	13.79	6.91	97.24	38.90	9.74	15.81	2.27	1.47	9.42
	BL recontacted sample size	20,138	20,223	20,620	20,387	20,972	19,945	19,945	11,767	12,932	12,090	17,375
	Difference	-1.84	-7.53	1.09	1.06	-2.66	7.35	-5.07	-1.82	0.45	1.60	-0.84
	P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.040	<0.001	0.012
Comparison	BL lost mean	35.03	32.79	15.01	8.16	93.70	43.85	4.63	13.78	2.85	3.42	10.62
	BL lost sample size	9,976	10,052	10,783	10,261	10,952	10,046	10,046	5,543	4,774	3,975	7,937
	BL recontacted mean	33.89	37.19	13.61	6.94	97.86	32.61	11.33	15.45	1.57	1.83	10.60
	BL recontacted sample size	13,532	13,600	13,607	13,657	13,955	13,288	13,288	8,150	8,833	8,594	11,501
	Difference	1.14	-4.40	1.39	1.22	-4.16	11.24	-6.70	-1.66	1.28	1.59	0.02
	P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.007	<0.001	<0.001	0.961

Table 12: Attrition bias, regression analysis

Variable		(1)	(2)	(3)	(4)	(5)	(6)
Treatment	Coefficient	-0.01	-0.01	-0.03	-0.01	-0.01	-0.02
	P-value	0.743	0.772	0.309	0.719	0.794	0.573
Age	Coefficient		-0.05**	-0.06**	-0.06**	-0.01	-0.01
	P-value		0.011	0.001	0.024	0.715	0.381
Overage	Coefficient		-0.02	0.06	0.03	-0.09	-0.03
	P-value		0.849	0.389	0.654	0.253	0.530
Disabled	Coefficient			0.06**	0.05*	0.05	0.01
	P-value			0.039	0.076	0.304	0.671
Literacy	Coefficient				-0.17*	-0.28*	-0.17
	P-value				0.064	0.070	0.133
Numeracy	Coefficient				0.14	0.42**	0.22*
	P-value				0.463	0.041	0.051
Orphan (single)	Coefficient					0.05	0.01
	P-value					0.277	0.675
Married	Coefficient						-0.17*
	P-value						0.060
Mother	Coefficient						-0.01
	P-value						0.794
Sample size	N	63,342	58,949	46,794	43,342	23,420	21,425

Key: Coefficients with two asterisks are statistically significant at the 95% confidence level (*P*-value lower than 0.05 = 5%). Those with one asterisk are statistically significant at the 90% level (*P*-value lower than 0.1 = 10%). The actual *P*-value is reported in the table.

Table 13: Difference-in-difference by recontact status at baseline

Attrition bias		Age	Overage [%]	Grade	Enrolment [%]	Disability [%]	Literacy [%]	Numeracy [%]	Orphan [%]	Married [%]	Mother [%]
No weights	Lost C mean	15.01	44	8.16	94	11	35	33	14	3	3
	Lost T mean	14.88	46	7.97	95	9	37	34	14	3	3
	Recontacted C mean	13.61	33	6.94	98	11	34	37	15	2	2
	Recontacted T mean	13.79	39	6.91	97	9	39	42	16	2	1
	DID	0.30	3.90	0.16	-1.50	0.90	3.00	3.10	0.20	0.80	0.00
	DID *P*-value	0.166	0.354	0.535	0.505	0.440	0.129	0.132	0.920	0.289	0.985
Beneficiary population weights	Lost C mean	15.32	38	8.71	92	12	36	30	21	3	2
	Lost T mean	15.07	43	8.32	94	9	39	34	17	3	4
	Recontacted C mean	12.42	41	5.86	99	7	32	44	15	1	1
	Recontacted T mean	12.7	45	5.98	99	7	36	47	16	1	1
	DID	0.53**	-0.01	0.51**	-1.50	3.1**	1.00	-1.20	4.90	-0.40	-2.30
	DID *P*-value	0.042	0.866	0.043	0.566	0.006	0.683	0.564	0.310	0.636	0.167
Project level weights	Lost C mean	14.28	53	7.42	91	7	37	37	15	3	3
	Lost T mean	14.64	56	7.48	92	7	38	36	15	4	12
	Recontacted C mean	13.24	44	6.44	97	7	37	43	17	2	2
	Recontacted T mean	13.78	49	6.56	95	8	43	46	18	3	1
	DID	0.18	2.40	0.07	-3.10	1.20	5.20	4.40	1.40	0.30	-9.50
	DID *P*-value	0.590	0.599	0.779	0.408	0.465	0.199	0.175	0.436	0.837	0.254
Sample size	Lost sample size	27,406	25,716	26,477	28,100	20,467	23,908	24,083	15,103	13,588	11,515
	Recontacted sample size	34,227	33,233	34,044	34,927	28,876	33,670	33,823	19,917	21,765	20,684

Replacement bias

Table 14: Replacement bias overview

Attrition bias		Enrolment status [%]	Being overage [%]	Being underage [%]	Being single orphan [%]	Married [%]	Is a mother [%]	Girl with disability [%]
Treatment	**ML replaced mean**	96.14	57.31	2.86	9.22	0.98	1.78	7.05
	ML replaced sample size	14,675	12,655	12,655	10,543	8,866	7,815	12,573
	BL lost mean	94.58	46.25	4.67	13.99	2.71	3.08	8.58
	BL lost sample size	17,148	15,670	15,670	9,560	8,814	7,540	12,530
	Difference	1.56	11.07	-1.81	-4.77	-1.73	-1.30	-1.53
	P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Comparison	**ML replaced mean**	95.27	57.41	3.37	11.44	0.32	0.63	8.55
	ML replaced sample size	6,489	5,969	5,969	4,194	4,025	3,170	6,070
	BL lost mean	93.70	43.85	4.63	13.78	2.85	3.42	10.62
	BL lost sample size	10,952	10,046	10,046	5,543	4,774	3,975	7,937
	Difference	1.57	13.57	-1.26	-2.34	-2.53	-2.79	-2.07
	P-value	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Transition outcomes

Table 15: Reasons for unsuccessful re-contact

Project Name	Country	Reported attrition rate	Number of lost girls based on report	Reason for unsuccessful re-contact	Implications on successful and unsuccessful transition
AKF	Afghanistan	24%	477	Unknown transition **(57%)** - 216 are from a community that was replaced because security concerns (presumably high dropout rates) - 69 questionable data The rest (43%), the project assumes 100% unsuccessful transition Unsuccessful transition **(43%)** - 192 cannot be tracked (the project assumes most are dropouts)	At least 43% unsuccessful transition
BRAC	Afghanistan	31%	451	The project provides reasons why girls discontinued studying in BRAC targeted school Successful transition (31%) - 140 changed school within project area, and we already accounted for as successful transition Out of the remaining 311 girls Unknown transition **(68%)** - 166 migrated out of the community - 46 unknown Unsuccessful transition **(22%)** - 36 did not continue because of various reasons - 31 did not continue because they got married Successful transition **(10%)** - 18 changed school - 14 changed to TVET or government school	At least 22% unsuccessful transition At least 10% successful transition
Leonard Cheshire	Kenya	11%	35	Unsuccessful transition **(100%)** The project estimated all lost girls are dropouts	100% unsuccessful transition
Mercy Corps Nepal	Nepal	13%	131	Unknown transition **(72%)** - 88 girls unknown Unsuccessful transition **(28%)** - Grade 10 girls completed the programme and are assumed to transition out of education (43 girls).	At least 28% unsuccessful transition

Project Name	Country	Reported attrition rate	Number of lost girls based on report	Reason for unsuccessful re-contact	Implications on successful and unsuccessful transition
Mercy Corps Nigeria	Nigeria	53%	902	The project conducted extensive review on lost girls Unknown transition **(43%)** - 388 because change in programme Successful transition **(33%)** - 520 girls are truly lost. Among which, 273 are assumed to have graduated (successful transition). The project was able to contact 108 parents of lost girls. For only 18 girls (17%), parents reported them remaining in school or planning to return. Unsuccessful transition **(24%)** - 90 girls reported to be dropouts - The rest who cannot be contacted, the project assumes them to be dropouts.	At least 24% unsuccessful transition At least 33% successful transition
PEAS	Uganda	39%	805	Unsuccessful transition **(100%)** The project estimated all lost girls are dropouts	100% unsuccessful transition
Relief International	Somalia	42%	1,068	Unsuccessful transition **(58%)** Successful transition **(42%)** The project estimated 41.7% enrolment rate for girls who could not be located, based on asking stakeholders about the lost girls	58% unsuccessful transition 42% successful transition
Viva	Uganda	24%	263	Unsuccessful transition **(30%)** The project estimated most lost secondary girls are dropouts. Successful transition **(72%[24])** The project estimated most lost primary girls remain in education.	At least 30% unsuccessful transition At least 72% successful transition
WUSC	Kenya	40%	731	Similar to Relief International, WUSC asked different stakeholders about the status of lost girls. Based on this, the project could determine the status of 602 girls in the learning cohort. Unknown transition **(57%)** Most status, such as girl completing class 8 does not tell us about transition outcome. We also have limited information on girls that cannot be traced. Unsuccessful transition **(14%)** - 104 girls dropped out Successful transition **(29%)**	At least 14% unsuccessful transition At least 29% successful transition

[24] The number does not add up to 100% as we were able to match fewer girls than the reported number.

Project Name	Country	Reported attrition rate	Number of lost girls based on report	Reason for unsuccessful re-contact	Implications on successful and unsuccessful transition
				- 177 girls graduated - 33 girls changed school	
Portfolio				Successful transition **20%** Unsuccessful transition **47%** Unknown transition **33%**[25]	

[25] The numbers are calculated by averaging percentages of each outcome.

Annex 4: Learning Samples

Table 16: Baseline learning sample sizes by project and subtask (literacy)

Baseline learning sample		EGRA					SeGRA		
Project Name	Country	Letter sound identification	Familiar word	Invented word	Oral reading fluency	Reading comprehension	Short reading comprehension	Longer reading comprehension	Short essay construction
AKF	Afghanistan	1,786	1,786	1,786	1,786	1,786	1,186	178	178
BRAC	Afghanistan	1,469	1,469	1,469	1,469	1,469	1,469		
Camfed	Tanzania						7,976	7,976	7,976
Camfed	Zambia	2,748	2,720	2,702		2,693	3,773	3,773	
Camfed	Zimbabwe						6,281	6,280	6,277
Camfed (ex-BRAC)	Tanzania						4,120	4,120	4,120
CARE International	Somalia		1,201		1,100	1,741			
Cheshire Services	Uganda	526		526	526	526	388	388	145
DLA	Ghana	1,521	1,459	1,403	1,115	913			
DLA	Kenya	2,283	2,264	2,264	2,158	2,068			
DLA	Nigeria	1,865	1,865	1,865	440	308			
EDT	Kenya		2,516	2,516	2,516	2,516	2,993	2,993	2,993
HPA	Rwanda	614	614	614	863	863	249	249	
I Choose Life	Kenya				263	266	656	420	412
Leonard Cheshire	Kenya		584	584	562	584	585	1	1
Mercy Corps Nepal	Nepal						650	650	650

Baseline learning sample		EGRA					SeGRA		
Project Name	Country	Letter sound identification	Familiar word	Invented word	Oral reading fluency	Reading comprehension	Short reading comprehension	Longer reading comprehension	Short essay construction
Mercy Corps Nigeria	Nigeria	922	922	922		922	918	918	918
PEAS	Uganda						861	861	861
Relief International	Somalia		1,924		1,920	1,927			
Varkey Foundation	Ghana	2,626	2,626	2,626	2,620	2,626	2,626	2,626	2,626
Viva	Uganda	620	962	793	865	823	855	855	855
VSO	Nepal						1,580	1,579	1,580
World Vision	Zimbabwe	3,298	3,298	3,298	3,298	3,298	952	1,752	919
WUSC	Kenya		187	187	185		1,081	890	754

Key: darker shades of green indicate higher values

Table 17: Baseline learning sample sizes by project and subtask (numeracy)

Baseline learning sample		EGMA								SeGMA		
Project Name	Country	Number identification	Quantity Discrimination	Missing Numbers	Addition Level 1	Addition Level 2	Subtraction Level 1	Subtraction Level 2	Word Problems	Mult./divis, fractions, geometry, measurement	Algebra	Sophisticated word problems
AKF	Afghanistan	1,786	1,786	1,786	1,786		1,786		1,786	1,186	178	
BRAC	Afghanistan	1,469	1,469	1,469	1,469		1,469		1,469	1,469		
Camfed	Tanzania									7,976	7,976	7,976
Camfed	Zambia	3,231	3,228	3,217	3,136	3,176	3,126	3,116	3,165	3,745	3,745	
Camfed	Zimbabwe									6,281	6,281	6,281
Camfed (ex-BRAC)	Tanzania									4,120	4,120	4,120
CARE International	Somalia			1,741	1,741	1,741	1,741	1,741	1,741			

Baseline learning sample		EGMA								SeGMA		
Project Name	Country	Number identification	Quantity Discrimination	Missing Numbers	Addition Level 1	Addition Level 2	Subtraction Level 1	Subtraction Level 2	Word Problems	Mult./divis, fractions, geometry, measurement	Algebra	Sophisticated word problems
Cheshire Services	Uganda	526	526	526	526		526		526	395	395	395
DLA	Ghana	1,549	1,550	1,538	1,545		1,530		1,536	1,550		
DLA	Kenya	2,286	2,284	2,277	2,286		2,280		2,271	2,286		
DLA	Nigeria	1,865	1,859	1,851	1,856		1,852		1,864			
EDT	Kenya			2,511	2,511	2,511	2,511	2,511	2,511	2,999	2,999	2,999
HPA	Rwanda	613	613	612	613		613		863	249	249	
I Choose Life	Kenya				264		261		266	687	421	418
Leonard Cheshire	Kenya			584	584		584		584	585	1	1
Mercy Corps Nepal	Nepal									650	650	650
Mercy Corps Nigeria	Nigeria	922	922	922	922	922	922	922	922	918		
PEAS	Uganda									861	861	861
Relief International	Somalia	1,927	1,927	1,927		1,927		1,927	1,927	1,927		
Varkey Foundation	Ghana	2,626	2,626	2,626	2,626	2,626	2,626	2,626	2,626	2,626	2,626	2,626
Viva	Uganda	993	989	994	978		967		995	855	855	855
VSO	Nepal									1,577	1,579	1,580
World Vision	Zimbabwe	3,298	3,298	3,298	3,298	3,298	3,298	3,298	3,298	643	1,740	913
WUSC	Kenya				187	187	187	179	185	1,081	893	756

Key: darker shades of green indicate higher values

Table 18: Midline learning sample sizes by project and subtask (literacy)

Midline learning sample		EGRA					SeGRA		
Project Name	Country	Letter sound identification	Familiar word	Invented word	Oral reading fluency	Reading comprehension	Short reading comprehension	Longer reading comprehension	Short essay construction
AKF	Afghanistan	1,898	1,898	1,898	1,898	1,898	1,306	805	184
BRAC	Afghanistan	1,464	1,464	1,464	1,464	1,464	1,464	1,464	1,464
Camfed	Tanzania						3,732	3,732	3,732
Camfed	Zambia	2,553	2,553	2,553	2,553	2,553	2,557	2,557	2,557
Camfed	Zimbabwe						2,280	2,280	2,280
Camfed (ex-BRAC)	Tanzania						3,507	3,507	3,507
CARE International	Somalia		807		801	807			
Cheshire Services	Uganda	163		163	275	275	246	112	112
DLA	Ghana	1,420	1,420	1,420	1,420	1,420	1,431		
DLA	Kenya	1,851	1,851	1,851	1,851	1,851	1,853		1,853
DLA	Nigeria	1,852	1,852	1,852	1,852	1,852			
EDT	Kenya		4,269	4,269	4,269	4,269	7,484	7,484	7,484
HPA	Rwanda	249	250	242	251	256	620	620	
I Choose Life	Kenya				576	586	3,288	3,268	2,702
Leonard Cheshire	Kenya		487	487	583	487	596	596	596
Mercy Corps Nepal	Nepal						578	578	578
Mercy Corps Nigeria	Nigeria	1,019	1,019	1,019	1,019	1,019	1,018	1,018	1,018

Midline learning sample		EGRA					SeGRA		
Project Name	Country	Letter sound identification	Familiar word	Invented word	Oral reading fluency	Reading comprehension	Short reading comprehension	Longer reading comprehension	Short essay construction
PEAS	Uganda						870	870	870
Relief International	Somalia		1,655		1,655	1,655			
Varkey Foundation	Ghana	2,444	2,444	2,444	2,422	2,444	2,444	1,607	
Viva	Uganda	892	892	892	892	892	892	892	892
VSO	Nepal						1,096	1,096	1,096
World Vision	Zimbabwe	2,029	2,029	2,029	2,029	2,029	2,029	2,029	2,029
WUSC	Kenya				1,469		1,469	1,468	

Key: darker shades of green indicate higher values

Table 19: Midline learning sample sizes by project and subtask (numeracy)

Midline learning sample		EGMA								SeGMA		
Project Name	Country	Number identification	Quantity Discrimination	Missing Numbers	Addition Level 1	Addition Level 2	Subtraction Level 1	Subtraction Level 2	Word Problems	Mult./divis, fractions, geometry, measurement	Algebra	Sophisticated word problems
AKF	Afghanistan	1,898	1,898	1,898	1,898		1,898		2,082	2,082	805	
BRAC	Afghanistan	1,464	1,464	1,464	1,464		1,464		1,464	1,464	1,464	
Camfed	Tanzania									3,732	3,732	3,732
Camfed	Zambia	2,672	2,672	2,672	2,672	2,672	2,672	2,672	2,672	2,414	2,414	2,414
Camfed	Zimbabwe									2,280	2,280	2,280
Camfed (ex-BRAC)	Tanzania									3,507	3,507	3,507
CARE International	Somalia			807	807	807	807	807	807			
Cheshire Services	Uganda	163	163	163	163		163		275	246	112	112
DLA	Ghana		1,431	1,431	1,431		1,431		1,431	1,431		
DLA	Kenya			1,852			1,852		1,852	1,853		
DLA	Nigeria	1,852	1,852	1,852	1,852		1,852		1,852			
EDT	Kenya			4,269	4,269	4,269	4,269	4,269	4,269	7,496	7,496	7,496
HPA	Rwanda	258	251	255	255		258		258	618	618	617
I Choose Life	Kenya				586	577	578	578	586	2,702	2,702	2,702
Leonard Cheshire	Kenya			487	487		487		487	596	596	596
Mercy Corps Nepal	Nepal									578	578	
Mercy Corps Nigeria	Nigeria	1,019	1,019	1,019	1,019	1,019	1,019	1,019	1,019	1,018		

Midline learning sample		EGMA								SeGMA		
Project Name	Country	Number identification	Quantity Discrimination	Missing Numbers	Addition Level 1	Addition Level 2	Subtraction Level 1	Subtraction Level 2	Word Problems	Mult./divis, fractions, geometry, measurement	Algebra	Sophisticated word problems
PEAS	Uganda									870	870	870
Relief International	Somalia			1,655				1,655	1,655	1,655		
Varkey Foundation	Ghana	2,444	2,444	2,444	2,444	2,444	2,444	2,444	2,444	2,444	2,444	
Viva	Uganda	892	892	892	892		892		892	892	892	892
VSO	Nepal									1,096	1,096	
World Vision	Zimbabwe	2,029	2,024	2,029	2,029	2,029	2,029	2,029	2,029	2,029	2,029	2,029
WUSC	Kenya					280		280	280	1,469	1,467	

Key: darker shades of green indicate higher values

Annex 5: Weights for Learning Analysis

Project-equal weights

Project-equal weights, or "inverse sample weights", were created with a view to give the same weight to each project in the portfolio-level analysis. They are equal to the inverse of the actual learning sample size of each project (number of girls who were given each subtask of the learning assessments). For the sake of clarity, this ratio has then been multiplied by 1000 (the value of the multiplicative coefficient does not matter as long as the same coefficient is applied throughout).

For example, a project who gave the EGRA familiar word subtask to exactly 400 girls at midline will be given a weight of: 1 / 400 * 1000 = 2.5. This means that the EGRA familiar word scores of each of the 400 girls will be assigned a weight of 2.5.

Weights vary widely by project, and to a lesser extent by subtask. This reflects the fact that GEC-T projects have very different learning sample sizes, and that some subtasks have different sample sizes than others (for example when they were given to different grade cohorts).

Analysis based on project-equal weights estimates the average effect of the GEC-T across projects (weighting them equally). Weights are used for any type of analysis, from descriptive analysis (simple averages, cross-tabulations) to regression analysis and difference-in-difference estimates. In Stata, they are accounted for as *analytical weights*, using the standard option `[aw = weight value]`.

Table 20: Project-equal weights – literacy assessments

Midline – Literacy assessments		EGRA					SeGRA		
Project Name	Country	Letter sound identification	Familiar word	Invented word	Oral reading fluency	Reading comprehension	Short reading comprehension	Longer reading comprehension	Short essay construction
AKF	Afghanistan	0.5	0.5	0.5	0.5	0.5	0.8	1.2	5.4
BRAC	Afghanistan	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Camfed	Tanzania	.	.	.	.	.	0.3	0.3	0.3
Camfed	Zambia	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Camfed	Zimbabwe	.	.	.	.	.	0.4	0.4	0.4
Camfed (ex-BRAC)	Tanzania	.	.	.	.	.	0.3	0.3	0.3
CARE International	Somalia	.	0.9	.	0.9	0.9	.	.	.
Cheshire Services	Uganda	4.5	.	4.5	2.5	2.5	2.8	5.7	5.7

Midline – Literacy assessments		EGRA					SeGRA		
Project Name	Country	Letter sound identification	Familiar word	Invented word	Oral reading fluency	Reading comprehension	Short reading comprehension	Longer reading comprehension	Short essay construction
DLA	Ghana	0.6	0.6	0.6	0.6	0.6	0.6	.	.
DLA	Kenya	0.5	0.5	0.5	0.5	0.5	0.5	.	0.5
DLA	Nigeria	0.5	0.5	0.5	0.5	0.5	.	.	.
EDT	Kenya	.	0.2	0.2	0.2	0.2	0.1	0.1	0.1
HPA	Rwanda	4.0	4.0	4.1	4.0	3.9	1.6	1.6	.
I Choose Life	Kenya	.	.	.	1.7	1.7	0.3	0.3	0.4
Leonard Cheshire	Kenya	.	2.0	2.0	1.7	2.0	1.7	1.7	1.7
Mercy Corps Nepal	Nepal	.	.	.	.	.	1.0	1.0	1.7
Mercy Corps Nigeria	Nigeria	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
PEAS	Uganda	.	.	.	.	.	1.1	1.1	1.1
Relief International	Somalia	.	0.6	.	0.6	0.6	.	.	.
Varkey Foundation	Ghana	0.4	0.4	0.4	0.4	0.4	0.4	0.6	.
Viva	Uganda	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
VSO	Nepal	.	.	.	.	.	0.9	0.9	0.9
World Vision	Zimbabwe	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
WUSC	Kenya	.	.	.	0.7	.	0.7	0.7	.

Key: darker shades of green indicate higher values

Table 21: Project-equal weights – numeracy assessments

Midline – Numeracy assessments		EGMA							SeGMA		
Project Name	Country	Quantity Discrimination	Missing Numbers	Addition Level 1	Addition Level 2	Subtraction Level 1	Subtraction Level 2	Word Problems	Mult./divis, fractions, geometry, meas.	Algebra	Sophisticated word problems
AKF	Afghanistan	13	13	13	.	13	.	12	12	30	.
BRAC	Afghanistan	34	34	34	.	34	.	34	34	34	.
Camfed	Tanzania	.	.	.	.	.	.	.	24	24	24
Camfed	Zambia	4	4	4	4	4	4	4	5	5	5
Camfed	Zimbabwe	.	.	.	.	.	.	.	76	76	76
Camfed (ex-BRAC)	Tanzania	.	.	.	.	.	.	.	2	2	2
CARE International	Somalia	.	28	28	28	28	.	28	.	.	.
Cheshire Services	Uganda	9	9	9	.	9	.	5	6	12	12
DLA	Ghana	65	65	65	.	65	.	65	65	.	.
DLA	Kenya	.	82	.	.	82	.	82	82	.	.
DLA	Nigeria	98	98	98	.	98	.	98	.	.	.
EDT	Kenya	.	17	17	17	17	17	17	8	8	8
HPA	Rwanda	32	31	31	.	31	.	31	13	13	13
I Choose Life	Kenya	.	.	17	17	17	17	17	4	4	4
Leonard Cheshire	Kenya	.	5	5	.	5	.	5	4	4	4
Mercy Corps Nepal	Nepal	.	.	.	.	.	.	.	4	4	.
Mercy Corps Nigeria	Nigeria	15	15	15	15	15	15	15	16	.	.

Midline – Numeracy assessments		EGMA							SeGMA		
Project Name	Country	Quantity Discrimination	Missing Numbers	Addition Level 1	Addition Level 2	Subtraction Level 1	Subtraction Level 2	Word Problems	Mult./divis, fractions, geometry, meas.	Algebra	Sophisticated word problems
PEAS	Uganda	.	.	.	.	.	.	.	8	8	8
Relief International	Somalia	.	19	.	.	.	19	19	19	.	.
Varkey Foundation	Ghana	2	2	2	2	2	2	2	2	2	.
Viva	Uganda	11	11	11	.	11	.	11	11	11	11
VSO	Nepal	.	.	.	.	.	.	.	7	7	.
World Vision	Zimbabwe	12	12	12	12	12	12	12	12	12	12
WUSC	Kenya	.	.	.	73	.	73	73	14	14	.

Key: darker shades of green indicate higher values

Beneficiary-population weights

Beneficiary-population weights are the weights used by default in the report's body. They are based on the target number of learning beneficiaries for each project and subtask. The principle is the same as for project-equal weights, except that instead of using an invariant multiplicative coefficient of 1000, the multiplicative coefficient is made proportional to the number of learning beneficiaries of each GEC-T project. The share of GEC-T learning beneficiaries by project has been obtained through FM documentation and is reproduced in Table 48 of the Learning analysis annex (Annex 9).

With beneficiary-population weights, learning scores at the portfolio level are made proportional to the relative 'size' of GEC-T projects, with larger projects (with higher numbers of learning beneficiaries) overweighted compared to smaller projects.

Beneficiary-population weights provide estimates of the ***effect of the GEC-T on the average (learning beneficiary) girl.***

Table 22: Beneficiary-population weights – literacy assessments

Midline - Literacy assessments		EGRA					SeGRA		
Project Name	Country	Letter sound identification	Familiar word	Invented word	Oral reading fluency	Reading comprehension	Short reading comprehension	Longer reading comprehension	Short essay construction
AKF	Afghanistan	13	13	13	13	13	19	30	132
BRAC	Afghanistan	34	34	34	34	34	34	34	34
Camfed	Tanzania	.	.	.	.	.	24	24	24
Camfed	Zambia	4	4	4	4	4	4	4	4
Camfed	Zimbabwe	.	.	.	.	.	76	76	76
Camfed (ex-BRAC)	Tanzania	.	.	.	.	.	2	2	2
CARE International	Somalia	.	28	.	28	28	.	.	.
Cheshire Services	Uganda	9	.	9	5	5	6	12	12
DLA	Ghana	65	65	65	65	65	65	.	.
DLA	Kenya	82	82	82	82	82	82	.	82
DLA	Nigeria	98	98	98	98	98	.	.	.
EDT	Kenya	.	17	17	17	17	8	8	8

Midline - Literacy assessments		EGRA					SeGRA		
Project Name	Country	Letter sound identification	Familiar word	Invented word	Oral reading fluency	Reading comprehension	Short reading comprehension	Longer reading comprehension	Short essay construction
HPA	Rwanda	32	32	33	32	31	13	13	.
I Choose Life	Kenya	.	.	.	17	17	3	3	4
Leonard Cheshire	Kenya	.	5	5	4	5	4	4	4
Mercy Corps Nepal	Nepal	.	.	.	.	.	4	4	8
Mercy Corps Nigeria	Nigeria	15	15	15	15	15	16	16	16
PEAS	Uganda	.	.	.	.	.	8	8	8
Relief International	Somalia	.	19	.	19	19	.	.	.
Varkey Foundation	Ghana	2	2	2	2	2	2	3	.
Viva	Uganda	11	11	11	11	11	11	11	11
VSO	Nepal	.	.	.	.	.	7	7	7
World Vision	Zimbabwe	12	12	12	12	12	12	12	12
WUSC	Kenya	.	.	.	14	.	14	14	.

Key: darker shades of green indicate higher values

Table 23: Beneficiary-population weights – numeracy assessments

Midline – Numeracy assessments		EGMA								SeGMA		
Project Name	Country	Number identification	Quantity Discrimination	Missing Numbers	Addition Level 1	Addition Level 2	Subtraction Level 1	Subtraction Level 2	Word Problems	Mult./divis, fractions, geometry, meas.	Algebra	Sophisticated word problems
AKF	Afghanistan	13	13	13	13	.	13	.	12	12	30	.
BRAC	Afghanistan	34	34	34	34	.	34	.	34	34	34	.
Camfed	Tanzania	.	.	.	.	.	.	.	.	24	24	24
Camfed	Zambia	4	4	4	4	4	4	4	4	5	5	5
Camfed	Zimbabwe	.	.	.	.	.	.	.	.	76	76	76
Camfed (ex-BRAC)	Tanzania	.	.	.	.	.	.	.	.	2	2	2
CARE International	Somalia	.	.	28	28	28	28	.	28	.	.	.
Cheshire Services	Uganda	9	9	9	9	.	9	.	5	6	12	12
DLA	Ghana	.	65	65	65	.	65	.	65	65	.	.
DLA	Kenya	.	.	82	.	.	82	.	82	82	.	.
DLA	Nigeria	98	98	98	98	.	98	.	98	.	.	.
EDT	Kenya	.	.	17	17	17	17	17	17	8	8	8
HPA	Rwanda	31	32	31	31	.	31	.	31	13	13	13
I Choose Life	Kenya	.	.	.	17	17	17	17	17	4	4	4
Leonard Cheshire	Kenya	.	.	5	5	.	5	.	5	4	4	4
Mercy Corps Nepal	Nepal	.	.	.	.	.	.	.	.	4	4	.
Mercy Corps Nigeria	Nigeria	15	15	15	15	15	15	15	15	16	.	.

Midline – Numeracy assessments		EGMA								SeGMA		
Project Name	Country	Number identification	Quantity Discrimination	Missing Numbers	Addition Level 1	Addition Level 2	Subtraction Level 1	Subtraction Level 2	Word Problems	Mult./divis, fractions, geometry, meas.	Algebra	Sophisticated word problems
PEAS	Uganda	.	.	.	.	.	.	.	.	8	8	8
Relief International	Somalia	.	.	19	.	.	.	19	19	19	.	.
Varkey Foundation	Ghana	2	2	2	2	2	2	2	2	2	2	.
Viva	Uganda	11	11	11	11	.	11	.	11	11	11	11
VSO	Nepal	.	.	.	.	.	.	.	.	7	7	.
World Vision	Zimbabwe	12	12	12	12	12	12	12	12	12	12	12
WUSC	Kenya	.	.	.	.	73	.	73	73	14	14	.

Key: darker shades of green indicate higher values

Annex 6: Overview of GEC-T Projects' Midline Results as Rated and Reported by the FM

Key: Green = the target has been reached or exceeded; Amber = some progress has been observed but target has not been reached; Red = no progress has been observed (negative achievement); Inconclusive = the data is not of sufficient quality or validity to assess progress.

Table 24: Overview of GEC-T Projects' Midline Results as Rated and Reported by the FM

FM ID	Project Name	Literacy	Numeracy	Definition of LEARNING, target and achievement	Transition	Definition of TRANSITION, target and achievement
5147	AKF	Amber	Amber	**Literacy definition**: Number of girls supported by GEC with improved literacy scores **Literacy target**: 5.59% above comparison group (0.25 SD) **Literacy achievement**: CBE: 36% of target / Gov: 60% of target **Numeracy definition**: Number of girls supported by GEC with improved numeracy scores **Numeracy target**: 4.98% above comparison group (0.25 SD) **Numeracy achievement**: CBE: 76% of target / Gov: 75% of target	Inconclusive	**Transition definition**: Number of girls who have transitioned to the next grade (1-10), been enrolled in vocational training or found employment as teachers **Transition target**: n/a **Transition achievement**: Unknown if true progress made above comparison. CBE: 98.6% / Gov: 99.2% / Comparison: 99%
9003	Avanti Comm.					
5085	BRAC	Amber	Amber	**Literacy definition**: Increased Literacy skills of learners from the baseline **Literacy target**: 0.5 SD (two years between BL and ML) **Literacy achievement**: CBE: 0.13 SD 26% against target (not statistically sig) / Gvt Schools: 0.2 SD 40% against target (not statistically sig) **Numeracy definition**: Increased the % of numeracy skills of learners from the baseline **Numeracy target**: 0.5 SD (two years between baseline and midline) **Numeracy achievement**: CBE: 0.06 SD 12% against target (not statistically sig) / Gvt schools: 0.07 SD 14% against target (not statistically sig)	Amber	**Transition definition**: % of girls transitioned from primary to lower secondary to upper secondary. and % of girls transitioned to, and completed course of vocational education **Transition target**: n/a **Transition achievement**: CBE: 76.8% / Gvt: 70.4%
5101	Camfed (Tanzania)	Amber	Green	**Literacy definition**: Number of marginalised girls supported by GEC with improved learning outcomes in literacy. (Boys and less marginalised girls with improved learning outcomes will be tracked as secondary	Green	**Transition definition**: Number of marginalised girls who have transitioned through key stages of education, training or employment (primary to lower

FM ID	Project Name	Literacy	Numeracy	Definition of LEARNING, target and achievement	Transition	Definition of TRANSITION, target and achievement
				beneficiaries) **Literacy target**: 5.9% above comparison group (0.375 SD for 1.5 years of implementation) **Literacy achievement**: 3.4% above comparison group (58% of target) **Numeracy definition**: Number of marginalised girls supported by GEC with improved learning outcomes in numeracy. (Boys and less marginalised girls with improved learning outcomes will be tracked as secondary beneficiaries) **Numeracy target**: 4.5% above comparison group (0.375 SD for 1.5 years of implementation) **Numeracy achievement**: 6.7% above comparison group (148% of target)		secondary, lower secondary to upper secondary, training or employment) **Transition target**: Treatment group had baseline of 82.9%, comparison had baseline of 91.4%. This set a target of 3.6pp difference in difference for midline. **Transition achievement**: 14.0% above comparison group (389% of target)
5101	Camfed (Zambia)	Green	Green	**Literacy definition**: Number of marginalised girls supported by GEC with improved learning outcomes in literacy. (Boys and less marginalised girls with improved learning outcomes will be tracked as secondary beneficiaries) **Literacy target**: 6.66% above comparison group **Literacy achievement**: 6.63% above comparison group (99% of target) **Numeracy definition**: Number of marginalised girls supported by GEC with improved learning outcomes in numeracy. (Boys and less marginalised girls with improved learning outcomes will be tracked as secondary beneficiaries) **Numeracy target**: 5.6% above comparison group **Numeracy achievement**: 5.4% above comparison group (97% of target)	Red	**Transition definition**: Number of marginalised girls who have transitioned through key stages of education, training or employment (primary to lower secondary, lower secondary to upper secondary, training or employment) **Transition target**: Treatment group had baseline of 67.1%, comparison had baseline of 71.5%. This set a target of 2.7pp difference in difference for midline. **Transition achievement**: 2.6% above comparison group (97% of target)
5101	Camfed (Zimbabwe)	Red	Green	**Literacy definition**: Number of marginalised girls supported by GEC with improved learning outcomes in literacy. (Boys and less marginalised girls with improved learning outcomes will be tracked as secondary beneficiaries) **Literacy target**: 7.8% above comparison group (0.375 SD) **Literacy achievement**: 1.9% above comparison group (25% of target) **Numeracy definition**: Number of marginalised girls supported by GEC with improved learning outcomes in numeracy. (Boys and less marginalised girls with improved learning outcomes will be tracked as secondary beneficiaries) **Numeracy target**: 8.0% above comparison group (0.375 SD) **Numeracy achievement**: 7.0% above comparison group (87% of target)	Red	**Transition definition**: Number of marginalised girls who have transitioned through key stages of education, training or employment (primary to lower secondary, lower secondary to upper secondary, training or employment) **Transition target**: Treatment group had baseline of 88.6%, comparison had baseline of 86.1%. This set a huge target of 11.9pp difference in difference for midline. **Transition achievement**: 2.6% above comparison group (22% of target)

FM ID	Project Name	Literacy	Numeracy	Definition of LEARNING, target and achievement	Transition	Definition of TRANSITION, target and achievement
5276	Camfed (ex-BRAC)	Green	Amber	**Literacy definition**: Number of marginalised girls supported by GEC with improved learning outcomes in literacy. (Boys and less marginalised girls with improved learning outcomes will be tracked as secondary beneficiaries) **Literacy target**: 4.07% above comparison group (0.25 SD) **Literacy achievement**: 4.27% above comparison group (105% against target, statistically significant) **Numeracy definition**: Number of marginalised girls supported by GEC with improved learning outcomes in numeracy. (Boys and less marginalised girls with improved learning outcomes will be tracked as secondary beneficiaries) **Numeracy target**: 3.43% above comparison group (0.25 SD) **Numeracy achievement**: 2.79% above comparison group (81% against target, statistically significant)	Amber	**Transition definition**: Number of marginalised girls who have transitioned through key stages of education, training or employment (primary to lower secondary, lower secondary to upper secondary, training or employment) **Transition target**: Baseline = 84.2%, Targets calculated as negative numbers, -4.9pp and -2.9pp for forms 2 and 4 respectively **Transition achievement**: Midline DiD = -0.3%
5274	CARE International	Red	Red	**Literacy definition**: Number of marginalised girls supported by GEC with improved literacy scores **Literacy target**: 6.38 (0.25SD over and above comparison) **Literacy achievement**: -19.7% (-1.26) **Numeracy definition**: Number of marginalised girls supported by GEC with improved numeracy scores **Numeracy target**: 6.54 (0.25SD over and above comparison) **Numeracy achievement**: -12% (-0.78)		**Transition definition**: Percentage of girls sampled who have transitioned to the next education level, in relation to the benchmark cohort **Transition target**: n/a **Transition achievement**: 82.50%
7879	Cheshire Services	Red	Red	**Literacy definition**: Number of disabled girls supported by GEC (disaggregated by impairment type) demonstrating SD 0.25 literacy outcome improvement at each evaluation point **Literacy target**: 0.375 SD (Standardised scores approach) **Literacy achievement**: -0.246 0% achieved against target **Numeracy definition**: Number of disabled girls supported by GEC (disaggregated by impairment type) demonstrating SD 0.25 Numeracy outcome improvement at each evaluation point **Numeracy target**: 0.375 SD (Standardised scores approach) **Numeracy achievement**: -0.669 0% achieved against target	Green	**Transition definition**: No. of disabled girls (disaggregated by impairment type) who have transitioned through key stages of education, training or employment (primary to lower secondary, lower secondary to upper secondary, training or employment) **Transition target**: n/a **Transition achievement**: Treatment = 70% at midline, 90% at baseline / Comparison = 68% at midline, 92% at baseline

FM ID	Project Name	Literacy	Numeracy	Definition of LEARNING, target and achievement	Transition	Definition of TRANSITION, target and achievement
5170	ChildHope UK	Inconclusive	Inconclusive	**Literacy definition**: No Log frame **Literacy target**: 4.6% (one year between BL and ML) Due to issues with Baseline data, no comparison over time possible **Literacy achievement**: At midline only: Local language treatment girls = 80.4%, comparison girls = 77.1%, English language treatment girls = 40.6%, comparison girls = 29.9% **Numeracy definition**: No Log frame **Numeracy target**: 5.9% (one year between baseline and midline) Due to data issues only one subtask could be tracked for comparison over time **Numeracy achievement**: (Baseline to midline) Treatment = 22.7% to 62.8% M Comparison = 24% B to 52% M, Difference in Difference = 12.5% above comparison group (statistically significant)		**Transition definition**: No Log frame **Transition target**: n/a **Transition achievement**: n/a
9001	Discovery Comm. (all)	Amber	Amber	**Literacy definition:** Number of marginalised girls supported by GEC with improved learning outcomes (with sub-indicator for boys where reported) - Measured by EGRA/SeGRA **Literacy target:** n/a **Literacy achievement:** n/a **Numeracy definition:** Number of marginalised girls supported by GEC with improved learning outcomes (with sub-indicator for boys where reported) - Measured by EGMA/SeGMA **Numeracy target:** n/a **Numeracy achievement:** n/a	Amber	**Transition definition:** Number of marginalised girls who have transitioned through key stages of education, training or employment (with sub-indicator for boys where reported) - Transition rate (for cohort) **Transition target:** n/a **Transition achievement**: n/a
9001	Discovery Comm. (Kenya)	Red	Red	**Literacy definition**: Number of marginalised girls supported by GEC with improved learning outcomes (with sub-indicator for boys where reported) - Measured by EGRA/SeGRA **Literacy target**: 4 **Literacy achievement**: DID 0.7, Performance against target 16% **Numeracy definition**: Number of marginalised girls supported by GEC with improved learning outcomes (with sub-indicator for boys where reported) - Measured by EGMA/SeGMA **Numeracy target**: 4.2 **Numeracy achievement**: DID 1, Performance against target 25%	Green	**Transition definition**: Number of marginalised girls who have transitioned through key stages of education, training or employment (with sub-indicator for boys where reported) - Transition rate (for cohort) **Transition target**: 1% **Transition achievement**: 3.5*, Baseline transition rate: 87% (comparison 89.5%),

FM ID	Project Name	Literacy	Numeracy	Definition of LEARNING, target and achievement	Transition	Definition of TRANSITION, target and achievement
9001	Discovery Comm. (Nigeria)	Green	Green	**Literacy definition**: Number of marginalised girls supported by GEC with improved learning outcomes (with sub-indicator for boys where reported) - Measured by EGRA/SeGRA **Literacy target**: 2 **Literacy achievement**: DID 3.8, Performance against target 186% **Numeracy definition**: Number of marginalised girls supported by GEC with improved learning outcomes (with sub-indicator for boys where reported) - Measured by EGMA/SeGMA **Numeracy target**: 6.2 **Numeracy achievement**: DID 9.3, Performance against target 150%	Green	**Transition definition**: Number of marginalised girls who have transitioned through key stages of education, training or employment (with sub-indicator for boys where reported) - Transition rate (for cohort) **Transition target**: 1% **Transition achievement**: 3.7, Baseline transition rate: 89% (comparison 88.1%),
9001	Discovery Comm. (Ghana)	Red	Red	**Literacy definition**: Number of marginalised girls supported by GEC with improved learning outcomes (with sub-indicator for boys where reported) - Measured by EGRA/SeGRA **Literacy target**: 6 **Literacy achievement**: DID No impact, Performance against target 18% **Numeracy definition**: Number of marginalised girls supported by GEC with improved learning outcomes (with sub-indicator for boys where reported) - Measured by EGMA/SeGMA **Numeracy target**: 3.7 **Numeracy achievement**: DID 0, Performance against target 7%	Red	**Transition definition**: Number of marginalised girls who have transitioned through key stages of education, training or employment (with sub-indicator for boys where reported) - Transition rate (for cohort) **Transition target**: 1% **Transition achievement**: -1, Baseline transition rate: 87% (comparison 88%),
5252	EDT	Red	Amber	**Literacy definition**: Number of marginalised girls supported by GEC with improved learning outcomes (with sub-indicator for boys where reported) - Improved learning (Literacy) outcomes among targeted girls **Literacy target**: 0.31 SD **Literacy achievement**: 0.12 SD 40% **Numeracy definition**: Number of marginalised girls supported by GEC with improved learning outcomes (with sub-indicator for boys where reported) - Improved learning (Numeracy) outcomes among targeted girls **Numeracy target**: 0.31SD **Numeracy achievement**: 0.23 SD 74.4%	Inconclusive	**Transition definition**: Number of marginalised girls who have transitioned through key stages of education, training or employment (with sub-indicator for boys where reported) - Proportion increase in Transition rates among marginalised girls **Transition target**: n/a **Transition achievement**: Partially inconclusive.
6317	HPA	Amber	Amber	**Literacy definition:** Number of marginalised girls supported by GEC with improved learning outcomes - Average score improvement on EGRA/SeGRA literacy assessment **Literacy target:** 5.14% above comparison group (0.25 SD)	Inconclusive	**Transition definition:** Number of marginalised girls who have transitioned through key stages of education, training or employment (with sub-indicator for boys where reported) - % improvement

FM ID	Project Name	Literacy	Numeracy	Definition of LEARNING, target and achievement	Transition	Definition of TRANSITION, target and achievement
				Literacy achievement: 3.79% (72% of target) **Numeracy definition:** Number of marginalised girls supported by GEC with improved learning outcomes - Average score improvement on EGMA/SeGMA numeracy assessment **Numeracy target:** 0.25 (0.25 SD – standardised scores approach) **Numeracy achievement:** 0.14 (54% of target)		of girls' transition rates from one stage to another as compared to comparison group **Transition target:** n/a **Transition achievement**: 90.4%, Comparison: 90.5%
6803	I Choose Life – Africa	Red	Red	**Literacy definition**: No Log frame **Literacy target**: 0.25SD per year, 1 year between BL and ML **Literacy achievement**: -0.09, 0% achievement of target **Numeracy definition**: No Log frame **Numeracy target**: 0.25SD per year, 1 year between BL and ML **Numeracy achievement**: -0.01, 0% achievement of target	Red	**Transition definition**: No Log frame **Transition target**: n/a **Transition achievement**: No improvement over and above comparison. Intervention sample BL transition rate 61%, ML transition rate 88%
6627	Leonard Cheshire Disability	Green	Amber	**Literacy definition**: Number of marginalised girls supported by GEC with improved learning outcomes (with sub-indicator for boys where reported) - Girls with disabilities have increased literacy skills **Literacy target**: Overall improvement in literacy scores for GwDs, Close the gap between GwDs and NDC **Literacy achievement**: Literacy scores increased by 0.34SD between BL and ML for GwDs, Gap has started to close and fell from 0.30SD at BL to 0.25SD at ML **Numeracy definition**: Number of marginalised girls supported by GEC with improved learning outcomes (with sub-indicator for boys where reported) - Girls with disabilities have increased numeracy skills **Numeracy target**: Overall improvement in numeracy scores for GwDs, Close the gap between GwDs and NDC **Numeracy achievement**: Numeracy scores improved by 0.25SD for GwDs between BL and ML. Gap has not started to narrow for numeracy.	Amber	**Transition definition**: Number of marginalised girls who have transitioned through key stages of education, training or employment (with sub-indicator for boys where reported) - Girls with disabilities transition from primary school to other forms of education or vocational training **Transition target**: n/a **Transition achievement**: Transition outcomes remained similar between BL and ML for both groups and a gap still exists.
6473	Link Community Development (LCD)					
6616	Mercy Corps Nepal	Green	Green	**Literacy definition**: Number of marginalised girls supported by GEC with improved learning outcomes - Number of marginalised girls supported by GEC with improved literacy	Green	**Transition definition**: Number of marginalised girls who have transitioned through key stages of education, training or employment (with sub-

FM ID	Project Name	Literacy	Numeracy	Definition of LEARNING, target and achievement	Transition	Definition of TRANSITION, target and achievement
				Literacy target: 4.09 % above comparison group (0.25 SD) **Literacy achievement**: 115% against target **Numeracy definition**: Number of marginalised girls supported by GEC with improved learning outcomes - Number of marginalised girls supported by GEC with improved numeracy **Numeracy target**: 4.14 % above comparison group (0.25 SD) **Numeracy achievement**: 266% against target		indicator for boys where reported) - Transition rate **Transition target**: BL: In school girls (T) – 93.7%, In school girls (C) 95.1%, School grads – 29.7%, Out of school girls who haven't graduated - 34.7%, ML: In school girls (T) 94.5%, In school girls (C) - 75.4%, School grads – 52.3%, Out of school girls who haven't graduated - 47.6% **Transition achievement**: In school girls DiD 20.5%, School grads (pre/post) = 22.6%, Out of school girls who haven't graduated (pre/post) = 12.9%
9002	Mercy Corps Nigeria	Amber	Green	**Literacy definition**: Number of marginalised girls supported by GEC with improved learning outcomes (with sub-indicator for boys where reported) - Percentage of marginalised girls supported by GEC with improved literacy outcomes **Literacy target**: ISG: 0.25SD over and above comparison group (2.53), OSG: 0.25SD over and above comparison group (4.00) **Literacy achievement**: ISG: 60% of target achieve, OSG: 58% of target achieved **Numeracy definition**: Number of marginalised girls supported by GEC with improved learning outcomes (with sub-indicator for boys where reported) - Percentage of marginalised girls supported by GEC with improved numeracy outcomes **Numeracy target**: ISG: 0.25SD over and above comparison group (3.46), OSG: 0.25SD over and above comparison group (5.05) **Numeracy achievement**: ISG: 145% of target achieved, OSG: 60% of target achieved	Amber	**Transition definition:** OI2.1 Percentage of marginalised girls who have transitioned through key stages of education OI2.2 Percentage of marginalised girls who have transitioned through key stages of economic opportunities **Transition target:** ISG: Baseline - Treatment: 95%, Comparison: 94%, OSG: Baseline - Treatment: 96.1%, Comparison: 94.2% **Transition achievement**: ISG: Treatment: 92%, Comparison: 93%, OSG: Treatment: 91.5%, Comparison: 92.6%
8980	Opportunity International United Kingdom	Inconclusive	Inconclusive	**Literacy definition:** Number of marginalised girls supported by GEC with improved learning outcomes (with sub-indicator for boys where reported) - Mean EGRA, SeGRA **Literacy target:** n/a **Literacy achievement:** T: 43.8, C: 46. **Numeracy definition:** Number of marginalised girls supported by GEC with improved learning outcomes (with sub-indicator for boys where reported) - Mean EGMA, SeGMA **Numeracy target:** n/a **Numeracy achievement:** T: 48.3, C: 53.	Inconclusive	**Transition definition:** Number of marginalised girls who have transitioned through key stages of education, training or employment (with sub-indicator for boys where reported) - Percentage of girls that successfully transition between grade levels (disaggregated by grade) **Transition target: n/a** **Transition achievement**: T: 94.9%, C: 93.6%.

FM ID	Project Name	Literacy	Numeracy	Definition of LEARNING, target and achievement	Transition	Definition of TRANSITION, target and achievement
5096	PLAN International	Inconclusive	Inconclusive	**Literacy definition**: Improved learning outcomes in literacy and numeracy for marginalised girls supported by GEC (with sub-indicator for boys with disabilities where reported) - Average literacy test score, weighted by grade, as percentage points above comparison group **Literacy target**: 2.05 over and above the comparison group **Literacy achievement**: DID: -3.906, p-value = .244, Performance against target: -190% **Numeracy definition**: Improved learning outcomes in literacy and numeracy for marginalised girls supported by GEC (with sub-indicator for boys with disabilities where reported) - Average mathematics test score, weighted by grade, as percentage points above comparison group **Numeracy target**: 1.36 **Numeracy achievement**: DID: -4.845, Performance against target= -356%	Amber	**Transition definition**: More marginalised girls transition through key stages of education, training or employment - Transition Rate, weighted by grade, as percentage points above comparison group **Transition target**: 2.6 percentage points above comparison **Transition achievement**: Intervention: 95%, Comparison: 98%
7374	Promoting Equality in African Schools (PEAS)	Red	Red	**Literacy definition**: No Log frame **Literacy target**: 8.5% (two years between BL and ML) **Literacy achievement**: -0.864 (0%) **Numeracy definition**: No Log frame **Numeracy target**: 8.25% (two years between baseline and midline) **Numeracy achievement**: 1.5 (18%)	Green	**Transition definition**: No Log frame **Transition target**: n/a **Transition achievement**: At baseline, all girls were in school. As the project defines repetition as successful transition, baseline transition rates were necessarily 100%. At midline, 56% of treatment girls and 38% of comparison girls had successfully transitioned.
5253	Relief International	Amber (Somali) Green (English)	Green	**Literacy definition**: Number of marginalised girls supported by GEC with improved learning outcomes (with sub-indicator for boys where reported) **Literacy target (English):** 5.4% over and above benchmark **Literacy achievement (English)**: 141% of target achieved, 14.5% improvement from baseline **Literacy target (Somali)**: 4.49% over and above benchmark **Literacy achievement (Somali)**:DID: 32% of target achieved, 4.6% increase from baseline **Numeracy definition**: Number of marginalised girls supported by GEC with improved learning outcomes (with sub-indicator for boys where reported) **Numeracy target**: 5.99% over and above benchmark **Numeracy achievement**: 5.99% over and above benchmark	Amber	**Transition definition**: Number of marginalised girls who have transitioned through key stages of education, training or employment (with sub-indicator for boys where reported) - Transition rate **Transition target**: Baseline: 88.7% **Transition achievement**: 89%

FM ID	Project Name	Literacy	Numeracy	Definition of LEARNING, target and achievement	Transition	Definition of TRANSITION, target and achievement
5100	Save the Children DRC					
5099	Save the Children Mozambique					
7045	Varkey Foundation	Amber	Red	**Literacy definition**: Improvement in marginalised girls' aggregate score in literacy assessment, (Targets measured as a change in standard deviations through DiD - [(Midline Treatment Mean - Midline Comparison Mean) - (Baseline Treatment Mean - Base Comparison Mean)]/(Baseline Treatment Std Dev), (Boys with improved learning outcomes tracked as secondary beneficiaries) **Literacy target**: 5.06% above comparison group (0.25 SD) **Literacy achievement**: 23% of target achieved, 1.16 percentage points higher than comparison **Numeracy definition**: Improvement in marginalised girls' aggregate scores in numeracy assessment, (Measured as a change in standard deviations through DiD), (Boys with improved learning outcomes tracked as secondary beneficiaries) **Numeracy target**: 3.98% above comparison group (0.25 SD) **Numeracy achievement**: 17% of target achieved, 0.69 percentage points higher than comparison	Amber	**Transition definition**: Transition rate: Percentage of marginalised girls who have made a transition to the next stage of their educational journey (Boys with improved transition can be tracked as secondary beneficiaries) **Transition target**: n/a **Transition achievement**: Treatment: 93.52%, Comparison: 90.96%, 111% of target achieved, Transition Rate
6595	Viva	Red	Red	**Literacy definition**: Number of marginalised girls supported by GEC with improved learning outcomes - Improvement measured in SDs from Baseline **Literacy target**: 3.67 (out of 100) **Literacy achievement**: 0.945 (26%) **Numeracy definition**: Number of marginalised girls supported by GEC with improved learning outcomes - Improvement measured in SDs from Baseline **Numeracy target**: 3.01 (out of 100) **Numeracy achievement**: -0.116 (-4%)	Green	**Transition definition**: Number of marginalised girls who have transitioned through key stages of education, training or employment - Transition rate **Transition target**: n/a **Transition achievement**: 87% T, 88% C. DiD is 10% (now updated by ages). Should be noted that at baseline there were difficulties determining the correct grade in the year before baseline. Transition rates out of CLCs are higher at over 90%.
7042	VSO	Amber	Green	**Literacy definition**: Average SeGRA score, Average SeGMA score, % of girls with competent level in digital literacy, % of girls with A2 level in English	Amber	**Transition definition**: % of girls who successfully transition **Transition target**: In school girls – 7% above

FM ID	Project Name	Literacy	Numeracy	Definition of LEARNING, target and achievement	Transition	Definition of TRANSITION, target and achievement
				Literacy target: 4.84% above comparison group (0.25 SD) **Literacy achievement**: 98% against target **Numeracy definition**: Average SeGRA score, Average SeGMA score, % of girls with competent level in digital literacy, % of girls with A2 level in English **Numeracy target**: 5.24% above comparison group (0.25 SD) **Numeracy achievement**: 221 % against target		Comparison, Baseline: T – 93.90% C- 92.10%, Midline: T - 99.4%, C- 99.4% **Transition achievement**: -DID = - 1.8% (i.e. The DID estimation shows that the increment in the transition of the intervention group is 1.8 percentage points less than that of the comparison)
5243	World Vision	Red	Red	**Literacy definition**: Number of marginalised girls supported by GEC with improved learning outcomes in literacy (primary, secondary & CBE) **Literacy target**: 0.25 **Literacy achievement**: 0.0 (0%) **Numeracy definition**: Number of marginalised girls supported by GEC with improved learning outcomes in numeracy (primary, secondary & CBE) **Numeracy target**: 0.25 **Numeracy achievement**: -0.07 (-28%)	Amber	**Transition definition**: Number of marginalised girls who have transitioned through key stages of education, training or employment (primary to lower secondary, lower secondary to upper secondary, training, employment or other) **Transition target**: n/a **Transition achievement**: T: 90.5 (BL 94.4), C: 90.2 (BL 94.6)
5136	WUSC	Green	Red	**Literacy definition**: No Log frame **Literacy target**: 6.44 over and above comparison **Literacy achievement**: 114% of the target or 7.36 over and above the comparison. 10.6 points increase from BL for literacy. **Numeracy definition**: No Log frame **Numeracy target**: 7.51 over and above comparison **Numeracy achievement**: Target not achieved for numeracy. No improvement above comparison., 4.3 points increase from BL for numeracy.		**Transition definition**: No Log frame **Transition target**: n/a **Transition achievement**: Remains unchanged since BL at 89%

Annex 7: Mapping of Relevant Midline Project Datasets

Table 25: Mapping of relevant midline project datasets

FM ID	Project Name	Country	Number of LA / HHS / GS datasets (1)	Number of transition-specific datasets	Number of other datasets	Merged BL-ML dataset?	Merging format of the BL-ML dataset	Recontact / cohort girl var. identified	Boys included in dataset	Baseline Start of data collection	Baseline End of data collection	Midline Start of data collection	Midline End of data collection	Months between BL and ML
5147	AKF	Afghanistan	1	0	0	Yes	Wide	Yes	No	oct-17	jan-18	oct-18	jan-19	12
9003	Avanti Communications	Kenya	1	0	0	No	n/a	Not found	Yes	may-18	may-18	jul-19	jan-20	17
5085	BRAC	Afghanistan	1	5	0	Transition: No LA: Yes	Wide	Yes	No	sept-17	jan-18	sept-19	dec 19	24
5101	Camfed	Tanzania	1	0	0	Yes	Long	Yes	Yes	sept-17	oct-17	jun-19	jul-19	21
5101	Camfed	Zambia	1	0	0	Yes	Long	Yes	Yes	sept-17	oct-17	jun-19	jul-19	21
5101	Camfed	Zimbabwe	1	0	0	Yes	Long	Yes	Yes	sept-17	oct-17	jun-19	jul-19	21
5276	Camfed (ex-BRAC)	Tanzania	1	0	0	Yes	Long	Yes	Yes	jul-18	jul-18	jul-19	aug-19	12
5274	CARE International	Somalia	1	0	0	Yes	Long	Yes	No	nov-17	dec-17	nov-18	dec-18	12
7879	Cheshire Services	Uganda	4	0	0	No	n/a	Not found	Yes	apr-18	apr-18	oct-19	nov-19	18
5170	ChildHope UK	Ethiopia	1	0	0	Yes	Wide	Yes	No	may-18	jun-18	nov-19	dec-09	18
9001	Discovery Communications	Kenya	2	1	0	No	n/a	Yes	No	apr-18	may-18	jun-19	jun-19	14
9001	Discovery Communications	Ghana	2	1	0	No	n/a	Yes	No	may-18	jun-18	jun-19	jun-19	13
9001	Discovery Communications	Nigeria	2	1	0	No	n/a	Yes	No	may-18	jun-18	jun-19	jun-19	13

FM ID	Project Name	Country	Number of LA / HHS / GS datasets (1)	Number of transition-specific datasets	Number of other datasets	Merged BL-ML dataset?	Merging format of the BL-ML dataset	Recontact / cohort girl var. identified	Boys included in dataset	Baseline Start of data collection	Baseline End of data collection	Midline Start of data collection	Midline End of data collection	Months between BL and ML
5252	EDT	Kenya	1	0	1	Yes	Wide	Yes	No	jan-18	jan-18	jul-19	jul-19	18
6317	HPA	Rwanda	1	0	0	No	n/a	Yes	No	dec-17	dec-17	feb-19	feb-19	14
6803	I Choose Life – Africa	Kenya	1	0	0	No	n/a	Not found	No	mars-18	apr-18	jun-19	sept-19	16
6627	Leonard Cheshire Disability	Kenya	1	0	0	Yes	Wide	Yes	No	may-18	may-18	may-19	may-19	12
6616	Mercy Corps Nepal	Nepal	4	2	0	No	n/a	Yes	No	jan-18	jan-18	feb-19	feb-19	13
9002	Mercy Corps Nigeria	Nigeria	3	1	2	Yes	Wide	Yes	No	feb-18	mars-18	jun-19	jul-19	16
8980	Opportunity International	Uganda	1	0	0	No	n/a	N/A: no cohort	No	Invalid data	Invalid data	apr-19	jun-19	n/a
5096	PLAN International	Sierra Leone	1	0	0	No	n/a	Yes	Yes	nov-17	dec-17	oct-19	nov-19	23
7374	PEAS	Uganda	1	1	0	No	n/a	Yes	No	sept-17	oct-17	sept-19	oct-19	24
5253	Relief International	Somalia	1	1	0	Yes	Long	Yes	Yes	nov-17	dec-17	apr-19	may-19	17
7045	Varkey Foundation	Ghana	1	0	0	Yes	Wide	N/A(2)	No	feb-18	mars-18	feb-19	mars-19	12
6595	Viva	Uganda	1	0	0	Yes	Long	Not found	No	feb-18	mars-18	jun-19	jun-19	16
7042	VSO	Nepal	1	0	0	No	n/a	N/A(2)	No	jan-18	feb-18	mars-19	mars-19	14
5243	World Vision	Zimbabwe	1	1	0	Transition: Yes LA:?	Transition: Long	Transition: Not found LA: Yes	Transition: No LA: Yes	oct-17	dec-17	may-19	aug-19	18
5136	WUSC	Kenya	1	1	0	No	n/a	Yes	No	jan-18	feb-18	may-19	jun-19	16

Notes: (1) LA = Learning Assessment; HHS = Household Survey; GS = Girl Survey. (2) The dataset includes recontacted girls only.

Annex 8: Mapping of Baseline and Midline Learning Assessment Data

Table 26: Mapping of baseline and midline learning assessment data

Subtask available
Subtask unavailable
Subtask available but not included in analysis

		EGRA						SeGRA			
		Letter sound identification	Familiar word	Invented word	Oral reading fluency (word-per-minute)	Comprehension	Non-standard subtask	Short reading comprehension	Longer reading comprehension	Short essay construction	Non-standard subtask
AKF	BL	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No
	ML	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No
Avanti	BL						No				No
	ML	(1)	(1)	(1)	(1)	No	No	No	No	No	No
BRAC	BL	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	No
	ML	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No
CamfedTz	BL	No	No	No	No	No	No	Yes	Yes	Yes	No
	ML	No	No	No	No	No	No	Yes	Yes	Yes	No
CamfedZa	BL	Yes	Yes	Yes	No	Yes	No	Yes	Yes	No	No
	ML	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No

		EGRA						SeGRA			
		Letter sound identification	Familiar word	Invented word	Oral reading fluency (word-per-minute)	Comprehension	Non-standard subtask	Short reading comprehension	Longer reading comprehension	Short essay construction	Non-standard subtask
Camfed Zim	BL	No	No	No	No	No	No	Yes	Yes	Yes	No
	ML	No	No	No	No	No	No	Yes	Yes	Yes	No
CamfedTz (ex BRAC)	BL	No	No	No	No	No	No	Yes	Yes	Yes	No
	ML	No	No	No	No	No	No	Yes	Yes	Yes	No
Care	BL	Yes[4]	Yes[6]	No	Yes[4][6]	Yes[4][6]	Yes[4][6]	No	No	No	No
	ML	No	Yes[6]	No	Yes[6]	Yes[6]	Yes[6]	No	No	No	No
CSU	BL	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No
	ML	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No
ChildHope	BL	[2][3]	No	[2][3]	[2][3]	[2][3]	No	[2]	No	No	No
	ML	Yes[3]	No	Yes[3]	Yes[3][4]	Yes[3][4]	Yes[4]	No	No	No	No
DLAK	BL	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	No
	ML	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	No
DLAG	BL	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	No
	ML	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	No
DLAN	BL	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No
	ML	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No
EDT	BL	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No

		EGRA						SeGRA			
		Letter sound identification	Familiar word	Invented word	Oral reading fluency (word-per-minute)	Comprehension	Non-standard subtask	Short reading comprehension	Longer reading comprehension	Short essay construction	Non-standard subtask
	ML	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No
HPA	BL	Yes[4][5]	Yes[4][5]	Yes[4][5]	Yes[4][5]	Yes[4][5]	No	Yes[4][5]	Yes[4][5]	No	Yes
	ML	Yes[4][5]	Yes[4][5]	Yes[4][5]	Yes[4][5]	Yes[4][5]	No	Yes[4][5]	Yes[4][5]	No	Yes
ICL	BL[8]	No	No	No	Yes	Yes	No	Yes	Yes	No	No
	ML	No	No	No	Yes	Yes	No	Yes	Yes	No	No
LCD	BL	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No
	ML	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No
MC Nepal	BL	No	No	No	No	No	No	Yes	Yes	No	No
	ML	No	No	No	No	No	No	Yes	Yes	No	No
MC Nigeria	BL	Yes	Yes	Yes	No[12]	Yes[9]	No	Yes[9]		No	No
	ML	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No
Opportunity Intl	BL[10]	No	No	No	No	No	No	No	No	No	No
	ML	No	No	No	Yes	Yes	No	Yes	Yes	No	No
Plan Intl	BL[10]	[11]			No[12]					No	
	ML	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
PEAS	BL	No	No	No	No	No	No	Yes	Yes	No	No
	ML	No	No	No	No	No	No	Yes	Yes	No	No

		EGRA						SeGRA			
		Letter sound identification	Familiar word	Invented word	Oral reading fluency (word-per-minute)	Comprehension	Non-standard subtask	Short reading comprehension	Longer reading comprehension	Short essay construction	Non-standard subtask
Relief	BL	Yes[4]	Yes[4][6]	No	Yes[4][6][14]	Yes[4][6]	No	Yes[4]	Yes[4]	No	Yes[4][6]
	ML	Yes[4]	Yes[4][6]	No	Yes[4][6]	Yes[4][6]	No	Yes[4]	Yes[4]	No	Yes[4][6]
Varkey	BL	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	[15]	No
	ML	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Viva	BL	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
	ML	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
VSO	BL	No	No	No	No	No	No	Yes	Yes	No	No
	ML	No	No	No	No	No	No	Yes	Yes	No	No
World Vision	BL	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No
	ML	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No
WUSC	BL	No	[15]	[15]	Yes	No	No	Yes	Yes	No	No
	ML	No	No	No	Yes	No	No	Yes	Yes	No	No

		EGMA									SeGMA			
		Number identific-ation	Quantity Discrimin-ation	Missing Numb-ers	Addit-ion Level 1	Addi-tion Level 2	Subtract-ion Level 1	Subtract-ion Level 2	Word Prob-lems	Non-stand-ard subtask	Mult./ divis., fract., geom., meas.	Algebra	Sophistic-ated word problems	Non-stand-ard subtask
AKF	BL	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	Yes[7]	Yes	No	No
	ML	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	Yes	Yes	No	No
Avanti	BL	No	No							No				No
	ML	No	No	No	No	No	No	No	No	No	No	No	No	No
BRAC	BL	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	Yes	No	No	No
	ML	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	Yes	Yes	No	No
CamfedTz	BL	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes	No
	ML	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes	No
CamfedZa	BL	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No
	ML	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No
Camfed Zim	BL	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes	No
	ML	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes	No
CamfedTz (ex BRAC)	BL	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes	No
	ML	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes	No
Care	BL	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No
	ML	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No
CSU	BL	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	Yes	Yes	Yes	No

		EGMA									SeGMA			
		Number identification	Quantity Discrimination	Missing Numbers	Addition Level 1	Addition Level 2	Subtraction Level 1	Subtraction Level 2	Word Problems	Non-standard subtask	Mult./ divis., fract., geom., meas.	Algebra	Sophisticated word problems	Non-standard subtask
	ML	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	Yes	Yes	Yes	No
ChildHope	BL	(2)	(2)	(2)	(2)	No	(2)	No	(2)	(2)	(2)	No	No	(2)
	ML	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No	Yes	Yes
DLAK	BL	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	Yes	No	No	No
	ML	No	No	Yes	No	No	Yes	No	Yes	No	Yes	No	No	No
DLAG	BL	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	Yes	No	No	No
	ML	No	Yes	Yes	Yes	No	Yes	No	Yes	No	Yes	No	No	No
DLAN	BL	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	No	No	No	No
	ML	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No	No	No	No	No
EDT	BL	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No
	ML	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No
HPA	BL	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	No	No
	ML	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No
ICL	BL[8]	No	No	No	Yes	No	Yes	No	Yes	No	Yes	Yes	Yes	No
	ML	No	No	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No
LCD	BL	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No
	ML	No	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No

		EGMA									SeGMA			
		Number identification	Quantity Discrimination	Missing Numbers	Addition Level 1	Addition Level 2	Subtraction Level 1	Subtraction Level 2	Word Problems	Non-standard subtask	Mult./ divis., fract., geom., meas.	Algebra	Sophisticated word problems	Non-standard subtask
MC Nepal	BL	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes	No
	ML	No	No	No	No	No	No	No	No	No	Yes	Yes	No	No
MC Nigeria	BL	Yes[9]	Yes	Yes	Yes	Yes[9]	Yes	Yes[9]	Yes	No	Yes[9]	No	No	No
	ML	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No	No
Opportunity Intl	BL[10]	No	No	No	No	No	No	No	No	No	No	No	No	No
	ML	No	No	Yes	No	No	Yes	No	Yes	No	Yes	Yes	Yes	No
Plan Intl	BL[10]	(11)	(11)	(11)	(11)	(11)(13)	(11)	(11)(13)	(11)	(11)		No	No	No
	ML	Yes	Yes	Yes	Yes	Yes[13]	Yes	Yes[13]	Yes	Yes	Yes	No	No	No
PEAS	BL	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes	No
	ML	No	No	No	No	No	No	No	No	No	Yes	Yes	Yes	No
Relief	BL	(15)	(15)	Yes	No	(15)	No	Yes	Yes	No	Yes	No	No	No
	ML	No	No	Yes	No	No	No	Yes	Yes	No	Yes	No	No	Yes
Varkey	BL	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	(15)	No
	ML	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No
Viva	BL	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No
	ML	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	No
VSO	BL	No	No	No	No	No	No	No	No	No	Yes	Yes	(15)	No

		EGMA									SeGMA			
		Number identific-ation	Quantity Discrimin-ation	Missing Numb-ers	Addit-ion Level 1	Addi-tion Level 2	Subtract-ion Level 1	Subtract-ion Level 2	Word Prob-lems	Non-stand-ard subtask	Mult./ divis., fract., geom., meas.	Algebra	Sophistic-ated word problems	Non-stand-ard subtask
	ML	No	No	No	No	No	No	No	No	No	Yes	Yes	No	No
World Vision	BL	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No
	ML	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No
WUSC	BL	No	No	No	(15)	Yes	(15)	Yes	Yes	No	Yes	Yes	(15)	No
	ML	No	No	No	No	Yes	No	Yes	Yes	No	Yes	Yes	No	No

Notes:

(1) Avanti submitted a monitoring dataset at midline, which is "not consistent with the standard reporting requirements for a GEC midline evaluation". Therefore, the midline data will be excluded from the analysis of changes between baseline and midline learning levels and from the creation of the unique midline dataset.

(2) The ChildHope baseline dataset was deemed not reliable and not comparable with the midline dataset.

(3) Amharic & Afan Oromo assessment subtask

(4) English assessment subtask

(5) Kinyarwanda assessment subtask

(6) Somali assessment subtask

(7) The corresponding subtask score variables are missing from the OPM unique baseline dataset but can be recreated using the BL-ML merged dataset submitted at the midline.

(8) ICL baseline data was not included in the OPM unique baseline dataset because it was submitted late. The raw baseline learning data (which only includes recontacted girls between baseline and midline) has therefore been processed and integrated into the OPM unique baseline dataset to be included in our analysis.

(9) The corresponding subtask score variables are missing from the OPM unique baseline dataset but can be recreated using the BL-ML merged dataset submitted at midline.

(10) The baseline data of these two projects was deemed inconclusive. The OPM unique baseline dataset includes EGRA and EGMA variables from both projects. Because Opportunity data was deemed invalid, it will not be included in the analysis. Plan International baseline data was reviewed, and multiple inconsistencies have been noted (see points 11, 12 and 13 below). For this reason, and in addition to doubts raised by the project's external evaluator about data validity, Plan baseline data will not be included in our analysis.

(11) These subtasks were only given to girls in treatment areas.

(12) The baseline raw and OPM data only includes the number of words read correctly but no time variable has been recorded, which makes it impossible to calculate a word-per-minute score.

(13) Included as part of the SeGMA test but will be considered an EGMA subtask in our analysis for the sake of consistency with other projects.

(14) The oral reading fluency subtask was included in the baseline learning assessment, but no relevant subtask score could be found in the raw data and no corresponding variable was included in the OPM unique baseline dataset.

(15) Subtask was dropped at midline hence is only available at baseline.

Annex 9: Learning Analysis

Table 27: Learning levels and difference-in-difference, % correct (panel sample)

Difference-in-difference *in percentage points*		EGRA						SeGRA				EGMA									SeGMA			
		Letter sound ident.	Familiar word	Invented word	Oral reading fluency	Reading comp.	Overall EGRA	Short reading comp.	Longer reading comp.	Short essay constr.	Overall SeGRA	Number ident.	Quantity Discrim.	Missing Numbers	Addition Level 1	Addition Level 2	Subtract. Level 1	Subtract. Level 2	Word Prob-lems	Overall EGMA	Mult./ div., fractions, geom-etry	Algebra	Sophist. word prob-lems	Overall SeGMA
Treatment	Baseline	40%	51%	39%	64%	39%	43%	44%	24%	16%	30%	61%	69%	42%	61%	66%	58%	59%	55%	63%	24%	13%	5%	17%
	Midline	51%	61%	47%	75%	43%	51%	54%	36%	32%	41%	75%	76%	49%	72%	75%	68%	67%	60%	67%	34%	26%	12%	25%
Comparison	Baseline	38%	49%	37%	64%	35%	39%	44%	24%	15%	28%	58%	65%	35%	59%	60%	57%	48%	53%	60%	21%	12%	5%	14%
	Midline	44%	57%	44%	72%	38%	45%	52%	32%	28%	37%	66%	69%	41%	67%	68%	65%	57%	56%	61%	27%	20%	7%	19%
BPW	DID	5%	1%	2%	3%	1%	2%	2%	3%	3%	2%	6%	4%	1%	3%	1%	2%	-1%	2%	3%	5%	5%	4%	3%
	P-value	0.146	0.525	0.046	0.042	0.350	0.037	0.349	0.056	0.001	0.056	0.053	0.107	0.649	0.239	0.409	0.282	0.684	0.300	0.021	0.026	0.001	0.000	0.069
PEW	DID	3%	-1%	1%	-3%	2%	0%	2%	-1%	2%	0%	3%	2%	0%	0%	2%	1%	1%	0%	1%	2%	0%	-1%	0%
	P-value	0.125	0.616	0.573	0.442	0.197	0.969	0.264	0.620	0.057	0.964	0.054	0.148	0.988	0.988	0.140	0.444	0.611	0.812	0.645	0.251	0.897	0.825	0.934

Key: *P*-value of 0.000 does not mean the *P*-value is zero but less than 0.001. The actual *P*-value is reported in the table.

Table 28: Learning levels and difference-in-difference, % zero (panel sample)

Difference-in-difference *in percentage points*		EGRA						SeGRA				EGMA									SeGMA			
		Letter sound ident.	Familiar word	Invented word	Oral reading fluency	Reading comp.	Overall EGRA	Short reading comp.	Longer reading comp.	Short essay constr.	Overall SeGRA	Number ident.	Quantity Discrim.	Missing Numbers	Addition Level 1	Addition Level 2	Subtract. Level 1	Subtract. Level 2	Word Problems	Overall EGMA	Mult./ div., fractions, geom-etry	Algebra	Sophist. word prob-lems	Overall SeGMA
Treatment	Baseline	26%	24%	32%	3%	27%	14%	8%	16%	47%	7%	8%	9%	21%	11%	14%	15%	20%	11%	1%	14%	44%	62%	12%
	Midline	11%	17%	23%	5%	20%	6%	5%	7%	22%	2%	2%	4%	13%	4%	8%	7%	12%	8%	0%	7%	32%	46%	6%
Comparison	Baseline	30%	28%	34%	2%	29%	18%	7%	15%	48%	7%	11%	15%	25%	16%	17%	18%	29%	11%	2%	13%	45%	62%	11%

Difference-in-difference *in percentage points*		EGRA						SeGRA				EGMA									SeGMA			
		Letter sound ident.	Familiar word	Invented word	Oral reading fluency	Reading comp.	Overall EGRA	Short reading comp.	Longer reading comp.	Short essay constr.	Overall SeGRA	Number ident.	Quantity Discrim.	Missing Numbers	Addition Level 1	Addition Level 2	Subtract. Level 1	Subtract. Level 2	Word Problems	Overall EGMA	Mult./ div., fractions, geom-etry	Algebra	Sophist. word prob-lems	Overall SeGMA
	Midline	22%	24%	29%	6%	24%	14%	5%	7%	24%	2%	4%	7%	20%	7%	12%	10%	21%	8%	1%	7%	34%	58%	6%
BPW	DID	-7%	-4%	-4%	-2%	-2%	-4%	-1%	-1%	-2%	-1%	2%	2%	-3%	1%	-1%	0%	0%	-1%	1%	-1%	-2%	-11%	-1%
	P-value	0.207	0.251	0.168	0.121	0.475	0.267	0.604	0.332	0.233	0.221	0.011	0.037	0.207	0.072	0.386	0.965	0.847	0.576	0.181	0.356	0.325	0.000	0.660
PEW	DID	-4%	0%	-2%	-1%	-3%	-1%	0%	1%	-2%	-1%	1%	1%	-1%	1%	-2%	0%	-2%	1%	1%	-1%	1%	2%	0%
	P-value	0.130	0.830	0.164	0.205	0.060	0.376	0.798	0.713	0.526	0.520	0.230	0.561	0.512	0.131	0.099	0.960	0.443	0.384	0.024	0.699	0.736	0.741	0.914

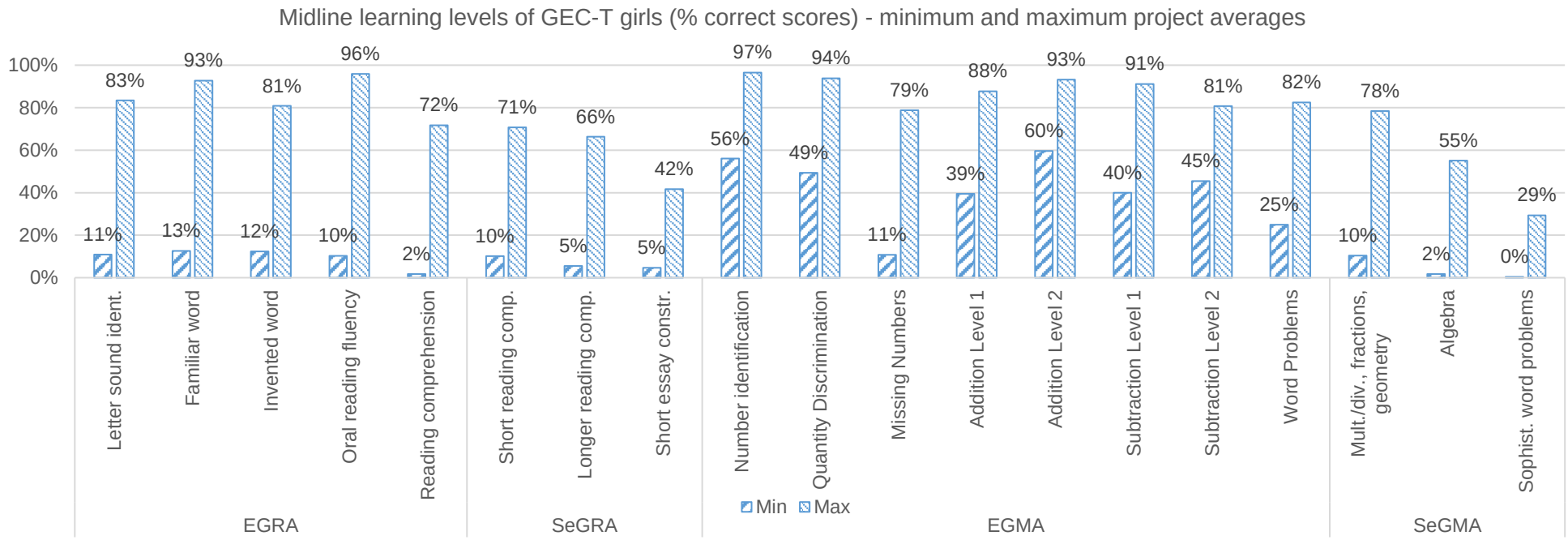
Key: *P*-value of 0.000 does not mean the *P*-value is zero but less than 0.001. The actual *P*-value is reported in the table.

Table 29: Learning levels and difference-in-difference, % correct (cross-sectional sample)

Difference-in-difference *in percentage points*		EGRA						SeGRA				EGMA									SeGMA			
		Letter sound ident.	Familiar word	Invented word	Oral reading fluency	Reading comp.	Overall EGRA	Short reading comp.	Longer reading comp.	Short essay constr.	Overall SeGRA	Number ident.	Quantity Discrim.	Missing Numb-ers	Addition Level 1	Addition Level 2	Subtract. Level 1	Subtract. Level 2	Word Problems	Overall EGMA	Mult./ div., fractions, geom-etry	Algebra	Sophist. word prob-lems	Overall SeGMA
Treatment	Baseline	38%	53%	41%	54%	31%	44%	46%	27%	22%	32%	63%	69%	43%	61%	67%	56%	59%	53%	61%	28%	16%	7%	20%
	Midline	49%	61%	48%	62%	32%	54%	53%	35%	30%	40%	74%	75%	51%	71%	77%	66%	67%	59%	66%	34%	23%	11%	25%
Comparison	Baseline	35%	49%	37%	53%	27%	38%	45%	26%	20%	30%	59%	65%	35%	57%	60%	54%	47%	50%	58%	23%	15%	7%	16%
	Midline	41%	55%	41%	51%	25%	44%	50%	31%	26%	36%	65%	67%	40%	66%	69%	63%	58%	55%	60%	27%	19%	7%	19%
BPW	DID	5%	2%	3%	10%	3%	4%	2%	3%	2%	2%	6%	4%	2%	2%	1%	2%	-2%	2%	3%	3%	3%	4%	2%
	P-value	0.061	0.089	0.001	0.003	0.078	0.022	0.066	0.170	0.248	0.042	0.006	0.032	0.267	0.350	0.818	0.364	0.558	0.238	0.036	0.098	0.171	0.000	0.116
PEW	DID	4%	2%	1%	4%	1%	4%	1%	-6%	-3%	0%	2%	2%	1%	-1%	4%	1%	2%	0%	0%	-1%	-2%	1%	0%
	P-value	0.171	0.378	0.554	0.255	0.708	0.259	0.446	0.212	0.358	0.789	0.272	0.229	0.770	0.470	0.142	0.645	0.429	0.926	0.938	0.733	0.383	0.851	0.972

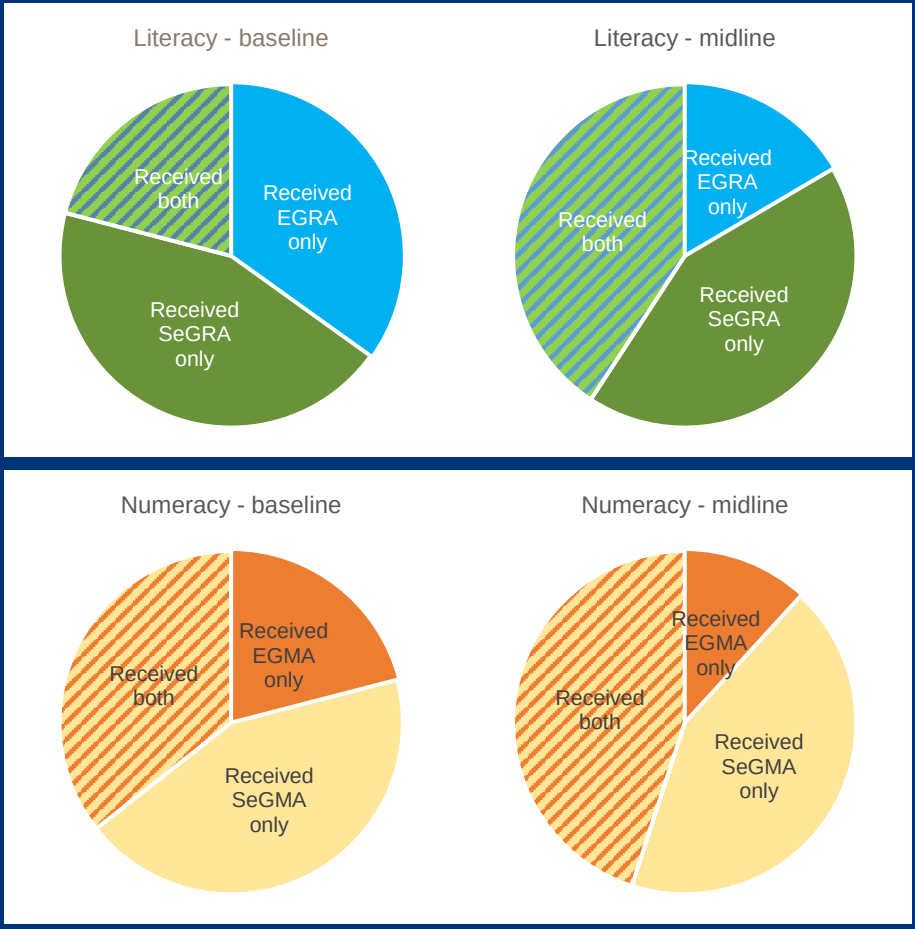
Key: *P*-value of 0.000 does not mean the *P*-value is zero but less than 0.001. The actual *P*-value is reported in the table.

Figure 4: Midline learning levels of GEC-T girls (% correct scores) - minimum and maximum project average scores



Box 3: Girls who received EGRA/ EGMA and girls who received SeGRA/ SeGMA are different

When comparing the effect of the GEC-T on different subtasks and assessments, we are also comparing its effect on different populations of girls. Indeed, girls who have received the EGRA/EGMA and the SeGRA/SeGMA are different. The EGRA and EGMA were designed to be given to girls in early grades, while the SeGRA and SeGMA were designed for higher grades. Many girls, however, received both tests, as shown below.



The following points are worth keeping in mind:

- The average age category of girls who were given the EGRA test is 12–13 years old. It is the same for EGMA;
- The average age category of girls who were given the SeGRA test 14–15 years old. It is the same for SeGMA;
- The average grade of girls who were given the EGRA test is Grade 6. It is the same for EGMA; and
- The average grade of girls who were given the SeGRA test is Grade 8. It is the same for SeGMA.

Table 30: Learning improvements by project, over and above comparison groups (panel sample)

Difference-in-difference (DID) by project, *in percentage points*		**EGRA**	**SeGRA**	**EGMA**	**SeGMA**	**Share in beneficiary population**
AKF	Afghanistan	+3**	+1	+3**	+2	2%
BRAC	Afghanistan	+0	-3	-1	+1	5%
Camfed International	Tanzania		+4**		+6**	8%
Camfed International	Zambia	+7**	-2**	+4**	+0	1%
Camfed International	Zimbabwe		+2**		+8**	16%
Camfed (ex-BRAC)	Tanzania		+4**		+3**	1%

Difference-in-difference (DID) by project, *in percentage points*		EGRA	SeGRA	EGMA	SeGMA	Share in beneficiary population
CARE International	Somalia	+0		+2		3%
Cheshire Services (1)	Uganda	-3	-5	-1	-15**	0.2%
DLA	Ghana	+2**		+0	-2**	10%
DLA	Kenya	-1		+1	+1**	14%
DLA	Nigeria	+4**		+8**		19%
EDT	Kenya	+1	+4**	+1	+5**	7%
HPA	Rwanda	-2	-5	+0	-2	1%
I Choose Life	Kenya	+2	-5**	-2	+2	1%
Leonard Cheshire (2)	Kenya	n/a	n/a	n/a	n/a	0.2%
Mercy Corps Nepal	Nepal		+6**		+12**	0.4%
Mercy Corps Nigeria	Nigeria	+4**	-1	+3**	+1	1%
PEAS	Uganda		+0		-2	1%
Relief International (2)	Somalia	n/a	n/a	n/a	n/a	3%
Varkey Foundation (3)	Ghana	n/a	n/a	n/a	n/a	0.5%
Viva	Uganda	+0	-1	-3*	+0	1%
VSO (2)	Nepal	n/a	n/a	n/a	n/a	1%
World Vision	Zimbabwe	+1	-1	-1	-1*	3%
WUSC (2)	Kenya	n/a	n/a	n/a	n/a	2%

Key: Difference-in-difference (DID) coefficients with two asterisks are statistically significant at the 95% confidence level (p-value lower than 0.05 = 5%). Those with one asterisk are statistically significant at the 90% level (p-value lower than 0.1 = 10%).
Green cells show positive and statistically significant DID (GEC-T girls have increased significantly more than comparison girls), orange shows negative and statistically significant DID (GEC-T girls have increased significantly less than comparison girls).
Notes: (1) CSU's design relies on a treatment group of disabled girls which is compared to a comparison group of non-disabled girls. These two groups are likely to not be fully comparable with respect to their learning progress. Besides, the project's sample size is small (less than 400 girls per wave in the panel sample). For this reason, the CSU project's results need to be interpreted with great caution. (2) Project only has nine recontacted girls in the comparison group (LCD Kenya) or does not have comparison group at all (Relief Somalia and WUSC Kenya). (3) Unique girls' identifiers are not consistent between baseline and midline.

Table 31: Learning improvements by project, over and above comparison groups (cross-sectional sample)

Difference-in-difference (DID) by project *in percentage points* – cross-sectional sample		EGRA	SeGRA	EGMA	SeGMA
AKF	Afghanistan	+1	-1	+3**	-2
BRAC	Afghanistan	-1	-4*	-1	0
Camfed	Tanzania		+5**		+6**
Camfed	Zambia	+10**	-1**	+7**	+1**
Camfed	Zimbabwe		+2**		+8**
Camfed (ex-BRAC)	Tanzania		+4**		+2**

Difference-in-difference (DID) by project *in percentage points* – cross-sectional sample		EGRA	SeGRA	EGMA	SeGMA
CARE International	Somalia	+1		+1	
Cheshire Services	Uganda	-5	-6*	-4	-13**
DLA	Ghana	+2		0	-2*
DLA	Kenya	0		+2	1
DLA	Nigeria	+4**		+7**	
EDT	Kenya	0	+4**	-1	+4**
HPA	Rwanda	0	-5	+2	-1
I Choose Life	Kenya	+3	-6**	-2	0
Leonard Cheshire	Kenya	-5*	-5**	-4	0
Mercy Corps Nepal	Nepal		+7**		+11**
Mercy Corps Nigeria	Nigeria	+6**	+5**	+4*	+4**
PEAS	Uganda		-1		2
Relief International	Somalia	n/a	n/a	n/a	n/a
Varkey Foundation	Ghana	+2	+1	+2	+1**
Viva	Uganda	+3	0	-1	0
VSO	Nepal		+3		+6**
World Vision	Zimbabwe	+1	-1	-1	-2**
WUSC	Kenya	n/a	n/a	n/a	n/a

Figure 5: Average words-per-minute read correctly by age, at midline (uncapped words-per-minute, project-level weights, cross-sectional sample)

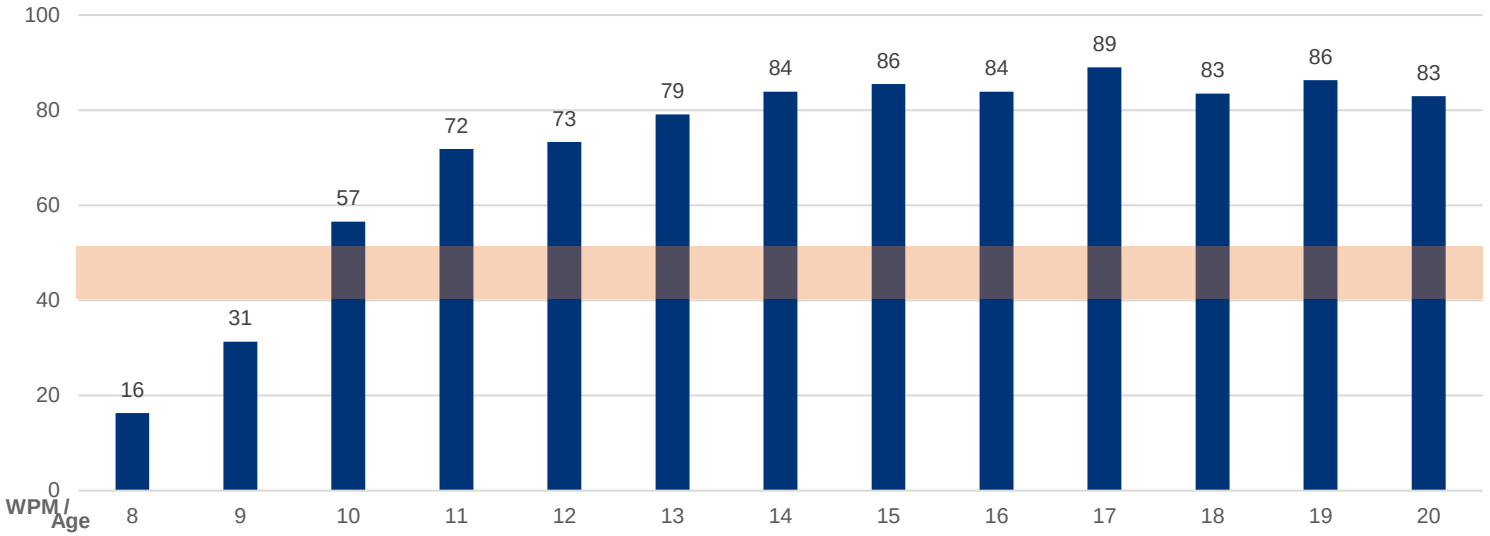


Figure 6: Share of girls able to read and understand what they read by grade, at midline (project-level weights, cross-sectional sample)

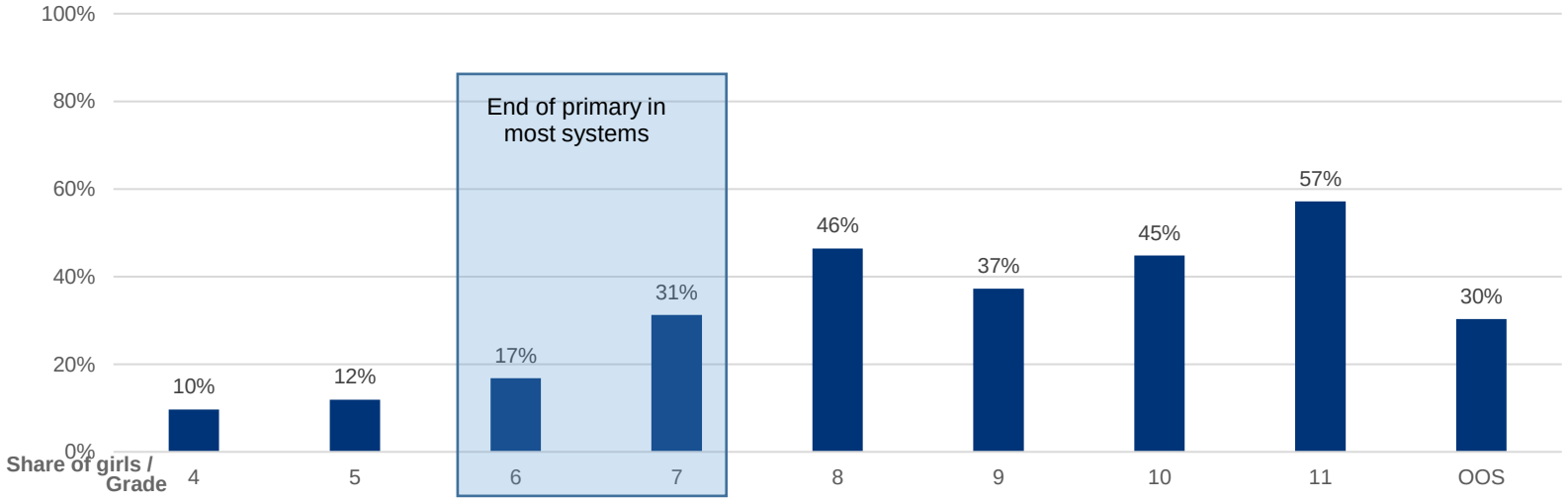


Table 32: Sample composition of subgroups by project (with beneficiary-population weights)

		AKF	BRAC	Camfed	Camfed	Camfed	Camfed (ex-BRAC)	CARE Intl	Cheshire Services	DLA	DLA	DLA	EDT	HPA	I Choose Life	Leonard Cheshire	Mercy Corps Nepal	Mercy Corps Nigeria	PEAS	Relief	Viva	World Vision	WUSC
		Afg.	Afg.	Tan.	Zambia	Zimb.	Tan.	Som.	Uganda	Ghana	Kenya	Nigeria	Kenya	Rwanda	Kenya	Kenya	Nepal	Nigeria	Uganda	Somalia	Uganda	Zimb.	Kenya
All		2%	3%	17%	1%	20%	1%	1%	0%	6%	14%	17%	10%	0%	0%	0%	0%	1%	0%	2%	0%	4%	0%
Age	6 to 8	45%	0%		0%				0%	4%	3%	33%									1%	14%	
	9 to 11	3%	3%		1%		0%	1%	0%	6%	36%	33%	8%	0%	0%	0%				0%	0%	6%	0%
	12 to 13	1%	6%	1%	2%	4%	1%	2%	0%	14%	18%	25%	18%	0%	0%	0%	0%		0%	2%	0%	4%	0%
	14 to 15	0%	2%	26%	1%	44%	2%	1%	0%	4%	2%	5%	7%	0%	0%	0%	0%		0%	2%	0%	2%	0%
	16 to 19	0%	1%	51%	0%	24%	1%	1%	0%	1%	0%	3%	5%	0%	1%	0%	0%	3%	0%	3%	1%	1%	2%
	19+	2%	2%	7%		6%			0%	3%				4%	1%	0%	0%	62%	0%		5%		7%
Grade	4 or below	38%						20%	0%					2%							3%	37%	
	5	1%	2%		1%			1%	0%	15%	33%	39%	7%	0%		0%					0%	1%	
	6		35%					3%	0%				43%	1%		0%				9%	1%	7%	2%
	7	4%			8%				0%				61%	0%	3%	0%				13%	1%	9%	2%
	8						35%		0%				2%	1%	0%	0%	3%		8%	17%	1%	29%	3%
	9			43%		50%	2%		0%				3%	0%	0%		0%	0%		1%	0%	1%	0%
	10								0%					1%	13%		5%	19%		40%	5%		16%
	11 to 14													1%	22%			44%			5%		27%
Enrolment	OOS							0%						2%				98%					
	In-school	1%	2%	18%	1%	17%	1%	1%	0%	7%	15%	18%	10%	0%	0%	0%	0%	0%	0%	2%	0%	4%	1%
	Alternative education	16%	18%	1%	0%	64%										0%						1%	
School level	Primary	3%	5%		2%			2%	0%	11%	24%	29%	15%	0%	0%	0%				3%	0%	4%	0%
	Secondary	0%		41%		47%	3%		0%				2%	0%	1%	0%	0%	1%	0%	1%	0%	2%	1%
	Overage	1%	2%	8%	1%	11%	0%	3%	0%	14%	14%	23%	13%	0%	0%	0%	0%	1%	0%	3%	1%	2%	1%

		AKF	BRAC	Camfed	Camfed	Camfed	Camfed (ex-BRAC)	CARE Intl	Cheshire Services	DLA	DLA	DLA	EDT	HPA	I Choose Life	Leonard Cheshire	Mercy Corps Nepal	Mercy Corps Nigeria	PEAS	Relief	Viva	World Vision	WUSC
		Afg.	Afg.	Tan.	Zambia	Zimb.	Tan.	Som.	Uganda	Ghana	Kenya	Nigeria	Kenya	Rwanda	Kenya	Kenya	Nepal	Nigeria	Uganda	Somalia	Uganda	Zimb.	Kenya
Age-grade status	Underage	3%	7%	32%	1%	14%	6%	0%	0%	3%	8%	20%	3%	0%	0%	0%			0%	1%	1%	1%	0%
	Correct age	2%	3%	21%	1%	26%	1%	0%	0%	2%	15%	13%	8%	0%	0%	0%	0%	0%	0%	1%	0%	5%	0%
Disability (girl)	Not disabled	2%	3%	16%		18%	1%	1%	0%	7%	16%	19%	10%	0%	0%	0%	0%	1%	0%	2%		2%	0%
	One type	0%	1%	29%		33%	2%	0%	0%	7%	10%	5%	9%	0%	0%	0%	0%	0%	0%	1%		2%	0%
	Multiple	0%	0%	33%		55%	3%	0%	0%	1%	2%	2%	2%	0%	0%	0%		0%				1%	0%
Disability (PCG)	Not disabled	1%	4%	9%	1%	15%	0%	2%	0%	11%	20%	27%	6%	0%	1%		0%				1%	3%	
	Disabled	1%	%	24%	1%	28%	2%	1%		6%	19%	9%	1%	0%	0%		0%				0%	5%	
Orphan status	Single orphan	1%	1%	13%	1%	30%	1%	1%	0%	6%	14%	15%	11%	0%	0%	0%						6%	0%
	Double orphan	0%		16%	1%	47%	2%	0%	0%	4%	7%	8%	8%	0%	0%	0%						6%	0%
Speaks language of instruction	Girl - very well	2%	2%	16%	1%	18%	1%	0%		18%	21%	6%	14%	1%	0%	0%							0%
	Girl - a little	4%	3%	11%	3%	9%	1%	1%	0%	10%	19%	6%	3%	1%	0%	0%						30%	
	Girl - not at all	4%	7%	1%	1%	9%	0%	1%		3%	14%	49%	7%		0%							5%	0%
	PCG - very well	2%	4%	3%	1%	20%	0%	0%		11%	30%	6%	22%		1%								0%
	PCG - a little	2%	1%	23%	1%	15%	1%	0%		18%	18%	4%	12%		0%							5%	0%
	PCG - not at all	2%	1%	23%	1%	15%	1%	0%		18%	18%	4%	12%		0%							5%	0%
Family status	Girl is married	3%	1%	11%	3%	13%	0%	2%		3%	4%	3%	16%	0%	1%		0%	38%			1%	2%	0%
	Girl is a mother	2%	1%	5%	3%	13%	0%	1%	0%	4%	11%	8%	15%	0%	0%	0%		33%				2%	0%

		AKF	BRAC	Camfed	Camfed	Camfed	Camfed (ex-BRAC)	CARE Intl	Cheshire Services	DLA	DLA	DLA	EDT	HPA	I Choose Life	Leonard Cheshire	Mercy Corps Nepal	Mercy Corps Nigeria	PEAS	Relief	Viva	World Vision	WUSC
		Afg.	Afg.	Tan.	Zambia	Zimb.	Tan.	Som.	Uganda	Ghana	Kenya	Nigeria	Kenya	Rwanda	Kenya	Kenya	Nepal	Nigeria	Uganda	Somalia	Uganda	Zimb.	Kenya
	Mother not in HH	3%	5%	8%	1%	10%	0%	2%	0%	9%	19%	26%	13%	0%	0%	0%						4%	0%
	Father not in HH	4%	6%	7%	1%	9%	0%	2%	0%	9%	18%	30%	12%	0%	0%	0%						3%	0%
Household chores	An hour or less	1%	2%	9%	1%	14%	0%	0%		9%	21%	25%	12%		0%						0%	6%	0%
	A few hours a day or more	3%	7%	10%	1%	14%	0%	4%		10%	9%	26%	11%		1%						1%	3%	0%
Household poverty indicators	Less than 50% PI	4%	8%	13%	1%	12%	1%	3%	0%	2%	8%	20%	22%	0%	1%	0%	0%					5%	0%
	More than 50% PI	0%	0%	3%	1%	15%	0%	0%	0%	17%	30%	29%	0%	0%	0%	0%						4%	0%
Household education	HOH has none	6%	8%	6%	0%	6%	0%	3%		19%	14%	24%	12%		0%			1%			0%	1%	0%
	PCG has none	4%	5%	4%	0%	5%	0%	3%		20%	16%	29%	11%	0%	0%	0%	0%				0%	1%	0%

Annex 10: Transition Analysis

Table 33: In-school progression by project

Project Name	Country	Successful progression	Partial progression	Any progression	Grade repetition [including one grade down]	Drop out	Unknown transition
AKF	Afghanistan	100	0	100	0	0	0
BRAC	Afghanistan	98	1	99	1	0	0
Camfed	Tanzania	99	1	100	0	0	0
Camfed	Zambia	95	1	96	0	0	4
Camfed	Zimbabwe	90	3	93	0	0	7
Camfed (ex-BRAC)	Tanzania	96	0	96	2	0	3
CARE International	Somalia	81	0	81	11	7	2
Cheshire Services	Uganda	86	0	86	14	0	0
DLA	Ghana	95	0	95	3	0	2
DLA	Kenya	95	0	95	3	0	1
DLA	Nigeria	91	0	91	7	0	2
EDT	Kenya	93	0	93	7	0	0
HPA	Rwanda	81	13	94	3	3	0
I Choose Life	Kenya	95	0	95	5	0	0
Leonard Cheshire	Kenya	83	0	83	12	0	0
Mercy Corps Nepal	Nepal	74	0	74	6	20	0
Mercy Corps Nigeria	Nigeria	98	0	98	2	0	0
PEAS	Uganda	57	3	60	0	40	0
Relief International	Somalia	89	0	89	6	1	4
Viva	Uganda	63	0	63	10	13	9
World Vision	Zimbabwe	87	3	90	1	4	5
WUSC	Kenya	97	0	97	3	0	0
Total	**Portfolio**	92	1	93	3	2	2

Table 34: Progression of in-school girls by project, accounting for attrition

Project Name	Country	Successful progression (Any progression)	Unsuccessful progression	Unknown transition
AKF	Afghanistan	80%	12%	8%
BRAC	Afghanistan	81%	12%	7%
Camfed	Tanzania	60%	24%	16%
Camfed	Zambia	68%	18%	14%
Camfed	Zimbabwe	49%	29%	22%
Camfed (ex-BRAC)	Tanzania	94%	3%	3%
CARE International	Somalia	60%	28%	13%
Cheshire Services	Uganda	47%	33%	20%
DLA	Ghana	91%	5%	4%
DLA	Kenya	91%	6%	3%
DLA	Nigeria	88%	9%	3%
EDT	Kenya	50%	31%	20%
HPA	Rwanda	63%	27%	10%
I Choose Life	Kenya	40%	36%	24%
Leonard Cheshire	Kenya	51%	30%	17%
Mercy Corps Nepal	Nepal	65%	30%	5%
Mercy Corps Nigeria	Nigeria	51%	29%	20%
PEAS	Uganda	43%	44%	13%
Relief International	Somalia	68%	19%	13%
Viva	Uganda	41%	35%	21%
World Vision	Zimbabwe	66%	20%	14%
WUSC	Kenya	40%	36%	25%
Total	**Portfolio**	63%	23%	14%

Table 35: Differences in reporting transition rates

Project Name	Country	Successful transition rates as per ML report	Successful transition rates calculated from data	Differences in reporting
BRAC	Afghanistan	73%	98%	BRAC takes into account attrition in reporting successful transition rates. Those who cannot be recontacted were recorded as unsuccessful transition, making the reported number much lower. Our calculation, by contrast, restricted analysis to only girls re-contacted.
Camfed International	Tanzania	Comparison: 80% Treatment: 86%	99%	All three Camfed International projects follow separate transition and learning cohorts. The reported attrition rates are based on the transition cohort only. As the transition cohort includes only marginalised girls, they resulted in having lower transition rates than our calculation (which also includes girls tracked for learning with more non-marginalised girls included).
Camfed International	Zambia	Comparison: 75% Treatment: 68%	95%	
Camfed International	Zimbabwe	Comparison: 70% Treatment: 75%	90%	
Camfed (ex-BRAC)	Tanzania	92%	96%	Like Camfed International, the transition cohort is smaller than the overall sample, and includes only marginalised girls, making the transition rate lower than our calculation.
Cheshire Services	Uganda	Comparison: 68% Treatment: 69%	86%	Like BRAC, Cheshire Services takes into account attrition in reporting successful transition rates. Those who cannot be recontacted were recorded as unsuccessful transition, making the reported number much lower. Our calculation, by contrast, restricted analysis to only panel girls.
HPA	Rwanda	In-school: 91% OOS: 48%	In-school 81% OOS 38%	Partial progression is counted as successful transition in the report, while our definition of successful transition only includes girls who transitioned fully – the expected number of years between rounds. The number of partially transitioned girls roughly matches the data. OOS transition is higher in the report as they include girls who transitioned into work and vocational training, in addition to re-joining formal education. As we do not include data on work, these girls were recorded as unsuccessful transition.
I Choose Life	Kenya	Comparison: 89% Treatment: 88%	95%	Due to data quality issue, we managed to merge fewer girls than reported. This resulted in different numbers and percentages of successful transition rates.
Leonard Cheshire	Kenya	Treatment: 88%	83%	Our calculation marked girls transitioning from formal schooling to ALP as unsuccessful (6%). The project, by contrast, marked them as successful transition.
Mercy Corps Nepal	Nepal	**In-school** Comparison 75% Treatment 95%	In-school 74% OOS 0%	For in-school girls, in our calculation, 20% of those unsuccessfully transitioned were tagged as dropouts. The report categorised these girls, who mostly graduated from grade 10 as graduates (and hence, as successful transition). From the curriculum, grade 10 is the end of lower secondary level and basic education continues up to grade 12.

Project Name	Country	Successful transition rates as per ML report	Successful transition rates calculated from data	Differences in reporting
		OOS School Graduates treatment: 52% OOS treatment: 48%		Therefore, we categorised them as dropouts instead of successful transition. For OOS, unsuccessful transition is defined as girls who did nothing and remained OOS. Successful transition is defined as girls who either transitioned into work, non-formal education, or re-joined school. Most girls with successful transition went into work. Our data does not capture this, and hence recorded them as unsuccessful transition.
Mercy Corps Nigeria	Nigeria	**In-school** Comparison: 93% Treatment: 92% **OOS** Treatment: 43% Comparison: 30%	In-school 98% OOS 0%	Report calculates successful transition rates based on all midline sample (included added sample), while our calculation is restricted to those recontacted only. Similar to Mercy Corps Nepal, for OOS, those counted as successful transition are those who transitioned into work or had done vocational training. This is not captured in our data and all those who did not re-join formal education were recorded as unsuccessful transition.
PEAS	Uganda	83% for age 13-17 42% for age 18 or above 46% for OOS	57%	The report takes out OOS as a separate category to determine transition outcomes. The report includes 497 girls who became OOS in midline. This number matches our calculation (40% of sample were tagged as dropped out). By taking out those who dropped out as a separate category, the report shows much higher rates of successful transition.
Relief International	Somalia	89%	89%	Reported percentage is the same, but the report excluded those 18 years old and above from the transition analysis as they cannot be compared to the benchmark group.
Viva	Uganda	Varies by grade Mostly 90% for in-school girls For OOS treatment 66% and Comparison 33%	63%	The discrepancy is mostly from OOS girls. In baseline, the programme reported some OOS. However, due to data quality issues, these OOS girls cannot be tagged, and all girls were tagged as enrolled. In midline, the high unsuccessful rates are mostly from girls transitioning into OOS, which the report separates out, creating the discrepancy.
World Vision	Zimbabwe	In-school: 90% OOS: 93%	In-school 87% OOS 0%	For in-school girls, partial transition in our calculation (4%) were counted as successful transition in the report. For OOS, successful transition is mostly from girls who enrolled in CBE. We cannot find this information in our data, and thus record 0% successful transition.
WUSC	Kenya	Transition cohort: 89% Learning cohort: 88%	97%	The report calculation takes into account all midline sample (included the replacement girls), making the calculated percentage different from ours, which includes only recontacted girls.