

Project Evaluation Report

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Evaluator:	Forcier
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Notes:

Some annexes listed in the contents page of this document have not been included because of challenges with capturing them as an A4 PDF document or because they are documents intended for programme purposes only. If you would like access to any of these annexes, please enquire about their availability by emailing uk_girls_education_challenge@pwc.com.

BASELINE EVALUATION:

REUSSITE ET EPANOUISSEMENT VIA L'APPRENTISSAGE ET L'INSERTION AU SYSTEME EDUCATIF (REALISE)

IN THE DEMOCRATIC REPUBLIC OF THE CONGO

Final, approved version

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By



For

World Vision



Save the Children

Purpose of the Baseline Evaluation Report

The Baseline Evaluation Report should be written with several objectives in mind.

- To set a baseline for the measurement of a project's outcomes (Learning, Transition, Sustainability), the project's Intermediate Outcomes, and the project's Outputs
- To suggest targets for Outcomes and Intermediate Outcomes for the Midline and Endline evaluations, and for Outputs at annual frequency
- To provide a nuanced, evidence-based picture of the context in which the project operates
- To describe the profile of the project's girl beneficiaries and boy beneficiaries (where applicable)
- To review the project's calculation of beneficiary numbers
- To identify and assess the barriers to education that girls face, especially with regards to their learning, progression through formal and informal education, and transition across stages of education
- To assess the validity of the project's theory of change, including testing its assumptions and how interventions are designed to overcome barriers and lead to outcomes
- To investigate the linkages between Outputs, Intermediate Outcomes and Outcomes
- To understand the project's approach to gender equality and how this has been integrated into the project design
- To assess the gender gap in learning and transition (where boys' data has been collected)
- To provide the GEC Fund Manager, DFID, and external stakeholders quality analysis and data for aggregation and re-analysis at portfolio level

The ultimate uses of the evidence and analysis in the Baseline Evaluation Report will be:

- To reflect on and assess the validity and relevance of the project's Theory of Change
- To evidence why changes may need to be made to the project's activities in response to the analysis
- To review the project's Logframe Indicators and change them where appropriate

Role of the External Evaluator and the implementing Project in the Baseline Evaluation Report

The Baseline Evaluation Report must be the work of the project's External Evaluator. The implementing project should provide the External Evaluator with background documentation and contextual information as needed. The project has a direct but limited role in completing some sections. The template explicitly refers to areas where a project contribution or response will be required.

- Green boxes/areas are to be completed by the Project
- Orange boxes include analysis guidance from the Fund Manager and do not need to be completed; they can be deleted in the final reports
- Red boxes are to be completed by the External Evaluator
- All other areas or where not otherwise stated are to be completed by the External Evaluator

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Executive Summary

Project Background

Conflict and political instability in the Democratic Republic of Congo continues to put strain on and disrupt education. Households struggle with the high costs of schooling and low household incomes as well as threats to the wellbeing of the child. The obstacles to education access for girls is made more difficult due to socio-cultural factors such as pressure to marry early, assist with household chores, and the de-prioritization of girls' education vis a vis boys' education. Gender disparities.

In this context, Save the Children launched Vas-y Fille and continued its program with REALISE. The project, which began on October 2017 and is expected to close on October 2021, builds on evidence from Vas-y Fille and seeks to further address barriers and challenges girls in the DRC face in accessing education. REALISE will support girls in 6 provinces: 1) Haut Katanga, 2) Lualaba, 3) Lomami, 4) Kasai Oriental, 5) Tanganyika, and 6) Ituri. Due to the increased conflict in Ituri, the research design excluded gathering data from Ituri. The project is expected to reach 53,149 girls in primary schools, 8,523 girls in 210 secondary schools and 1,049 girls who have dropped out of school.

To address barriers to learning and transition for girls in the DRC, the REALISE theory of change focuses on five outputs: 1) literacy/numeracy methodologies, 2) teacher professional development, 3) conflict-sensitive education, 4) activities outside class to support wellbeing, and 5) addressing economic and institutional barriers to education. These outputs will contribute to improvement in four intermediate outcomes: attendance, teaching quality, life skills, and economic empowerment which in turn contribute to the broader goals of improving learning outcomes, increasing transition rates, and effecting sustainable change.

The REALISE evaluation uses a mixed-methods, quasi-experimental design, involving a longitudinal panel of girls with a non-randomly assigned comparison group. The baseline sample consisted of 116 schools: 56 intervention, 56 comparison schools, and 4 accelerated education centres.

Learning Outcome findings

Aggregate learning assessment scores for in-school cohort girls are: literacy = 12.3; and numeracy = 52.9.¹ These do not vary significantly by intervention versus comparison girls. Scores for out-of-school girls are significantly lower: literacy = 3.3; and numeracy = 24.4.² The most disadvantaged girls in terms of learning are those who do not speak the language of instruction at their school, those who are disabled, those who come from remote, agrarian communities, and those belonging to households of limited means. The most important barriers that girls face in terms of learning are schools with insufficient learning materials, teacher absenteeism, poorly trained teachers who tend to intimidate their students, and unsupportive families.

Subgroup and barriers analysis of learning outcomes provides significant support for key linkages hypothesized in the theory of change. The most important linkage found is that higher attendance is a

¹ These scores are unweighted averages, including both intervention and comparison schools, and excluding four AEP schools.

² These scores are unweighted averages, including both intervention and comparison schools, and excluding four AEP schools.

strong and statistically significant predictor of higher learning outcomes in both numeracy and literacy. The analysis of relationships between other intermediate outcomes and learning outcomes also helps to verify the important link between teaching quality and girls' learning outcomes, as well as the link between school resources (especially adequate learning materials) and girls' learning outcomes.

Transition Outcome findings

Across all communities in the sample, benchmark transition rates for girls 9-16 years old were 73.8 percent. Girls in intervention communities had somewhat higher transition rates of 75.9 as compared to 71.6 percent for girls in comparison communities. Unusually, transition rates were lowest among the two youngest age cohorts (9 and 10-year olds), before rising among 11- to 14-year old girls, which is a function of the criteria by which households were selected into the sample. The analysis revealed large, over 30-point, differences between provinces, with Haut Katanga, Lualaba, and Tanganyika especially disadvantaged. Migration and displacement are both associated with markedly lower transition rates. Also, the educational background of the adults in a girl's life matter: where the head of household or caregiver, respectively, have never attended school, transition rates are 20.2 and 11.4 points lower than average.

In line with the theory of change, economic distress is the most important and consistent household-level predictor of low transition rates among cohort girls. Nearly every indicator of economic distress is strongly correlated with lower transition rates, while girls in households with savings are much more likely to remain in school. The evidence also suggests a link between girls' life skills and the likelihood that they remain in school.

Marginalisation Analysis and Gender Analysis (including GBV)

Girls belonging to poor households in remote, agrarian communities are consistently the most marginalized. Poorer girls tend to have lower learning outcomes, drop out of school, and remain out of school. Girls who live in poor households in remote areas are also far less likely than their peers to learn French or other widely spoken languages such as Kiswahili at home. Girls who do not speak the primary language of instruction at their schools tend to fall behind because teachers do not have adequate training or resources to deal with such students. In particular, these girls (if they do remain in school) lack the fundamental skills necessary to learn to read and fall into an abrupt learning gap in their literacy because they lack a foundational understanding of French phonetics.

Intermediate Outcomes findings

Attendance

The school attendance rate for cohort girls established through a headcount conducted during a single day of data collection is 86.8 percent of the total girls enrolled—a relatively high proportion at the baseline. The calculation of attendance based on the primary caregivers' assessment resulted in an estimated attendance rate of 85.3 percent. Both measures of attendance found that attendance differed significantly by province, in the headcount (84.0 percent) and the primary caregivers' assessment data (83 percent), we found that girls in Kasai Oriental attended school at significantly lower rates. In addition, in the primary caregivers' assessment data, girls from Haut Katanga are observed to attend school at the lowest rates among all provinces, averaging 81.4 percent attendance.

Teaching Quality

Teaching quality is primarily measured against key competencies set by DRC's Ministry of Primary, Secondary and Vocational Education (EPSP). While a total of nine competencies are assessed in the teaching quality scorecard, for the sake of brevity this summary focuses on those competencies that show the greatest room for improvement. The absolute lowest teaching quality score is in the category of organizational skills, and specifically in the category of teachers' professional development (with a score of 32.6 out of 100). The lowest cognitive skill score was in terms of teachers demonstrating mastery of the didactic actions that facilitate learning in the classroom (with an aggregate score of 64.3 out of 100). Finally, the behavioural or socio-emotional skill scores that are the lowest both relate to student-centred teaching approaches, namely the ability of teachers to take into account the diversity and emotional needs of students and the ability of teachers to adapt their interventions to the specific needs of pupils with learning difficulties (with scores of 61.6 and 63.4, respectively). When examining teachers' skills in teaching children with special needs, teachers' greatest limitations were in terms of their abilities to use different languages when needed to accommodate children who did not speak the language of instruction, as well as teachers' abilities to make special accommodations for conflict-affected children, when necessary. Finally, analysis of girls' impressions of their teachers and comfort levels when interacting with their teachers suggest that the punishment strategies that teachers use are extremely influential and that corporal punishment and punishments given for incorrect answers in class can undermine student trust and lead girls to be fearful of their teachers in ways that may undermine participation in class and thereby impede learning.

Economic Empowerment

Though the report did find that girls experiencing the results of poverty are more likely to struggle with their ability to learn, the report also found that caregivers with savings and participation in savings groups were more likely to have their girls enrolled in school. The results suggest that families who know how to save for the future will also see the investment in paying the school fees for their daughters. The findings underscore the importance of girls' education in their social development as strong, confident community and family members and reveal the need to provide more support for VSLAs and trainings on budgets and fiscal investments for families, with a focus on education.

Life Skills

In the survey, in- and out-of-school girls were asked a series of questions aimed at measuring girls' leadership skills, levels of self-confidence, and agency in making life decisions. Overall, girls exhibited high levels of self-confidence, and the majority reported that they are confident in their organizational and communication skills. In decision-making, girls exhibited the lowest levels of agency in decisions related to marriage, attending school, and staying in school and the highest levels of agency in decisions related to spending time with their friends and working after finishing their studies.

A life skills index based on girls' responses to questions on leadership, self-confidence, and decision-making was calculated for in- and out-of-school girls across survey locations. Out-of-school girls scored significantly lower on the life skill index scores than out-of-school girls. Age was a significant predictor of life skills index scores for out-of-school girls, with younger girls scoring lower on the life skills index than older girls. For in-school girls, grade was a significant predictor – life skills index scores increase as a girl advances to higher grade levels.

There were also notable differences by location – for in-school girls, life skill index scores were highest among girls in Lomami and Lualaba and lowest among girls in Haut Katanga, and for out-of-school girls, scores were highest among girls in Tanganyika and Lomami and lowest among those in Haut Katanga. Qualitative data suggests that biases against girls and negative attitudes toward education girls on sexual and reproductive health may be contributing to the observed differences by location.

Self-esteem

The report found a strong relationship between girls' enrolment/learning ability and the level of self-esteem found in the girls' perceptions and behaviours. By encouraging girls' enrolment in school and aiding in their learning, girls not only gain an education, but also the ability to be engaged in the community and their current/future family, so they may always have some control over decisions about them.

Output Indicators

The project has not yet collected data on these indicators. Please see Annex 3 for more information about output definitions and verification methods.

1. Background to project

1.1 Project context

In the aftermath of the First and Second Congo Wars, the Democratic Republic of Congo (DRC) has struggled to regain political and economic stability. At present, despite the presence of nineteen thousand United Nations (UN) peacekeeping forces, the security situation in the country is declining.³ Armed groups continue to terrorize citizens in weakly governed areas of the country, particularly in eastern DRC in the provinces of Haut-Katanga, Kasai, North and South Kivu and Tanganyika.⁴

The continued conflict has deepened an already severe humanitarian crisis. The UN estimates that nearly 13.1 million people – 14 percent of the population initially projected for 2018 – is currently in need of humanitarian assistance and protection.⁵ Approximately 4.5 million people were internally displaced by the end of 2017, and 2.4 million new internally displaced people (IDPs) are expected by the end of 2018.⁶ The DRC is simultaneously experiencing an influx of refugees from the Central African Republic and South Sudan, adding further stress to humanitarian efforts.⁷

The political situation is also declining, as government and security forces are exhibiting signs of abandoning democratic principles of governance. President Joseph Kabila, whose presidential term should have ended on December 19, 2016, per the 2016 power-sharing agreement, has delayed elections until December 2018 in what is seen by Congolese civil society and political opposition leaders as an attempt to remain in power.⁸ Human Rights Watch reports that, in the aftermath of Kabila's refusal to hold elections, government officials and security forces have systematically oppressed opposition leaders, civil society, peaceful protestors, and media – during the 2016 protests that took place following Kabila's decision, security forces killed at least 62 people and jailed hundreds of protestors, and in 2017, security forces jailed more than 300 opposition leaders and supporters, journalists, and activists.⁹

In conflict-affected areas, an already strained education system is directly impacted by fighting. Armed groups target schools, in some cases permanently interrupting access to schooling. In 2016 and 2017, six hundred schools in the Kasai region alone were attacked or destroyed.¹⁰ Nevertheless, despite the continued conflict and lack of political stability, the education sector has shown improvements in the past two decades. Education spending suggests that the government is prioritizing the sector – in 2015, education spending represented 12.4% of government expenditures, compared to 6.7% in 2005.¹¹ According to the latest national education statistics, enrolment in primary schools increased from 5.5 million in 2001-02 to 13.5 million in 2013-14, and the gross enrolment ratio (GER) increased from 62% in

³ Council on Foreign Relations (2018). *Violence in the Democratic Republic of Congo*. Accessed at: <https://www.cfr.org/interactives/global-conflict-tracker#!/conflict/violence-in-the-democratic-republic-of-congo>

⁴ *Ibid.*

⁵ UNHCR (2018). *Supplementary Appeal – Congolese Situation. Responding to the Needs of Displaced Congolese and Refugees*. Accessed at: http://reporting.unhcr.org/sites/default/files/2018%20Congolese%20Situation%20SB%20-%20DRC_0.pdf.

⁶ *Ibid.*

⁷ International Rescue Committee (2017). *Improved Management and Accountability: Conditions for Better Access and Quality of Primary Education in the Democratic Republic of Congo?* Accessed at: <https://www.rescue.org/sites/default/files/document/1310/drceducationgovernancefinaljanuary2017.pdf>

⁸ Human Rights Watch (2017). *Democratic Republic of Congo – Events of 2017*. Accessed at: <https://www.hrw.org/world-report/2018/country-chapters/democratic-republic-congo>.

⁹ *Ibid.*

¹⁰ Council on Foreign Relations (2018).

¹¹ International Rescue Committee (2017).

2001-02 to 106.8% in 2013-14. However, there are still significant barriers to accessing and staying in school that challenge the healthy functioning of the education system.

In the education sector in the DRC, power is shared between the central state and provinces. At the state level, the education sector in the DRC is administered by three ministries: the Ministry of Primary, Secondary and Professional Education (MEPSP), the Ministry of Higher Education and University (MEAS), and the Ministry of Social Affairs (MAS). However, the day-to-day operation of services and facilities is managed by provincial and local structures.¹² Both state schools and confessional schools are classified as public schools in the DRC, with the remaining schools in the country operated by private institutions.

In the DRC, 3.5 million children of primary school age are still not in school, 44% of those who do attend start late, and learning outcomes for those who attend are poor.¹³ Distance to schools and financial costs of schooling are among the most significant barriers to education. Under Article 43 of the constitution, primary education is compulsory and available for free in all public establishments,¹⁴ but fees are nevertheless collected informally and illegally at the school level. One study finds that for the average student in the DRC, fees can range from 26,300 to 59,900 CFs (\$27 to \$62 at the time of the study in 2016) per year, a prohibitively high cost for most families.¹⁵ Additionally, distance to schools poses a barrier for children from rural areas and has led to lower levels of attendance among rural children – the 2008-2012 primary school net attendance ratio in rural areas was 69.9 compared to 86.4 in urban areas.¹⁶

In addition to geographic disparities in education sector performance, there are gender disparities in access to schooling. The DRC ranks among the countries in the world with the worst levels of gender equality. In 2017, it was ranked 152 out of 160 on the Gender Inequality Index (GII) and measured as a group 5 country for the Gender Development Index (GDI), the classification for countries with the highest levels of deviation from gender parity for measured indicators.¹⁷ The gender inequality represented in these measures manifests in all spheres of life, from education to healthcare to command over economic resources.

A 2010 MICS survey found that girls and boys attend primary school in similar proportions, but the parity index between the sexes is 0.81 at the high school level, indicating higher rates of drop-out among girls than boys and suggesting girls face additional barriers to accessing education as they age.¹⁸ Socio-cultural factors such as pressure to marry early contribute to higher drop-out rates among girls. According to the 2013-14 Demographic and Health Survey (DHS) for the DRC, 35.9 percent of women ages 18-22 married as children, and 10% of those married very early, before the age of 15.¹⁹ Although rates of both

¹² International Rescue Committee (2017).

¹³ USAID (2018). *Democratic Republic of the Congo Education Factsheet*. Accessed at: <https://www.usaid.gov/democratic-republic-congo/fact-sheets/usaiddrc-fact-sheet-education>.

¹⁴ *The Constitution of the Democratic Republic of the Congo*, 2005. Article 43.

¹⁵ International Rescue Committee (2017).

¹⁶ UNICEF. *Democratic Republic of the Congo Statistics*. (2013). Accessed at: https://www.unicef.org/infobycountry/drcongo_statistics.html

¹⁷ UNDP (2018). *Congo (Democratic Republic of the) Human Development Indices and Indicators: 2018 Statistical Update*. Accessed at: http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/COD.pdf

¹⁸ UNICEF (2011). *DR Congo Multiple Indicator Cluster Survey MICS-2010*.

¹⁹ Ministère du Plan et Suivi de la Mise en œuvre de la Révolution de la Modernité (MPSMRM), Ministère de la Santé Publique (MSP) and ICF International (2014). *Democratic Republic of Congo Demographic and Health Survey 2013-14: Key Findings*. Accessed at: https://dhsprogram.com/pubs/pdf/SR218/SR218_e.pdf.

early marriage and extreme early marriage (marriage before 15 years) are decreasing over time, but remain most prevalent in rural areas and among girls from poorer socio-economic groups.²⁰

Gender inequalities have been heightened by the ongoing conflict. Rape and sexual violence are used as weapons of war by both government forces and militia groups – an estimated 57% of women have experienced physical or sexual violence at some point of their lives.²¹ Although sexual violence can include violence by women and against men, estimates on sexual violence suggest that perpetrators of sexual violence in the DRC are almost solely men and victims are mostly women. A 2014 study found that 73% of the victims of sexual violence are women, 25% are children, and 2% are men,²² and another found that 99% of the perpetrators of sexual violence are men, the majority of who are over the age of 18.²³ In addition to facing the risk of sexual violence, girls who live in conflict areas are at risk of recruitment by armed groups – a 2017 Child Soldiers International report estimated that approximately 40% of child soldiers in the DRC are girls.²⁴ Rape, forced marriage, and sexual slavery occur in the context of recruitment and use or abduction of children.

Access to education for girls has important development implications. Women with higher levels of education tend to desire less children, have less children, initiate sexual intercourse at a later age, use modern family planning methods more, give more live births, and have children who suffer less from stunting due to chronic malnutrition.²⁵ In recognition of the importance of girls' education, the UK Department of International Development (DfID) launched the Girls' Education Challenge (GEC), disbursing over £300 million to 37 projects across 18 countries between 2012 and 2017 to provide girls with quality education. The GEC Transition Window (GEC-T) was established in 2016 to support original GEC beneficiaries to further improve their learning and transition outcomes.

In the DRC, the Réussite et Epanouissement Via L'Apprentissage et L'Insertion au Systeme Educatif (REALISE) program run by Save the Children and World Vision is a continuation of the Vas-y-ville (GEC-1) program. Through a suite of interrelated interventions, the program aims to improve girls' learning, attendance, and transition in the DRC formal education system. Under the REALISE program, interventions will target six provinces: Haut-Katanga, Ituri, Kasai Oriental, Lomami, Lualaba, and Tanganyika. Of these six provinces, Ituri, Lomami, Lualaba, and Tanganyika are new, as per the recent implementation of découpage, or decentralization, which divided the DRC's former 11 provinces into 26 provinces. As a result, institutions in these provinces are fairly new and potentially understaffed.

All six of the target provinces are affected by or directly experiencing acute conflict. During the program design stage, it was expected that Kasai Oriental would be the most likely to experience community shutdowns as a result of conflict – due to the outbreak of fighting in 2016 between government security

²⁰ World Bank (2016). *Basic Profile of Child Marriage in the Democratic Republic of Congo*. Chata Malé and Quentin Wodon. Accessed at: <http://documents.worldbank.org/curated/en/448331467831741265/pdf/105918-BRI-ADD-SERIES-PUBLIC-HNP-Brief-DRC-Profile-CM.pdf>.

²¹ Ministère du Plan et Suivi de la Mise en œuvre de la Révolution de la Modernité (MPSMRM), Ministère de la Santé Publique (MSP) and ICF International (2014).

²² UNJHRO (2014). *Progress and obstacles in the fight against impunity for sexual violence in the Democratic Republic of the Congo*.

²³ République Démocratique du Congo Ministère de la Famille et de l'Enfant (2013). *Ampleur des violences sexuelles en RDC et actions de lutte contre le phénomène de 2011 à 2012*.

²⁴ Child Soldiers International (2017). *Raped then rejected*. Accessed at: <https://www.child-soldiers.org/Handlers/Download.ashx?IDMF=e57e9cb2-cd70-4dc2-8681-e29bc6f3622b>

²⁵ Ministère du Plan et Suivi de la Mise en œuvre de la Révolution de la Modernité (MPSMRM), Ministère de la Santé Publique (MSP) and ICF International (2014).

forces and militiamen, the security situation in the province has recently deteriorated.²⁶ However, the provinces of Haut-Katanga, Ituri, and Tanganyika are also experiencing acute conflict, often along ethnic lines.²⁷ Notably, in 2017, an estimated 90% of all new cases of child recruitment by armed forces took place in the east of the DRC, including in Ituri, Tanganyika, and Haut-Katanga.²⁸

The remaining provinces – Lomami and Lualaba – have been affected by population displacement from Kasai, although it is important to note that a number of the provinces directly experiencing acute conflict are also responding to an influx of internally displaced people (IDPs) and refugees.²⁹ Ituri, for instance, is experiencing an influx of refugees from neighboring South Sudan, and Haut-Katanga is likely to experience an influx of IDPs from Tanganyika and Kasai as the security situation in these provinces worsens.³⁰

In addition to conflict, the six target provinces are also at risk of health crises in the form of infectious disease outbreaks and food insecurity. Outbreaks of infectious diseases, including measles, cholera, and tuberculosis, have been reported in all six provinces in the past few years.³¹ Additionally, there are high rates of severe acute malnutrition among children in Kasai Oriental, and severe food insecurity is a major challenge in Ituri.³² These location-specific factors were mapped and considered through a Fragile and Conflict-Affected States (FCAS) analysis and used to inform the REALISE project's Theory of Change (ToC).

In this context, Save the Children programming is designed through a conflict sensitive lens and includes early warning systems and interventions aimed specifically at addressing the psychosocial repercussions of conflict among teachers and students, as well as the direct effects of conflict and emergency on continuity of schooling. Through its process of developing mechanisms to respond to conflict, Save the Children has categorized REALISE activities into three main groups: development activities, transition activities, and emergency in education (EIE) activities.

Development activities are the standard activities that take place when there is no crisis. Transition activities represent a blend of EIE activities and development activities in cases where there is a mild crisis or when a crisis is in the process of being resolved. The focus of transition activities is on protecting children, creating a safe environment and supporting child wellbeing, and returning to development activities as soon as possible. EIE activities include interventions that are particularly relevant during an emergency, when it is not possible to implement development activities. The emergency intervention strategy includes clear threshold mapping to determine when an emergency response will be triggered and outlines specific changes to the REALISE work plan for each output in the case of an emergency.

1.2 Project Theory of Change and assumptions

The REALISE project's ToC³³ proposes that by addressing the key barriers to education through teaching and learning, social, and economic interventions, access to education for marginalised girls will increase. In addressing key barriers through evidenced-based interventions, girls are expected to progress through

²⁶ Save the Children (2018). *REALISE – The Democratic Republic of Congo Theory of Change*.

²⁷ *Ibid.*

²⁸ UN Security Council, *Children and Armed Conflict in the DRC*, 25 May 2018.

²⁹ Save the Children (2018). *REALISE – The Democratic Republic of Congo Theory of Change*.

³⁰ *Ibid.*

³¹ *Ibid.*

³² *Ibid.*

³³ *Ibid.*

key transition points, from accessing formal or accelerated education to sitting their exams to progressing to secondary school. A particular focus is placed on girls between grades 4 and 7, as girls are most at risk of dropping out as they transition from primary or Accelerated Education to secondary education.

A number of key barriers are identified in the ToC. First, the cost of schooling is prohibitively high for the average household in the DRC. Additionally, girls' education is not valued to the same degree as boys' education, particularly among families that face financial constraints. Girls' bride prices represent an important source of funds for families, and girls are also often required to support their mothers in completing household chores. Low teacher capacity is also a barrier to girls attending and staying in school, as low levels of teachers have been exposed to effective pedagogies. The Vas-y-fille endline evaluation found significant gaps in teacher knowledge and skills, but also illustrated the success of teacher trainings in remedying competency gaps. Lastly, conflict and crisis continues to have a negative psychosocial impact on children, who suffer from direct trauma, displacement, and loss of family members. Conflict has also resulted in the loss of school structures and has affected the ability of communities to engage with regular education programming. Attacks on and occupation of schools has degraded the protective environment for children, and girls have become increasingly vulnerable to exploitative labour and recruitment by armed groups.

The ToC is built on the assumption that these barriers are in fact significant challenges faced in the project target areas. A number of causal pathways included in the ToC are supported by a strong base of evidence, whereas others are not well-evidenced. For example, the Vas-y-fille endline evaluation found that bursaries have a great impact on student learning, demonstrating the strength of the causal pathway from bursaries to attendance and learning. Other pathways, such as the Bien Grandir and Citizen Voice and Action interventions, both outlined in more detail below, have been shown to be successful in other contexts but are as of yet untested in the project's target locations. ToC assumptions on wider contextual factors are also untested. Although it is known that conflict is a restraining factor and that resilience work, conflict preparedness, and psychosocial support can improve girls' access to education, detailed information on which resources should be deployed in the project's specific locations is as of yet lacking. Therefore, causal pathways and the degree to which enabling factors will reduce or overcome the constraining factors mentioned above will be tested during the project. ToC assumptions regarding wider contextual factors will also be tested using monitoring data throughout the life of the project.

A series of interventions will be undertaken to minimize or overcome the factors constraining girls' education. The project's interventions are divided into the following three categories: Teaching and Learning Interventions, Social interventions, and Economic Interventions. The interventions are as follows:

- **Literacy and Numeracy Boost (Supplementary Classes):** Girls and boys with low numeracy and literacy scores will receive supplementary classes to focus on literacy and numeracy.
- **Teacher Professional Development:** Inspectors from the ministries of six provinces at primary and secondary levels will receive Training of Trainers (TOT) training.
- **Accelerated Education Methodologies:** Educators will implement accelerated education.
- **Conflict-Sensitive Education:** Teachers will be trained in psychological first aid and working with children who have been traumatized by violence and war.
- **Improved Quality Learning Environment:** Girls will benefit from additional resources.
- **Bursaries:** Girls in selected grade levels in target schools and AEP schools will receive bursary support.
- **Citizen Voice and Action:** Groups of parents will be trained to conduct advocacy within each of the communities.
- **Financial Support to AEP:** Girls and boys who are not eligible for reintegration into the formal education system will be provided financial support.

- **Savings and Loans Groups:** Groups of parents per primary school in the full cohort will be encouraged to join a Savings and Loans Group

The Bien Grandir and Citizen Voice and Action programs will work with families to demonstrate the value of girls' education and equip families with advocacy tools. Simultaneously, savings groups and bursaries will provide extrinsic motivation to families by increasing their capacity to provide for their girls' education. For older girls under the program, an Accelerated Education route will be available. The main focus of the project will be developing fundamental competencies and equipping girls to pass their exams through a series of literacy and numeracy interventions. Resources will be made available to properly equip classrooms and provide teachers with quality professional development. Additionally, the project will include elements aimed at preparing schools and students for conflict, providing psychosocial support to students and teachers affected by conflict, and providing education in times of displacement.

Table 1: Project design and intervention: SCI

Intervention types	What is the intervention?	What Intermediate Outcome will the intervention will contribute to and how?	How will the intervention contribute to achieving the learning, transition and sustainability outcomes?
<p>List main types of project interventions in this column by type in this column e.g. access, capacity-building, governance, material support, safe-spaces, teaching inputs, female voice, community initiatives, learning support</p>			
<p>Learning Support</p>	<p>Literacy Boost: improve reading and writing by girls inside and outside the classroom. Specific activities include: assess children’s reading levels and evaluate their literacy learning needs based on those assessments; students with low performance in the continuous assessments are targeted with literacy boosts, teachers are trained to incorporate skill-building into their regularly scheduled curricula; guide parents and communities to support children as they learn to read and foster their love of reading.</p>	<p>Quality of teaching: Literacy boost provides training to teachers to build their skills in assessing the girls’ needs in literacy and adapt their curriculum accordingly.</p>	<p>Learning: This intervention is directly related to the ‘learning’ outcome, as its core activity is to improve girls’ literacy skills.</p>
<p>Learning Support</p>	<p>Numeracy Boost: improve student’s numeracy ability to solve arithmetic at grade level inside and outside the classroom. Based on</p>	<p>Quality of teaching: Numeracy boost strengthens teachers’ skills through a series of trainings focusing on three</p>	<p>Learning: This intervention is directly related to the ‘learning’ outcome, as its core activity is to improve girls’ numeracy</p>

	the Literacy Boost model, with interventions that include: student assessment, teacher training, students with low performance in the continuous assessments are targeted with numeracy boosts, and community action.	core domains in mathematics: Number and Operations, Geometry, and Measurement.	skills.
Capacity Building	<p>Teacher Professional Development:</p> <p>this intervention introduces proven approaches like teacher training on gender sensitive pedagogy, peer learning circles and lesson observations. TPD uses blended learning approaches – face-to-face, as well as self-study. Teachers develop a range of teaching competencies, linked to national frameworks.</p>	<p>Quality of teaching:</p> <p>TPD is all about strengthening teachers’ skills and competencies through a series of trainings focusing on domains most useful and helpful for the teachers, based on an initial assessment, and then continuous assessments.</p> <p>Attendance:</p> <p>By improving the teaching quality environment, mostly at the school level, girls will be more inclined to attend classes regularly as they will learn more effectively.</p>	<p>Learning</p> <p>This intervention will help girls achieve better learning outcomes as the teaching environment and methodology will be improved. As girls’ learning improves, they will be more likely to score better in exams and transition through grades.</p>
Access	<p>Accelerated Education Programs (AEPs)</p> <p>This intervention is aimed at ensuring that the most vulnerable children who have not had a chance to enter the formal education system, or those who dropped out, are able to catch up and complete primary education, and enrol in secondary school.</p>	<p>Attendance</p> <p>AEPs aim to create an informal alternative to primary education that is adapted to student needs. Since none of the costs of this education are paid by the family, children who have been left behind by the formal system can register and attend.</p>	<p>Learning</p> <p>This intervention is directly related to the ‘learning’ outcome, as its core activity is to ensure that the most vulnerable children are educated.</p> <p>Sustainability</p> <p>Following changes to the national curriculum in Vas Y Filles, REALISE wants to contribute to a sustainable</p>

		<p>Life Skills</p> <p>Over the course of Vas- Y-Filles, life skills classes were integrated into the national Accelerated Education Program in order to improve life skills and resilience for the most vulnerable children.</p>	<p>change in accelerated education by working with the government to integrate standardized level evaluations that can allow for transition to the formal education system at all levels, not just after completion of the full primary cycle.</p>
Safe Spaces	<p>Conflict Sensitive Education</p> <p>This activity is aimed at ensuring that teachers are equipped to work with children affected by conflict in their classrooms. They will be trained on various topics like psychological first aid, working with traumatized children, protecting schools in conflict.</p>	<p>Teaching quality</p> <p>By training teachers to have improved skills to teach children who have been affected by conflict, they will better adapt to children with specific needs following trauma and conflict improving the quality and responsiveness of teaching.</p> <p>Life Skills</p> <p>By improving teacher capacity to work with children affected by conflict and trauma, they will build their resilience and life skills and ability to respond and to process conflict.</p>	<p>Learning</p> <p>By adapting teaching to all children, including those affected by conflict, children will have improved learning and will stay in school during conflict or reintegrate schools more quickly after conflict, minimizing the disruptive impact of conflict on education</p>
Capacity building	<p>Research: The three research pieces to be undertaken will support piloting project improvements and contribute to overall knowledge on girls' education and transition.</p>	<p>All:</p> <p>By improving program quality in multiple sectors, research will help us to learn, and adapt and pilot activities for innovation in multiple aspects of the program.</p>	<p>Sustainability</p> <p>Through contributing to the body of knowledge about girls' education, this will contribute to the global body of knowledge and ensure sustainable learning through dissemination of findings.</p>
Female Voice/Safe Spaces	Bien Grandir (SRH):	Life Skills	Transition

	<p>Provide training to clubs, caregivers and schools on education to family life curriculum on various useful topics, such as sexual & reproductive health, gender equity, puberty etc.; develop strategies with clubs to prevent and mitigate risks and violations of their rights and training on puberty and menstrual hygiene management, etc.</p>	<p>Members of clubs have a safe space for peer support and peer learning, as well as a space and time to take part in activities that will support them in building up their confidence, self-agency, and ultimately their self-esteem.</p> <p>Attendance Girls who have a safe space and a close peer community in the school will increase their sense of belonging. The improved sense of belonging will in turn increase their regular attendance in classes and school</p>	<p>Sustainability</p> <p>This intervention will help improve girls' self-esteem and girls' attendance in school, which the project believes will in turn increase learning for girls.</p> <p>Caregiver sessions will help create a lasting change in the community on attitudes and behaviours towards girls, leading to achieving the sustainability outcome through behavior change.</p> <p>If the key community members support girls to continue their learning in schools and acknowledge education as a priority for girls, these girls will feel more supported to attend school and learn and transition over the years.</p>
<p>Safe Spaces</p>	<p>Child Protection</p> <p>Provide training of teachers on positive discipline, ensure proper referral protocols are in place in schools, conduct trainings for children's club in schools focusing on child rights and trainings for community child protection networks. (RECOPE).</p>	<p>Quality Teaching</p> <p>By training teachers in positive discipline they will have improved teaching.</p> <p>Life Skills</p> <p>By contributing to better overall protection of children through strengthened referral pathways for abuses of child rights both in schools and in communities, the response to abuse will be improved.</p>	<p>Learning</p> <p>This intervention focuses on learning by ensuring that children are in a safe environment in schools therefore better able to learn.</p> <p>Transition</p> <p>Quick responses to child protection issues keep children in school longer as these can prevent further harm from happening to girls and can prevent drop out, early marriage and early pregnancy.</p>

			<p>Sustainability</p> <p>Supporting community child protection networks will have a lasting change on referral of child protection cases and supporting children who are victims of abuses</p>
<p>Material support</p>	<p>School Supplies</p> <p>In Vas Y Fille, school supplies were distributed to girls; however, as a key lesson learned, REALISE will distribute school kits to ensure that all children in a class are equipped to learn and teachers have some resources to teach</p>	<p>Attendance</p> <p>Children will have basic supplies for learning, meaning that they will be in a position to actively participate in classes and learn with proper tools. This will improve attendance by reducing inequities between children in their capacity to engage in learning, keeping them in school longer.</p>	<p>Learning</p> <p>This intervention is directly related to the 'learning' outcome, as its core activity is to ensure that children can actively engage in learning in schools</p>
<p>Community Initiatives</p>	<p>VSLA</p> <p>As the burden of fees is one of the barriers that impacts girl's education, VSLA groups are meant to build parent financial capacity to pay for schools and increase their revenue.</p>	<p>Economic Empowerment:</p> <p>Parents will be trained on VSLA to participate in savings and loans groups and engage in economic activities to grow their revenues, and improve their capacity to face economic difficulties by giving them access to loans when needed.</p>	<p>Sustainability</p> <p>Improving parents' revenues will have a long term impact on their capacity to pay schools fees, and support their families, creating an overall sustainable change</p>
<p>Governance</p>	<p>CVA</p> <p>Creating local advocacy groups advocating for rights based improvements in education. These groups will engage with multiple actors (governments, NGO, Private sector etc.) to improve quality of</p>	<p>Economic Empowerment</p> <p>By supporting communities and parents to become actors actively engaged in ensuring increased attention on education, they are empowered to examine spending on</p>	<p>Sustainability</p> <p>This activity is fully aimed at ensuring sustainability as it engages communities to become agents of change in education. They do not have to wait for external actors to advocate or fund education spontaneously for</p>

	education.	education and education priorities, to ensure that education authorities and schools are accountable.	them, but they are actively engaging and seeking support for their education needs.
Financial Support	<p>Bursaries</p> <p>REALISE will continue providing bursaries to girls to support them to stay in primary in the final year, and transition to secondary school.</p>	<p>Attendance</p> <p>This intervention solely aims at keeping girls in schools through the final year of primary and getting them to register, and start secondary.</p> <p>Bursaries also improve attendance as girls are no longer chased away from school mid-year, therefore, they can attend more regularly</p>	<p>Transition</p> <p>By supporting girls through the final year of Primary and into the first year of secondary, girls are able to transition into secondary.</p> <p>Learning</p> <p>By stabilizing attendance, girls are more present in school, so they have more learning time and will have improved learning</p>

1.3 Target beneficiary groups and beneficiary numbers

REALISE project plans to work with these primary target groups over the course of the project:

- Girls from VYF cohort: REALISE will help girls to access primary and secondary school through a suite of interrelated interventions. The project targets approximately 61,500[1] girls (53,000 in primary school and 8500 in secondary schools) from VYF cohort. These girls will be reached directly by receiving bursaries (approximately 30,000) and a package of interventions in LB/NB activities. They will also benefit indirectly with boys from the better trained teachers through the TPD program to ensure a better quality of education.
- Teachers and Inspectors: to ensure better quality of education in our interventions, REALISE will use Teacher Professional Development approach to reinforce the quality of teaching. REALISE will implement TOT training with provincial education inspectors from the 6 provinces at primary and secondary levels. The project targets 1000 teachers and 12 inspectors as to be trained as Master Trainers. Conflict sensitive education, girls' well-being, and child protection will be part of the training package.
- Citizen Voice and Action: Groups of parents constituted to conduct advocacy within each of the 267 communities.
- SRH: For the SRH program, the project will establish SRH club in all the secondary schools and 210 mentors will be trained to lead SRH activities with SRH clubs.
- Accelerated Education Program: REALISE will train 162 educators (AEP teachers and partners) on AEP implementation methodology. Through its financial and material support to 16 AEPs, REALISE expects to help educate 4000 children (Girls and boys who are out of school, and over 12, but not eligible for reintegration into formal system).
- Savings and Loans group: the project target is Groups of parents per primary school in a full cohort and aims to achieve 300 groups.

The REALISE project's primary target groups are over 70% of the original VYF (GEC1 in DRC) cohort in 6 of the original 8 provinces, who had already been identified as marginalised due to the poverty level and rural setting of the school locations. REALISE has listed some criteria for marginalization among its beneficiaries, which are:

- Girls living in conflict zones (chronic or sudden)
- Underage girls (under 18) being married and/or having child
- Girls who do not speak or understand the language of instruction – French
- Girls belonging to an indigenous / ethnic group
- Girls attending an AEP centre

As can be seen below, we will support girls from grade 3 to grade 9 in 2018/2019 (who were in grade 2 to grade 8 in 2017/2018) in formal schools, and level 2 and 3 in AEP centres. These girls were part of our GEC1 cohort and thus are included in the REALISE activities which will support them to transition through primary school to secondary.

	2016/17	2017/18	2018/19	2019/20	2020/21
Cohort 1	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
Cohort 2	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
Cohort 3	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7
Cohort 4	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
Cohort 5	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9
Cohort 6	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10
Cohort 7	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11
Cohort 8		Level 1	Level 2	Level 3	Grade 7
Cohort 9	Level 2	Level 2	Level 3	Grade 7	Grade 8
Cohort 10	Level 3	Level 3	Grade 7	Grade 8	Grade 9

The table below shows the number of beneficiaries per grade in each province in 2018/2019. It is important to note that girls' age in each grade isn't homogenous as it is common for girls to repeat one or more grades, or for an older girl to join a lower grade because of her skills level. Therefore, the project prefers to give an age range of the girls within each grade.

REALISE girls	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9
	8 - 10 years old	9 - 11 years old	10 - 12 years old	11 - 13 years old	12 - 14 years old	13 - 15 years old	14 - 16 years old
Haut-Katanga	3132	3003	3141	3690	2147	1572	1404
Kasai Oriental	1676	1333	1454	1954	1648	960	760
Ituri ³⁴	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lomami	1246	1141	1278	2110	1242	911	667
Lualaba	1093	1142	1148	1313	699	529	567
Tanganyika	1327	1199	1159	1401	648	468	334
Total	8474	7818	8180	10468	6384	4440	3732

REALISE girls

AEP 2

AEP 3

³⁴ Information is not available for Ituri as it has been unsafe and unstable for our staff or the external evaluator to travel in that province due to internal conflict, violence and displacement in that area.

	14 – 17 years old	14 – 17 years old
Haut-Katanga	257	160
Kasai Oriental ³⁵	-	-
Ituri ³⁶	N/A	N/A
Lomami	98	76
Lualaba	129	130
Tanganyika	236	66
Total	720	432

During the February cohort identification exercise, the project used the Washington Disability Group Short Form to identify the prevalence of disability among its sample of girls (approx. 17,000 girls). This is shown in the table below. Based on this sampling, the project did not consider disability as a significant criterion of marginalisation given the low percentage of disability identified, but this can be explained by the fact that the February data collection was also mainly done at school level, therefore less likely to find girls with disability. While the baseline did not find significant numbers of physical disability or issues related to access, it did highlight that mental impairment and cognitive disabilities related to trauma that are a barrier to learning, and therefore the project is adding this to its marginalization criteria.

Disability*	Percent of cohort identification sample
difficulty seeing	2%
Difficulty hearing	3%
difficulty walking or climbing steps	2%
difficulty remembering or concentrating?	5%
difficulty holding a pen in order to write	1.60%

*from February cohort identification, we assessed approx. 17,000 girls

DIRECT LEARNING AND TRANSITION BENEFICIARIES

The direct learning and transition beneficiaries can be found in the table below:

Targeted girls	2017/2018	2018/2019	2019/2020	2020/2021
Learning beneficiaries	Primary level:	Primary level:	Primary level:	Primary level:

³⁵ There is no AEP in Kasai Oriental.

³⁶ Information is not available for Ituri as it has been unsafe and unstable for our staff or the external evaluator to travel in that province due to internal conflict, violence and displacement in that area.

	39,812 (formal) 1,654 (AEP)	28,721 (formal) 1,234 (AEP)	19,317 (formal) 605 (AEP)	11,515 (formal)
	Secondary level: 10,824	Secondary level: 15,427	Secondary level: 19,531	Secondary level: 22,846
Transition beneficiaries	Primary level: 35,830 (formal) 1,596 (AEP)	Primary level: 25,848 (formal) 1,146 (AEP)	Primary level: 17,385 (formal) 521 (AEP)	Primary level: 10,363
	Secondary level: 8,875	Secondary level: 12,650	Secondary level: 16,015	Secondary level: 18,733
Sources to support this data	In early 2018, the project has conducted a data collection to identify its cohorts of beneficiaries as there has been a gap in time (almost one year) between the end of GEC 1 and GEC-T due to contractual delays. This exercise produced a 'cohort identification' report (submitted to the FM back in March 2018) and a database of beneficiaries that was used to complete this table.			
Method used for calculations and assumptions	<ul style="list-style-type: none"> • Based on UIS statistics (2015), the repetition rate for girls in primary school is about 10% (9.98%), which was used to apply on the transition beneficiaries' number at primary level year on year. • Based on the DRC Ministry of Education statistics, the repetition rate for secondary school is at 18%, which was used to apply on the transition beneficiaries' number at secondary level year on year. • The projection of learning beneficiaries' number was calculated by applying a drop-out rate from one year to another; while the projection for transition beneficiaries' number was calculated by applying a repetition rate on the learning beneficiaries. • Based on the DRC Ministry of Education statistics, the dropout rate in primary school is around 14%, and in secondary school, it is at 11.8%; which were used to project learning beneficiaries' number (estimates) over the project's life. • Regarding AEP, there is no official or literature data available in terms of repetition rate or dropout rate; therefore, the project only used a dropout rate of 14% between AEP Level 3 and Grade 7 of secondary school. The project also assumes that REALISE girls in AEP don't repeat their levels, or that only a minimal number does, which wouldn't be reflected in the table above. • Over time, the number of beneficiaries in AEP and primary education will decrease as they transition to higher grades, which means the number of 			

beneficiaries in secondary education would increase.

DIFFERENCE IN BENEFICIARY NUMBERS BETWEEN VYF, REALISE AND/OR MEL FRAMEWORK

	VYF*	REALISE	REASONS FOR DIFFERENCES
Number of provinces	8	6	We decided not to continue working in Equateur or Kwilu, as these areas are not affected by conflict and are complex and costly to operate in due to SC and WV not having a strong footprint in these areas.
Number of Girls in primary school	61,814	53,149	Girls dropped out
Number of secondary schools worked with	n/a	210	the project switched its focus to transition to secondary school
Number of girls in secondary schools	12,870	8,523	Girls dropped out
Number of girls out of formal school, but attending AEP	1,120	1,049	Girls dropped out of AEP centres

***NB: the data for VYF shown in this table is for the 6 provinces where REALISE is being implemented only, and excludes data for Equateur and Kwilu.**

Evaluator Response:

The estimates above were derived on the basis of recent data collection that appears to have been comprehensive. The methodology for arriving at the estimates above is clear, and the adjustments made for anticipated repetition and dropout are empirically grounded and appropriately applied to the adjusted estimates. The figures supplied above also appear plausible when we consider the demographics of the provinces where the REALISE interventions will take place.

The school survey has not been performed yet, but the school survey will only be carried out in a sample of intervention schools and therefore cannot be used to estimate total beneficiary numbers. In light of the thorough cohort identification exercise carried out in early 2018, we believe that the numbers presented here are reliable. Moving forward, adjustments can be made to the estimates on the basis of actual transition rates calculated.

2. Baseline Evaluation Approach and Methodology

This section presents the approach to the evaluation, beginning with an overview of the key evaluation questions that are the focus of the baseline research design. The key outcomes and intermediate outcomes are reviewed, with an emphasis on operationalization of indicators and measurement. The evaluation methodology is summarized, including a listing of all data types collected and their achieved sample sizes. Finally, the data collection process is described in detail, along with the main limitations of this study.

For more detail, please refer to the CARE International MEL Framework, as well as the Evaluator's Inception Report.

2.1 Key evaluation questions & role of the baseline

As stated in the REALISE MEL Framework, evaluations will focus on assessing results at the level of Intermediate Outcomes and Outcomes. Evaluation questions are intended to examine causal links among key Intermediate Outcomes and Outcomes. Project activities and outputs will also be monitored in terms of their quality and consistency, and in terms of how these activities and outputs relate to the Intermediate Outcomes, and Outcomes. The project's theory of change will be tested at each evaluation point and validated or adapted if needed depending on findings. The project evaluation questions were designed by following the OECD DAC criteria to generate evidence, and are summarized below:³⁷

Relevance

- To what extent is the project's theory of change still valid?
- Are the activities and outputs of the project consistent with the Intermediate Outcomes and Outcomes?
- Are the Intermediate Outcomes of the project consistent with the overall objectives of improving marginalized girls' learning and transition through education stages, and overall sustainability outcome?

Effectiveness

- To what extent are the objectives likely to be achieved (Baseline and Midline evaluations) / were the objectives achieved (Endline evaluation)?
- What works to facilitate transition of marginalized girls through education stages and increase their learning?
- To what extent has the project reached and made a difference to marginalized sub-groups of girls (i.e. living in remote areas; girls married under 18; girls with disability; extremely poor; engaged in child labour; and young mothers under 18) in terms of learning and transition?
- To what extent have the project's interventions addressed the major barriers and challenges to marginalized girls' transition through key education stages and their learning?

Efficiency

³⁷ These evaluation questions are reproduced from the REALISE MEL Framework, pages 13-14.

- Was REALISE successfully designed and implemented?
- Was REALISE good Value for Money in utilization of resources and achievement of project results?
- Were objectives of the project achieved on a timely basis?

Impact

- What impact did the GEC Funding have on the transition of marginalized girls through education stages and their learning?
- How many girls (and boys if relevant) have been positively affected by the project interventions?
- What are the main results achieved by the project? And what are the key factors (and challenges if any) behind these achievements?
- What effect has had the project's work on social and gender norms (including CHOICES and Growing Great approaches) at the community level among different categories of stakeholders (e.g. parents, community leaders, religious leaders, etc.)?

Sustainability

- How sustainable were the activities funded by the GEC, and was the program successful in leveraging additional interest and investment?
- Which interventions have the highest potential and likelihood of continuation after the project ends, and for scale-up?
- What are the key factors/aspects, which require more attention from the project to increase prospects of sustainability at intermediate outcomes and outcomes level?

Some of the evaluation questions related to Relevance (a), Effectiveness (c, d), Efficiency (c, e), Impact (c), and Sustainability (b, c) were designed with the aim of generating evidence that would feed into the project learning agenda. The findings resulting from these questions will indeed open doors to more learning and more adaptation to improve programming and sharpen the focus of the project's interventions throughout the life of the project.

2.2 Outcomes and Intermediate Outcomes

For reference, the project's Outcomes and Intermediate Outcomes are briefly summarised below, with emphasis on operationalization of quantitative measures. All outcomes will also be measured qualitatively and quantitative and qualitative data sources will be triangulated to form the broadest and most contextualized picture possible for each outcome.

Expected Outcomes

Long-term outcomes:

- (1) Learning: The number of cohort girls supported by GEC with improved learning outcomes measured as percentage-point increases in scores for literacy and numeracy assessments vis-à-vis the baseline sample.
- (2) Transition: The number of cohort girls who have transitioned through key stages of education, training, or employment, measured as the percentage-point increase in the proportion of girls who transition successfully vis-à-vis the benchmark sample established at the baseline.

- (3) Sustainability: The changes brought about through the project that increase learning and transition through education cycles are sustainable at the community, school, and system levels. For more detail, please see the section on sustainability below.

Intermediate Outcomes:

- (1) Attendance: measured as an increase in weighted average attendance based on multiple data sources, including a headcount, school records, and caretaker reporting.
- (2) Improved quality of teaching: measured in terms of the proportion of teachers showing improvement in the competencies listed in the national teacher competency framework, as well as demonstration of skills necessary to teach children with special needs.
- (3) Life skills development: measured as SRH club attendance and improvement in mean life-skills score.
- (4) Economic empowerment: measured in terms of girls' and caretakers' views on how financial support received has contributed to girls' attendance and ability to continue in school (i.e. how financial assistance contributes to successful transition outcomes).

The table below presents these Outcomes and Intermediate Outcomes with emphasis on how this outcome will be measured in terms of the operational details of the subpopulation from which data will be collected, as well as the tool and mode, and the rationale for the proposed data collection approach.

Table 2: Outcomes for measurement

Outcome	Level at which measurement will take place	Tool and mode of data collection, e.g. HH survey, school based survey, focus group discussions etc	Rationale, i.e. why is this the most appropriate approach for this outcome	Frequency of data collection, i.e. per evaluation point, annually, per term
Outcome 1 - Learning Literacy: Number of marginalised girls supported by GEC with improved learning outcomes in literacy	School Household	Literacy assessment test: EGRA / SeGRA (disaggregated by age, geography, disability, and sub-groups)	The EGRA and SeGRA are standard tools for measuring learning for GEC projects literacy.	Baseline, Midline and Endline
Numeracy: Number of marginalised girls supported by GEC with improved learning outcomes in numeracy	School Household	Numeracy assessment test: EGMA / SeGMA (disaggregated by age, geography, disability, and sub-groups)	The EGMA and SeGMA are standard tools for measuring learning for GEC projects numeracy.	Baseline, Midline and Endline

Outcome	Level at which measurement will take place	Tool and mode of data collection, e.g. HH survey, school based survey, focus group discussions etc	Rationale, i.e. why is this the most appropriate approach for this outcome	Frequency of data collection, i.e. per evaluation point, annually, per term
Outcome 2 - Transition: Number of marginalised girls who have transitioned through key stages of education, training or employment (primary to lower secondary)	Household	School enrolment records; Household survey (disaggregated by age, geography, disability, and sub-groups)	This approach uses enrolments rates over time and also assesses successive progression in grades, and movement from one level of education to another as well as to employment.	Baseline, Midline and Endline
Intermediate outcome 1: attendance 1.1 Percentage improvement in marginalised girls' attendance rate in intervention schools	School	School Register; Spot checks; Household survey (disaggregated by age, geography, disability, and sub-groups)	School attendance is recorded on a daily basis using school attendance registers. Triangulation will be done through spot checks and household level information.	Baseline, Midline and Endline
1.2 Average attendance rate in project AEP centres	AEP Centre	AEP Centre enrolment register; Household survey (disaggregated by age, geography, disability, and sub-groups)	AEP centres will also mark attendance for girls every day and the registers will be the primary source of information.	Baseline, Midline and Endline

Outcome	Level at which measurement will take place	Tool and mode of data collection, e.g. HH survey, school based survey, focus group discussions etc	Rationale, i.e. why is this the most appropriate approach for this outcome	Frequency of data collection, i.e. per evaluation point, annually, per term
1.3 Girls' views on the strength of barriers that may prevent girls' ability to attend school regularly	Community	FGDs with the girls (disaggregated by age, geography, disability, and sub-groups)	Focus Group Discussions with girls are the best approach to solicit for views and perceptions about school attendance and barriers.	Baseline, Midline and Endline
Intermediate outcome 2: Quality of teaching 2.1 Proportion of teachers who demonstrate improvement against four or more competencies within the national teacher competency framework.	School	Validation of Teacher Competency Profile through teacher interview, coach interview, student interview and teacher observation (disaggregated by sex)	We will ask the EE to validate the assessment of coaches and teachers themselves (the 'Teacher Competency Profile') using interviews to triangulate a snapshot lesson observation and student interview. Lesson observations alone are often poor measures of teacher competence - observations in English	Baseline, Midline and Endline
2.2 # of teachers demonstrating skills in teaching children with specific needs	School	Validation of Teacher Competency Profile through teacher interview, coach interview, student interview and teacher observation	As above. The Teacher Competency Profile will include competencies relating to different special needs.	Baseline, Midline and Endline

³⁸ <http://www.suttontrust.com/wp-content/uploads/2014/10/What-Makes-Great-Teaching-REPORT.pdf>

Outcome	Level at which measurement will take place	Tool and mode of data collection, e.g. HH survey, school based survey, focus group discussions etc	Rationale, i.e. why is this the most appropriate approach for this outcome	Frequency of data collection, i.e. per evaluation point, annually, per term
2.3 Girls' perception towards their teacher's teaching methods and ability	School	FDGs and/or KIIs with girls (disaggregated by age, geography, disability, and sub-	This indicator will provide information on whether girls are enjoying learning and like methods applied by teachers to improve learning.	Baseline, Midline and Endline
Intermediate outcome 3: Life skills 3.1 # children actively participating (i.e. regularly taking part in activities or initiatives) in SRH clubs	School	SRH Clubs' records; girls' survey (disaggregated by sex, age, geography, disability, and sub-groups)	Participation in SRH clubs will seek to improve life skills which are critical to young people's ability to positively adapt to and deal with the demands and challenges of life.	Baseline, Midline and Endline
3.2 Girls' confidence claiming their rights at school, in the community and at home.	Community	Girls' survey; Focus Group Discussions and/or KIIs with girls (disaggregated by age, geography, disability, and sub-groups)	Life skills should equip the girls with skills and confidence to make decisions and express themselves. This indicator will check if participation in clubs is giving positive results or not.	Baseline, Midline and Endline
Intermediate outcome 4 - Economic Empowerment 4.1 Change in attendance rates of targeted girls	School	Enrolment and attendance records of school; bursaries record; project monitoring record (disaggregated by age, geography, disability, and sub-groups)	Economic empowerment activities are expected to increase parents' ability to pay for school fees for their children thereby improving attendance rates.	Baseline, Midline and Endline

Outcome	Level at which measurement will take place	Tool and mode of data collection, e.g. HH survey, school based survey, focus group discussions etc	Rationale, i.e. why is this the most appropriate approach for this outcome	Frequency of data collection, i.e. per evaluation point, annually, per term
4.2 Girls' views on how financial support received impacted on their ability to further their education	Community	Focus Group Discussions and/or KIIs with girls (disaggregated by age, geography, disability, and sub-groups)	Increasing household income is expected to have wider benefits for household members including increased investment in adolescent girls (e.g. improved food security, increased access to education, health and social needs for girls)	Baseline, Midline and Endline
4.3 Parents' views on how access to financial support impacted on family income level and use (e.g. spend on education costs, investment in daughter overall, saving for further education, etc.)	Community	Focus Group Discussions and/or KIIs with parents (disaggregated by sex and geography)	Increasing household income is expected to have wider benefits for household members including increased investment in adolescent girls (e.g. improved food security, increased access to education, health and social needs for girls)	Baseline, Midline and Endline

Sustainability is measured by tracking key changes that the project would like to sustain in the future using the GEC Guidance on Sustainability. Measurement will be done at three levels: community, school and system. Information gathered through a mix of qualitative and quantitative tools will be analysed against the GEC Sustainability Score Card.

- **Community** – the focus will be on the acceptance of the introduction of Sexual and Reproductive Health curriculum in communities and schools and get the buy-in from key stakeholders. It will also be about supporting communities to develop advocacy plans to promote the improvement of school environment for the benefit of their children, especially when some parents and community members sit in the management committees of the school. This will be measured by quantitative and qualitative data captured through the evaluations
- **School** – Adoption of improved and inclusive teaching methods by schools and teachers over time will be assessed using classroom observations, focus group discussions and/or key informant interviews. The availability and transparency of the Code of Conduct in schools, signed by teachers, and the existence of a functioning case reporting system to ensure child safeguarding and child protection in schools are also key areas of this sustainability plan and will be measured at school level.

- **System** – At the system level, measurements will be on actions done to facilitate the integration of AEP students into formal schools by official authorities, and how research results are disseminated to influence national strategies in education.

Table 3: Sustainability outcome for measurement

Sustainability Level	Where will measurement take place?	What source of measurement/ verification will you use?	Rationale – clarify how you will use your qualitative analysis to support your chosen indicators.	Frequency of data collection
Community: # community stakeholders (village leaders, private sector, MoE) actively participating in the development and monitoring school improvement plans through CVA	Community	Review of participation records of community stakeholders in CVA activities	Regular project monitoring on CVA activities will be used as a secondary source, while the evaluators will also ask to review the records on CVA activities and its participant's list.	Baseline, Midline and Endline
# of functioning SRH clubs	SRH club	SRH club's activities reports	Functioning SRH club means that the club is active and has plans to implement regular activities to raise awareness about SRH in general and promote girls' rights to SRH. Interviews with club members will help triangulate.	Baseline, Midline and Endline
Perception among VSLA group members around their capacity to sustain its model	Community	FGDs and/or KIIs with VSLA group members (disaggregated by sex and geographical areas)	Interviewing and assessing VSLA group members perception and knowledge on the group's strengths and weaknesses on sustaining the model long term will inform the project on how to best support the VSLA groups.	Baseline, Midline, and Endline

Sustainability Level	Where will measurement take place?	What source of measurement/ verification will you use?	Rationale – clarify how you will use your qualitative analysis to support your chosen indicators.	Frequency of data collection
School % of schools implementing Teacher Professional Development program / curriculum	School	Schools' development plan and strategy (on TPD); project's TPD record; KIs with school management members (disaggregated by geography)	KIs with school management members will be used to explore challenges and benefits of the processes involved in implementing TPD. Common issues and divergent issues will be explored to understand and share positive dynamics and aspects of the approach.	Baseline, Midline and Endline
% schools with a functioning case reporting system (to ensure child safeguarding/protection)	School	Schools' case reporting system and strategy (on child protection / safeguarding) (disaggregated by geography)	KIs with school management members to explore the challenges in implementing and managing their case reporting system, and potential solutions to address these challenges.	Baseline, Midline, and Endline.
Change in teachers' attitudes and knowledge about positive discipline in classrooms	School	FGDs or KIs with teachers (disaggregated by sex and geography)	Positive discipline in classrooms lead to a more stimulating learning environment for girls and boys; and aims at improving relations between teachers and students.	Baseline, Midline and Endline
System Creation of a platform to disseminate research results for advocacy purposes	Province / country level	Project's activities result in the creation of the platform and has hold successful dissemination events.	Documenting the findings and results from the dissemination platform will support the project's advocacy efforts and build up its base of evidence.	Baseline, Midline and Endline

Sustainability Level	Where will measurement take place?	What source of measurement/ verification will you use?	Rationale – clarify how you will use your qualitative analysis to support your chosen indicators.	Frequency of data collection
Implementation and validation of AEP end-of-year exams by MINAS	MINAS	KIIs with government officials at MINAS	The project seeks qualitative evidence to demonstrate the buy-in from MINAS about AEP end-of-year exams. Getting their validation of these exams will hopefully allow girls to officially transition from an AEP level (if successful) to a formal education/school	Baseline, Midline and Endline

2.3 Evaluation methodology

The evaluation uses a mixed-methods, quasi-experimental design, involving a longitudinal panel with a non-randomly assigned comparison group. The reason for non-random assignment is explained in the MEL Framework, which states: “a randomized controlled trial would require the project to randomly select girls to be part of a treatment group and a control group, which is not the appropriate approach for GEC-T as the project works with the same beneficiaries as GEC 1.”³⁹

In the construction of the sample, schools served as a primary sampling unit. Schools were drawn randomly from a list of intervention and control schools provided by Save the Children and World Vision. The sample is balanced between intervention and comparison schools, with 56 of each in the sample. Within the area of each sampled school, households were selected randomly and screened. Households qualified for inclusion in the sample if they contained at least one girl belonging to the primary beneficiary population of girls (see definitions below). Respondents were then selected randomly from among eligible respondent types within each qualified household.

The primary target beneficiaries (i.e. cohort girls) are:

- In school girls in grades 4-6, aged 9-11 years
- Out of school girls aged 9-11

Indirect beneficiary groups include:

- Mothers/caretakers
- Teachers
- Community members
- Government officials

³⁹ REALISE MEL Framework v9, June 16, 2018.

The overall design of the evaluation uses a joint-sampling approach to select evaluation participants. In this broad sense, the evaluation matches the standard GEC-T design recommended by the Fund Manager (FM). At the level of sampling, the joint sampling approach means that the same students who complete learning assessments are also included in the household survey sample. These students will be sampled at the household level in the first phase of fieldwork while school-level data will be collected in the second phase of fieldwork. Students who are sampled to complete learning assessments will serve as both the learning and transition cohorts, meaning that their learning and transition outcomes will be tracked throughout the life of the project. An additional benchmark sample of girls aged 12-16 years has been surveyed for the purpose of assessing transition outcomes for older cohort girls. The relevant transition comparisons are summarised in the table below, for reference.

Baseline (2018)	Midline (2019)	Grade in (2020)	Endline (2021)
4	5	6	7
5	6	7	8
6	7	8	9
Benchmark Grades			
7	8	9	N/A
8	9	N/A	N/A
9	N/A	N/A	N/A
AEP			
AEP 1	AEP 2	AEP 3	7
AEP 2	AEP 3	7	8

The random household sampling strategy ensured that a representative sample of cohort girls was achieved. Subgroup quotas were not used in the recruitment of cohort girls in order to ensure that the distribution of subgroup characteristics in the sample is as representative as possible of the overarching population of targeted girls. The sample is powered to enable estimation of longitudinal differences in the aggregate cohort sample. Identification of statistically significant differences for key subpopulations may not be possible.

The quantitative datasets and qualitative findings allow for the explicit evaluation and triangulation of some assumptions and connections between intermediate outcomes and outcomes. These evaluations are presented in sub-sections in the body of this report, titled *Testing the Theory of Change*, where key correlations between intermediate outcomes and outcomes are tested using the available quantitative data and further triangulated with the available qualitative data.

In the baseline evaluation, quantitative data will be used to establish baseline values on key intermediate outcome and outcome-level indicators for the purpose of benchmarking, target-setting, and establishing a firm basis for longitudinal comparison, allowing for eventual difference-in-differences comparisons among baseline, midline, and endline data. Quantitative data will also allow for the correlational investigation of key population subgroups and barriers, and how different types of marginalisation and different barriers affect key outcomes of interest. This correlational analysis will inform programming by allowing the project to better target its interventions to ensure that the project meets the needs of the most disadvantaged

beneficiaries. Finally, quantitative data will allow for the explicit testing of important assumptions in the project ToC (as noted above).

The primary focus in analysis of qualitative data is to produce narrative evidence that can make sense of the historical processes and lived experiences behind quantitative findings, including prevalent social and gender norms (which were not necessarily expressed in quantitative surveys as a result of social desirability bias, but surface in qualitative narratives). Counter-narratives or minority narratives (that potentially contradict or qualify quantitative findings) were also given voice. Qualitative data were also queried selectively to make sense of quantitative outliers.

Incorporation of GESI minimum standards:

The evaluation addresses and incorporates GESI minimum standards through the collection of data that will be relevant to interventions focused on girls' life-skills (including sexual and reproductive health-related knowledge) girls' self-esteem, and on economic empowerment of caregivers, which are the most gender-transformative aspects of the project. The data collected through the evaluation also allows for disaggregation by a broad set of groupings and potential barriers, enabling the identification of subpopulations of girls who are at the greatest risk or disadvantage relative to their peers and relative to boys. Learning assessments allow the comparison of girls' and boys' learning in order to assess gender gaps and also to assess differences (and similarities) in levels of skill acquisition between girls and boys, as well as among out-of-school girls and among a diverse set of subgroups of potentially marginal girls.

The project and its evaluation design place a strong emphasis on the investigation of contextual factors that potentially affect gender relations and produce disparities, such as armed conflict, migration and displacement, and traditional gender norms. Each of these key factors are considered extensively in terms of their relationships to key intermediate outcomes and outcomes.

2.4 Baseline data collection process

This section outlines the data collection process, beginning with sample design and selection of schools as sampling points, and other aspects of preparing for data collection. The process of data collection is described, including quality assurance measures used. Finally, the post-fieldwork data cleaning and verification processes are described.

Pre data collection

All quantitative research instruments were provided by the FM and adapted collaboratively by Save the Children, World Vision, and the Evaluator.

As this is a baseline where the respondents are chosen randomly to take part in a longitudinal panel study, the following considerations related to tracking respondents were salient:

- Using the correct (i.e. matching and unique) Unique ID for all of the girl's surveys and assessments – Enumerators had tracking sheets for the new girls, where a unique identifier code will be pre-assigned. It was of the utmost importance that the enumerators used the right code for all the assessments and surveys with the girls. The team leader also made use of the same Unique IDs when collecting the information for those cohort girls who are enrolled at the school. The girl's section of the school visit questionnaire was also tied to the same Unique ID codes.
- Leaving enough information to be able to find the respondents at midline and endline – Given the longitudinal nature of the REALISE project, it is fundamental to have full and accurate contact

information for the cohort girls and their families to be able to find them again at midline and endline.

To address the above issues, the Evaluator created a tracking form for the enumerators, to be used for each girl. Please see the Evaluator's Inception Report for an example of the form. This form records the full name of the girl, caregiver, and head of household, along with all geographic and tracking information that is collected in the household survey. In addition, to facilitate tracking and re-contact of girls in the midline and endline studies, the tracking form provides space for the collection of multiple phone numbers for the purpose of re-contacting households, as well as a description of key landmarks and directions that would be sufficient to allow the household to be located again in the future.

Forcier performed 100 pilot interviews in the commune of Selembao, in Kinshasa, from July 19 to July 22, 2018. The literacy and numeracy assessments consisted of EGRA and EGMA, with supplementary subtasks from SeGRA and SeGMA.⁴⁰ The learning assessment pilot led to the identification of several important problems. These problems, along with the strategies used to address them, are summarized briefly below:

- It is strongly suggested that all girls (irrespective of age or grade) take the exam planned for the 11-year old girls. There are two main reasons for this: first, it will make the analysis easier. For instance, comparisons across grade level will be easier. Second, while older girls did generally perform better on SeGRA/SeGMA tasks than younger girls, it wasn't as strong of a finding as we would expect. Actually, some 10-year olds scored well on SeGMA tasks. And some 11-year olds are in grades 4-5 and did poorly on those same tasks. To ensure our ability to make like-for-like comparisons, we should give the same exam to everyone.
 - **Solution that was implemented:** As discussed with SCI, all girls will take EGMA, EGRA, SeGRA subtask 1 and SeGMA subtask 1. Benchmark girls will also take SeGRA subtask 2 and SeGMA subtask 2.
- About 7% of girls scored 0 and 41% of all girls scored 5% or lower on the exam. That is low, and I expect scores will be lower in rural eastern DRC than in Kinshasa.
 - **Solution that was implemented:** As discussed with SCI, we added EGRA subtask 0, on letter identification.
- Discrimination analysis tests whether a correct answer on a given test item is correlated with higher scores on the exam overall. A good question should have high discrimination: children who get low scores overall should not get it right, but children who get high scores overall should get it right. The test questions below have low negative discrimination values:
 - EGMA subtask 2, items 1-3 (egma_quant1 through egma_quant3 in script)
 - EGMA subtask 4, item 1 (egma_add1 in script)
 - SeGMA subtask 1, q4, 7 and 10 (segma_q4, segma_q7, segma_q10 in script)
 - SeGRA subtask 1, q10 (segra_q10 in script)
 - SeGRA subtask 2, q18 (segra_q18 in script)
 - **Solutions that were implemented:** First, review the translations to make sure they are right. Second, clarify the instructions to the enumerators.

⁴⁰ Specifically, students 9-10 years of age will complete EGRA/EGMA with one supplemental subtask drawn from SeGRA/SeGMA, respectively; students 11 years of age will receive two supplemental subtasks from SeGRA/SeGMA.

- Scripting and translation errors were also fixed.
 - We removed a question related to ethnic groups as this was very sensitive.

Beyond the learning assessments, other data collection tools were piloted in two phases, in line with the timing and structure of fieldwork. As noted above, data collection for the baseline evaluation was conducted in two waves. In the first phase, the evaluation team collected girl- and household-level information, completing the household survey and learning assessments. In this phase, qualitative interviews were also completed. In the second phase, the evaluation team will collect data from schools and classrooms, completing surveys with head teachers, teachers, direct observations of classrooms, and classroom headcounts for measuring attendance.

During enumerator training for Fieldwork Phase I, enumerators piloted the household survey and all qualitative tools. Each enumerator will complete one household survey, resulting in a pilot total of 65 household surveys in this phase. Each qualitative tool was also piloted once. Based on this phase of piloting, minor modifications were made to the survey CAPI script. No major substantive changes were made to the household survey.

Enumerator Recruitment

Enumerators were recruited on the basis of prior experience working on the Evaluator's data collection projects. Due-diligence vetting was still applied to all enumerators, even those who had significant prior experience. Enumerators with little to no prior experience in data collection were subject to competitive vetting and were exclusively recruited from among the Evaluator's salaried researchers who had a high level of performance on all previous projects executed for the Evaluator, and who had clearly demonstrated the attention to detail necessary to engage successfully in REALISE data collection.

All enumerators participated in five days of training, involving an orientation to the REALISE baseline study and evaluation purpose and approach including a review of key ethical standards (more on this below), and a systematic review of each of the data collection tools including their individual purpose and the key aspects of their proper administration. The final two days of the five-day training also included a full day of practice with the key quantitative tools and a half day of piloting, accompanied by a half day of debrief and final guidance prior to the start of fieldwork. All enumerators were provided with copies of all questionnaires. All team leaders had prior experience with fieldwork supervision and with the administration of qualitative questionnaires, and received a full day of training on qualitative interviewing.

During data collection

Phase 1 of fieldwork began on July 21st, 2018 and concluded on September 3rd, 2018. All household and learning assessment data was collected from each school cluster during the same timeframe. For the sake of efficiency, some qualitative and quantitative data collection was carried out simultaneously, with qualitative data collected by qualified team leaders, while quantitative data was collected by enumerators.

The second fieldwork phase will start once schools have re-opened, which is estimated to be mid- to late-September. The fieldwork to take place in the second phase will be performed in each of the sampled schools. Two classroom observations, two headcounts, two teacher surveys, and one head teacher survey will be conducted at each of the sampled schools. Only the supervisors from the teams in the first phase of fieldwork will work during the second fieldwork phase and it is estimated that one school will take approximately half a day to complete. No additional qualitative work will be undertaken during this fieldwork phase.

Ethical standards

Tools were reviewed by the Evaluator and modified in keeping with ethical principles, including do-no-harm, gender sensitiveness, benefit versus cost of obtaining data (i.e. “nice to know” versus “need to know”, considering the time burden for participants), respect for the local culture and nuances related to specific sub-groups (i.e. ensuring that questions take into consideration sensitivities and risks for disabled girls, orphans, and girls at high risk of dropout).

Researchers received specific training on research ethics, including informed consent, confidentiality, working with children / child protection principles, gender sensitiveness and do-no-harm principles.⁴¹ Informed consent was obtained from adults and children. Specific guidelines were provided to ensure that illiterate participants in remote areas were able to understand the purpose of the REALISE project and data collection activities as well as the uses of data, and the concept of data confidentiality and protection of privacy. Respondents, independent of their age, gender or status, were treated as partners in the project; questions were asked in a manner that demonstrated respect for respondents’ dignity, and participants were clearly informed of their right to refuse responses and to withdraw from the process at any time.

The Evaluator takes the security of its staff as a paramount concern. The Evaluator is aware of the potential risks for researchers when conducting interviews with female respondents in a society in which women and girls tend to be marginalised. Communities were sensitised about the research process beforehand. The Evaluator engaged with elders and traditional leaders in each community, and in all cases obtained prior authorisation to access selected research areas. In case of unrest or violent clashes, data collection was to be postponed to avoid potential harm to researchers.

Datasets were securely stored and accessible only to the Quality Assurance Officer, and the team of analysts who were responsible for analysis and coding of the primary data. The leading analyst for the project ensured that all datasets shared externally were fully anonymised, removing respondent names, contact details and location markers. Where relevant, findings were (as appropriate) disaggregated by province, but specific location markers were not used in reports.

Selection of Schools (Primary Sampling Units)

The school sample was stratified by province, defined as the five provinces in which the baseline evaluation will take place. Schools were also stratified by control and intervention schools, providing 56 primary schools in the intervention group and 56 primary schools in the control group. Lastly four AEPs were selected, all of which are categorised as intervention schools.

The sample frame provided by Save the Children and World Vision contained 196 intervention primary schools, 117 control primary schools, and 6 AEPs, out of which we randomly selected a total of 112 schools and 4 AEPs for evaluation. The table below describes the composition of the sample frame and

⁴¹ Researchers were trained on the reporting process described in the GECT Handbook Appendix B, as well as child protection guidelines provided by CARE. The guidelines provided by CARE provide for field staff to report cases to supervisors and trigger a coaching process in the case of corporal punishment, and for follow up with CECs in cases of abuse.

the sample, by stratum, to highlight the extent to which the sample represents the underlying population of eligible schools.⁴²

Province	Intervention			Comparison	AEP	
	Intervention Schools in Population	Prop.	Sampled Schools	Sampled Schools	Accessible AEP centres	Sampled AEP centres
HAUT KATANGA	37	18.88%	11	11	0	0
KASAI ORIENTAL	46	23.47%	13	13	2	1
LOMAMI	20	10.20%	6	6	0	0
LUALABA	41	20.92%	12	12	0	0
TANGANYIKA	52	26.53%	14	14	4	3
Total	196	100.00%	56	56	6	4

Household and respondent selection

For the baseline, all respondents were selected through the households using random household selection. In order to be eligible, households were required to have at least one girl who is 9-11 years old and either out of school or in grades 4-6. In each the community surrounding selected schools, the target was to collect 22 surveys and learning assessments with cohort girls in each school-cluster.

The random household selection procedure used for this project involved the supervisor identifying starting points for the enumerators. The enumerators started with their backs against the starting point and proceeding to the right. Every third household on the right was selected. When a household was not eligible, refused, or is was not available, the enumerator would then resume the random-walk pattern and select the third household on the right as the next candidate household. In case of key household members (i.e. caretakers, cohort, or benchmark girls) not being home when a household had already been established as eligible, researchers revisited the household at least twice in different times of the day before substituting the household.

The cohort girls or the transition benchmark survey respondents were all be selected randomly using the ODK data collection software. This random selection was achieved by the software prompting the researcher to fill in the details of all eligible respondents. The phone then randomly selected the respondent and informed the researcher.

Fieldwork quality assurance

At least 20% of completed interviews were validated through a combination of accompaniments and re-contacts according to the following rules:

⁴² Note that the baseline evaluation samples primary schools and AEPs exclusively, and does not include secondary schools, because at the targeted age ranges for inclusion in the evaluation cohort (9-11 years) girls are generally enrolled in primary school. In addition, at the time of the construction of the sample, SCI had not yet selected the secondary schools that would receive project interventions.

- Each enumerator was accompanied by a supervisor for one full interview, from start to finish, within the interviewer’s first three households in a given cluster.
- At least 20% of respondents were re-contacted either over the phone or in-person by supervisors, or the Research Officer.

Validation of interviews done by phone involved verification that the interview was conducted, verification of correct selection of household members, and verification of a standard set of item responses including head of household gender and age. In addition to the above-mentioned checks, in-person re-contacts will also verify correct execution of random route procedures.

Back office quality assurance/control

In areas where daily data uploads were possible, fieldwork progress was monitored daily through the upload of data from enumerators at the end of each working day. Full data uploads allowed the near real-time dashboarding of critical information on sample performance/management and data quality through the Evaluator’s data flow, which pulls .sav formatted data from Ona and runs it through an automated (Stata-based) quality control script, producing tables and graphs that summarize key indicators of progress and quality with automatic flagging of problematic interviews or enumerators. The Research Officer and Quality Assurance Officer reviewed each of these indicators and any flags on a daily basis. Flagged data and problematic interviews were investigated and corrective actions (including feedback to enumerators or re-fielding of interviews) were taken in a timely fashion. The Evaluator’s standard dashboard indicators include daily completion rates by date and enumerator, key demographics by enumerator, and interview duration by enumerator (with automatic flags programmed for interviews or enumerators whose submitted interviews deviate significantly from the overall sample mean or proportion). These indicators were checked daily for each dataset. Forcier also created questionnaire-specific dashboard items addressing potential issues of digit preference (for numeric assessment questions), as well as visualizations of key response distributions and enumerator-level averages and patterns for learning assessment scores.

GPS coordinates were checked twice weekly through mapping points on PSU and SSU shapefiles in order to cross-check sampling performance and to examine geographic patterns of interviews to check for evidence of curb-stoning.

In areas where daily data uploads were not possible, fieldwork supervisors spoke with each enumerator daily (in person or over the phone), and verified key demographics and indicators of sampling performance that were then transmitted by SMS to the data quality assurance officer, who then analysed the SMS data coming back from the field, flagged problems, and fed back to supervisors and enumerators.

Post data collection

The following table summarises the achieved sample for Phase 1 of fieldwork in terms of key subpopulations and quantitative tools:

Tool	Population	Planned	Achieved
Household survey	Total Cohort Girls	2464*	2438
	Total Benchmark Girls	320	838

	Total HH Surveys	2784	3339
Assessments (at households)	Total Cohort Girl Assessments	2464*	2438
	Total Benchmark Assessments	320	644
	Total AEP Girl Assessments	88	151
	Total Assessments Completed	2872	3210

*Note, these planned numbers do not include AEP girls. AEP girls are accounted for separately.

It is worth noting that the sample design specified in the MEL Framework assumed that it would be possible to perform household interviews for girls in AEPs; however, this was not possible because most girls were boarding at AEPs and could not be sampled using the same household selection strategy as was employed for other cohort girls. It should also be noted that target numbers were achieved or exceeded for all of the subgroups in the sample with the exception of cohort girls. The actual number of cohort girls interviewed and assessed was in keeping with the planned number, but 28 cohort girl observations could not be matched across the household and learning assessment datasets and thus were lost as a result of the merging process.

In addition to the quantitative data summarized above, Phase 1 of fieldwork involved the collection of 80 qualitative interviews, including a mixture of focus group discussions (FGDs) and key informant interviews (KIIs). In each of the five provinces, the Evaluator visited one control and one intervention school and conducted one of each of the types of qualitative interviews planned. The table below summarises the number and types of qualitative interviews performed.

Target Respondent Group	Type of Interview	Number of Interviews
Girls	FGDs	10
Boys	FGDs	10
Parents	FGDs	10
Savings and Loans Group Members	FGDs	10
Teachers/Headmasters	KIIs	10
Religious Leaders	KIIs	10
Community Leaders	KIIs	10
MINAS Povincial Officers	KIIs	10
Total	-	80

In order to maximize the diversity of the sample of qualitative interviews, locations for qualitative interviews were chosen purposively, with two schools from each province being selected for qualitative interviews. At each selected school, one of each of the eight different types of focus groups and interviews were conducted.

The fieldwork coordinator, as part of his work accompanying enumerators for quality assurance, would assess whether certain households (interviewed as part of the quantitative study) appeared to offer good

candidates for focus groups in terms of their diversity (on key traits being studied). The coordinator would then organize the focus groups with the help of the qualitative researcher. As for interviews with local leaders, the qualitative researcher and coordinator received the assistance of the village chief or local authorities in identifying them. Using this approach, a total of six individuals were invited to participate in each focus group.

The qualitative researcher conducted all qualitative interviews at each of the schools selected. The qualitative researcher was not accompanied by a note-taker or co-facilitator, but all interviews were recorded in order to ensure that an accurate verbatim transcription of each interview could be made following the end of fieldwork.

Following the conclusion of fieldwork, all qualitative interviews were transcribed on the basis of the recording and were translated into French (when the interview was conducted in another local language). The transcribed interviews were analysed thematically by the Evaluator's analysis team in order to extract useful insights. As stated earlier, the general approach to analysing and utilising qualitative evidence was to extract key quotes and narratives that spoke to the lived experiences behind the quantitative findings, as well as surfacing important counter-narratives or minority narratives that would potentially contradict or qualify the quantitative findings.

Data cleaning and verification

The first round of data cleaning took place as part of quality assurance of fieldwork, and was thus ongoing. This data cleaning involved the near real-time identification and rectification of discrepancies in the data, with the creation of Stata cleaning syntax that accumulated during the course of fieldwork and that was finalized following the conclusion of fieldwork, when a final check of all datasets was performed in order to remove all duplicates, correct miscoded location information or other obvious instances of enumerator error, and to ensure that all Unique IDs and other linkage-related codes were indeed unique and enabled the merging of datasets necessary for analysis.

Data was further verified by the analysis team prior to the start of analysis. The analysis team verified and cross-checked all aspects of sampling performance as well as assessment scoring and a set of internal consistency checks (e.g. whether the cohort girl's age reported during respondent selection matched the girl's age as reported later in the survey by the caretaker), and checks for outliers and digit preference in assessment scores and other continuous variables.

Finally, some additional data cleaning was necessary as additional discrepancies were found during the course of analysis.

Data storage and analysis

Data was stored securely on a limited-access, password-protected partition of the Evaluator's cloud-based data management system. Access to non-anonymised data was limited to staff directly involved in the analysis of REALISE data. Data will be fully anonymised before sharing with the FM. All paper tracking sheets, fieldwork notes, and surveys filled on paper are stored securely on location in the Evaluator's in-country office.

All quantitative data was analysed using Stata 15, and a full record of all analysis has been kept using Stata syntax stored in .do files. All tables and graphs in the report are fully replicable on the basis of the

Stata code written by the Evaluator and can be furnished as necessary to support replication and checking of the analysis herein.

All qualitative data was transcribed. The primary approach to analysing qualitative data involved the extraction of narrative evidence that can make sense of the historical processes and lived experiences behind quantitative findings, including prevalent social and gender norms (which may not be expressed in quantitative surveys as a result of social desirability bias, but surface in qualitative narratives). Counter-narratives or minority narratives (that potentially contradict or qualify quantitative findings) have also been given voice. Qualitative data was also queried selectively to make sense of quantitative outliers.

2.5 Challenges in baseline data collection and limitations of the evaluation design

This section lays out the primary methodological challenges posed by the study in terms of its overall design and the way that design considerations intersect with the specific context of REALISE implementation. These limitations include central issues of non-random assignment of intervention versus comparison schools as well as problems of panel-attrition, and cross-contamination.

Non-random assignment

Non-random assignment to intervention versus comparison sites presents a primary limitation to our ability to make valid causal inferences on the basis of the data collected. The sample design has paired intervention and comparison schools such that they are from the same province. However, the Evaluator did not have access to consistent and reliable data on school characteristics that would have allowed for matching of schools on additional characteristics beyond their province. The Project provided full data for intervention schools—where there was any query or missing data, we linked the field teams with the EE in advance to help the EE to finalize the intervention sites information. However, the project could not provide the same level of information for the comparison schools as most were not known sites under VYF project, and were not known by the field teams. Therefore, the project put the EE in contact with the Sous-Proved and other education actors of the zone to help them to obtain the information available. The Evaluator made significant efforts to obtain information remotely through the contacts provided by the project. Ultimately, comparison school locations were the only information that could be consistently verified through this method. Thus, province was the only school characteristic available for stratification/matching.

In light of the discussion above, it is almost certain that intervention and comparison schools are imbalanced in terms of potentially important, but unobserved, factors that may bias analysis. The main implication of this limitation is that, when making inferences on the basis of these data, we cannot be absolutely certain that observed results are a product of program interventions and not at least partly a product of unobserved, systematic, differences between the intervention and comparison groups. We will attempt to mitigate this problem in our analysis using statistical controls in regressions to adjust findings for the influence of observable factors that are significantly different between intervention and comparison groups. However, we can never be certain that we have accounted for all potential confounders, and thus we can never claim that our estimates are completely unbiased.

Notwithstanding these concerns, the analysis of population characteristics, and learning outcomes below will demonstrate that the intervention and comparison groups are exceedingly well-paired in terms of their baseline values. In particular, the learning trajectories and transition rates of girls across grades are comparatively even between intervention and comparison, which is a paramount concern. It should be

borne in mind that the difference-in-difference analysis that will be performed as part of midline and endline reporting will effectively adjust for differences in baseline levels on key outcome variables, provided that the assumption of parallel paths (of intervention vis-à-vis comparison) holds true.

Panel attrition through out-migration:

It is assumed that at least some of the targeted areas may currently be experiencing in- or out-migration as a result of recent or ongoing conflict. The design of the sample takes into account the presence of a large proportion of displaced households, which may return to their locations of origin during the life of the project. If the proportion of displaced households exceeds the anticipated attrition rate embedded in the sample size calculation, the project's ability to assess impact will be compromised.

High levels of out-migration pose a threat to the longitudinal panel design of the sample. Migration of cohort girls threatens to remove a significant number of girls from the sample between the start of the study and its end. Replacements can be made to the longitudinal sample (from one wave to the next), but cross-sectional comparisons among heterogeneous populations of girls are less valid than comparisons of the same girls over time.

Exclusion of girls behind grade level in sample design:

The sampling approach outlined earlier in this section has specific criteria for determining the eligibility of cohort girls: to be included in the sample, a cohort girl must be aged 9-11 years at the baseline, and either be out-of-school or enrolled in grades 4 through 6. As we discuss in greater detail when analyzing transition rates in Section 4.5, this sampling strategy effectively excludes girls who have fallen behind their expected grade level. For instance, girls aged 9 years who are in grades 2 or 3 are excluded from the cohort sample; at the same time, OOS girls who would have been enrolled in these lower grades are included. The result is that transition rates among younger girls – primarily age 9 and 10 – are underestimated by the cohort sample.

For the purposes of tracking transition rates over time, the sampling strategy will not produce any obvious bias, because the same girls are tracked over time. If and when cohort girls cannot be located in future evaluation waves, their replacements should be selected with caution, by selecting a replacement girl of the same age and with the same sampling criteria applied. Specifically, during the midline (one year after the baseline), replacement girls should be the same age as the cohort girl would be at midline, and should either be out-of-school or in grades 5 to 7. This selection process will ensure that the unique sample characteristics observed during the baseline are maintained throughout the project's life.

We also recommend that the midline evaluation consider adjusting transition benchmarks for the 9-year old cohort (who will be 10 years old at midline). Transition benchmarks were calculated among a broader sample of respondents than the cohort girls, including girls who had fallen behind their expected grade level – i.e. girls aged 9 or 10 years who were in grade 3 at the baseline. As a result, benchmark transition rates for these younger cohorts were inflated somewhat: by our calculations, benchmark transition for the 10-year old group was inflated by 1.9 percentage points, from 64.7 percent to 66.6 percent.⁴³ The midline evaluation should consider adjusting the benchmark transition rates by limiting the benchmark sample to those girls aged 9-11 years who would have been eligible for inclusion in the tracked cohort, to ensure

⁴³ The effect on benchmark transition rates is starkest among 9-year old girls. However, the 9-year old benchmark is not used for comparison at the midline or endline, so adjustment is unnecessary.

like-for-like comparisons at midline and endline; benchmark rates among girls 12-16 years are unaffected by this discussion and would not be affected by adjustment.

Qualitative data that is often uninformative:

The evaluation invested considerable resources into the collection of qualitative data, conducting 40 FGDs and 40 KIIs among a range of stakeholders and target groups. In some cases, however, the quality of the qualitative data collected was poor, providing limited insight into both foundational questions qualitative data was intended to answer and ad hoc questions that arose as a result of unusual or unexpected quantitative findings.

Despite uneven quality and depth, the qualitative data still provide useful insight in many of the sections of this report. However, it will be important to improve the overall quality of qualitative data collection in future evaluation waves, and to target the data collection more effectively. We recommend two complementary strategies to achieve these goals. First, the qualitative tools and set of target populations should undergo extensive revision prior to the start of the midline, including feedback from the FM and Save the Children. The goal of these revisions should be to identify areas of interest – which include, but are not limited to, many issue areas noted in this report – for targeted questioning during qualitative interviews. The target populations should also be revisited to ensure coverage of all relevant groups, especially girls with disabilities. Second, the evaluation team should consider a staggered approach to fieldwork during the midline, with quantitative data collection first and qualitative data collection following after the initial quantitative analysis has been completed. Alternatively, fieldwork could be conducted in waves, such that data collection is completed in approximately half of schools, followed by a brief lull to allow initial analysis, which will guide revisions to the qualitative tools for the remainder of the fieldwork. These strategies will ensure that the qualitative data collected is as informative as possible.

Possible contamination of comparison schools:

It is also possible that, due to the high level of migration in the areas of the intervention, girls from intervention schools will end up joining one of the comparison schools before they receive the intervention. The household survey data would indicate if such migration has occurred. This can then be accounted for in the regression models.

Challenges in the field

Sampling adjustments:

There was no need to adjust the sample subsequent to the start of fieldwork.

Fieldwork disruptions and other general challenges:

- Villagers were not always receptive of enumerators and their work. In Haut-Katanga and Lualaba, inhabitants of intervention villages did not always trust Forcier personnel when they explained that they had come on behalf of WVI. Locals claimed that WVI had promised them certain activities and programs that they had yet to see materialize. Secondly, in control villages, levels of awareness of WVI and SCI activities among inhabitants was low, as activities have not been planned in these villages. It was therefore more difficult to gain the trust and acquire the consent of respondents in control villages. Many more of the interviewees in these villages refused to give a phone number to the enumerator, which will pose a challenge for the mid-line survey.

- At Don Bosco and other AEP schools, students tend to live at school even during summer vacation. Forcier was therefore unable to conduct household interviews for those clusters.
- Additionally, although enumerators were in most cases able to easily identify a sufficient number of cohort girls in each village, they did at times face difficulties identifying enough girls in rural areas because girls and their families had often left the village to go on vacation during the summer break. In these cases, enumerators visited nearby villages in an attempt to identify girls who attend the same target school. In all cases, enumerators were able to find students in neighboring villages, as it is quite rare in rural areas for each village to have its own school.
- In the beginning of fieldwork, enumerators also had difficulties identifying a sufficient number of benchmark girls to interview. According to the proposed methodology, 12-16 year-old girls were to be interviewed in households in which a 9-11 year old had already been interviewed, as the household information would remain the same. However, of the 22 households in which cohort girls were interviewed per intervention village, enumerators were rarely able to find ten in which a benchmark girl could also be found. Therefore, enumerators were forced to search for benchmark girls in other households, outside the original 22 households in which cohort girls were interviewed. As a result, for a substantial portion of interviewed benchmark girls, there is little associated household information as heads of household and tutors were only interviewed in the 22 original cohort households.
- Focus group participants were provided with a small incentive of \$2 per participant to ensure their motivation and enthusiastic participation. Nonetheless, several focus groups were not very informative, and to some extent this was attributed to respondents who seemed poorly motivated and generally unwilling to participate or to elaborate on their responses. Focus groups with girls and boys were also challenging because many of the children had a difficult time expressing clear and substantive thoughts in response to the facilitator's questions.
- Additionally, there were a disproportionate number of cohort girls who were enrolled in the fourth grade at the time of data collection, which resulted in lower representation of girls in the fifth and sixth grade. This was due to the age range (9-11) criteria for determining eligible girl respondents, to avoid overlap with the benchmark girl sample. As sixth graders are most typically 11 years old if they have not stayed behind in school, the eligibility criteria resulted in the exclusion of sixth graders who are a year or two behind in school. For fourth graders, respondents could be 9, 10, or 11 years old – in other words “on time,” a year behind, or even two years behind – and still be eligible to respond to the questionnaire.
- Prior to the start of fieldwork, the Evaluator was not aware of which schools were subject to Accelere activities and interventions. During the course of focus group discussions in some locations, it became clear that those schools had also received Accelere interventions. Qualitative data collected suggested that the Accelere intervention focused on training teachers, and this seemed to have a significant and positive impact of the quality of education in Accelere schools. The Evaluator recommends that the project produce a comprehensive list of these overlapping schools so that appropriate statistical adjustments can be made in the midline analysis.
- There were also a number of security issues enumerators experienced during data collection. When enumerators arrived in the territory of Kongolo, in the province of Tanganyika, civil society actors expressed frustration over the fact that enumerators from the territory of Kalemie (in the same province) had been recruited and sent to conduct the interviews rather than locals from Konogolo. Forcier had not recruited locals from Kongolo because it would have been logistically challenging to hold a training in the territory. To resolve the issue, Forcier hired two civil society

members to accompany the enumerators, although the civil society members themselves did not conduct any data collection.

3. Key Characteristics of Baseline samples

3.1 Project beneficiaries

REALISE defines marginalized girls as those who face demand-side challenges to improvement in learning and transition outcomes, including extreme poverty, pastoralism, displacement, being over age for their grade, a high degree of exposure to violence/conflict, orphan status, disability, and having an illiterate mother. Marginalized girls may also face limited provision of secondary education, poor infrastructure, limited access to qualified teachers, lack of remedial education for pastoralist children, and limited capacity by school officials to address absenteeism, dropout, and poor learning outcomes. The analysis to follow provides sample breakdowns by province, grade, age, and disability, and subsequently provides a breakdown by girls' characteristics and barriers associated with educational marginalisation.

3.2 Representativeness of the learning and transition samples across regions, age groups, grades, disability status and sex of the beneficiaries

The tables in this section provide key demographic information of the evaluation sample. The table below presents the evaluation sample disaggregated by province. In addition to these intervention and comparison cohort groups are totals for the number of girls who received the benchmark survey in the column "Benchmark HH." The total girls in this column include households with cohort and benchmark girls as well as households with only benchmark girls who completed the benchmark survey within the household survey. The column titled "Benchmark LA Only" presents the total benchmark girls who only completed the learning assessment. In the final column of the table, titled "AEP", the total number of surveyed girls who were enrolled in accelerated education programs is presented. The girls enrolled in accelerated education only completed the learning assessment, because their families were not available since they attended boarding schools. In total, enumerators visited 5 provinces of the Democratic Republic of Congo and surveyed a total of 4,040 girls, 1,194 of whom were in intervention areas and 1,244 of whom were in comparison areas. While there are some discrepancies between the total girls interviewed in intervention schools and comparison schools, there were no statistically significant differences observed between intervention and comparison schools in each of the provinces visited.

Table 4: Evaluation sample breakdown (by province)

	Intervention	Comparison	Benchmark HH	Benchmark LA Only	AEP
Sample breakdown (Girls)					
Haut Katanga	243 (20.4%)	241 (19.4%)	169 (20.3%)	156 (24.3%)	0 (0%)
Lualaba	258 (21.6%)	260 (20.9%)	153 (18.3%)	148 (23.1%)	0 (0%)
Lomami	116 (9.7%)	132 (10.6%)	96 (11.5%)	34 (5.3%)	0 (0%)
Kasai Oriental	280 (23.5%)	323 (26%)	218 (26.1%)	169 (26.4%)	37 (28.9%)
Tanganyika	297 (24.9%)	288 (23.2%)	198 (23.7%)	134 (20.9%)	91 (71.1%)
Girls (sample size)	1194 (100%)	1244 (100%)	834 (100%)	641 (100%)	128 (100%)

The table below presents the evaluation sample by grade and enrolment status for cohort and benchmark girls. The sample is balanced with no statistically significant differences between intervention and comparison schools by grade and enrolment status among both cohort and benchmark girls. Among the

cohort girls, there were 1,856 girls who are enrolled in fourth through sixth grades, 582 girls who are out of school, and there were only 128 girls who were enrolled in accelerated education.

Table 5: Evaluation sample breakdown (by grade)

	Intervention	Comparison	Benchmark HH	Benchmark LA Only	AEP
Sample breakdown (Girls)					
Primary 1	0 (0%)	0 (0%)	10 (1.2%)	0 (0%)	0 (0%)
Primary 2	0 (0%)	0 (0%)	1 (0.1%)	0 (0%)	0 (0%)
Primary 3	0 (0%)	0 (0%)	8 (1%)	0 (0%)	0 (0%)
Primary 4	532 (44.6%)	588 (47.3%)	22 (2.6%)	1 (0.2%)	0 (0%)
Primary 5	298 (25%)	274 (22%)	44 (5.3%)	0 (0%)	0 (0%)
Primary 6	95 (8%)	69 (5.5%)	75 (9%)	0 (0%)	0 (0%)
Secondary 1	0 (0%)	0 (0%)	259 (31.1%)	260 (40.6%)	0 (0%)
Secondary 2	0 (0%)	0 (0%)	116 (13.9%)	129 (20.1%)	0 (0%)
Secondary 3	0 (0%)	0 (0%)	72 (8.6%)	90 (14%)	0 (0%)
Secondary 4	0 (0%)	0 (0%)	12 (1.4%)	0 (0%)	0 (0%)
Secondary 5	0 (0%)	0 (0%)	2 (0.2%)	0 (0%)	0 (0%)
Secondary 6	0 (0%)	0 (0%)	2 (0.2%)	0 (0%)	0 (0%)
AEP Level 1	0 (0%)	0 (0%)	0 (0%)	0 (0%)	80 (62.5%)
AEP Level 2	0 (0%)	0 (0%)	0 (0%)	0 (0%)	43 (33.6%)
AEP Level 3	0 (0%)	0 (0%)	4 (0.5%)	0 (0%)	5 (3.9%)
OOS	269 (22.5%)	313 (25.2%)	207 (24.8%)	161 (25.1%)	0 (0%)
Girls (sample size)	1194 (100%)	1244 (100%)	834 (100%)	641 (100%)	128 (100%)

The age distribution of the evaluation sample is presented below. As dictated by the evaluation’s sample design, all cohort girls surveyed are between the ages of 9 and 11 and all benchmark girls, who were only sampled in intervention areas, are between 12 and 16 years of age. No statistically significant difference between the ages of intervention and comparison girls is observed.

Table 6: Evaluation sample breakdown (by age)

	Intervention	Comparison	Benchmark HH	Benchmark LA Only	AEP
Sample breakdown (Girls)					
Aged 6-8	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Aged 9-11	1194 (100%)	1244 (100%)	0 (0%)	1 (0.2%)	80 (62.5%)
Aged 12-13	0 (0%)	0 (0%)	257 (30.8%)	171 (26.7%)	17

					(13.3%)
Aged 14-15	0 (0%)	0 (0%)	385 (46.2%)	319 (49.8%)	26 (20.3%)
Aged 16-17	0 (0%)	0 (0%)	187 (22.4%)	150 (23.4%)	5 (3.9%)
Aged 18-19	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Aged 20+	0 (0%)	0 (0%)	5 (0.6%)	0 (0%)	0 (0%)
Girls (sample size)	1194 (100%)	1244 (100%)	834 (100%)	641 (100%)	128 (100%)

The table below presents the evaluation sample by disability and type of disability of the cohort girls. The table presents the proportion of girls whose primary caregivers said that their girls had “a little difficulty” or a “a lot of difficulty” with an impairment. As shown in the table, vision, hearing, mobility self-care, and communication impairments were relatively rare among cohort girls. The most common impairment that primary caregivers indicated that cohort girls have were mental health impairments. Primary caregivers said that these girls experienced anxiety or depression daily, weekly, or monthly. Primary caregivers of girls from comparison areas were more likely to indicate that their girls had cognitive⁴⁴ and communication impairments⁴⁵ and were more likely to have an impairment at all.⁴⁶

Table 7: Evaluation sample breakdown (by disability)

Sample breakdown (Girls)	Intervention (Baseline)	Comparison (Baseline)	Household Survey and Girls School survey – Washington Group and child functioning questions
Girls with disability (% overall)	406 (34%)	461 (37.1%)	
<i>Provide data per impairment</i>			
Vision impairment	8 (0.7%)	6 (0.5%)	WG_CF2, WG_CF3
Hearing impairment	4 (0.3%)	7 (0.6%)	WG_CF5, WG_CF6
Mobility impairment	8 (0.7%)	14 (1.1%)	WG_CF8, WG_CF9, WG_CF10, WG_CF11, WG_CF12, WG_CF13
Cognitive impairment	92 (7.7%)	130 (10.5%)	WG_CF17, WG_CF18, WG_CF19, WG_CF21
Self-care impairment	25 (2.1%)	41 (3.3%)	WG_CF14
Communication impairment	25 (2.1%)	49 (3.9%)	WG_CF15, WG_CF16, WG_CF22
Mental health impairment	332 (27.8%)	342 (27.5%)	WG_CF20, WG_CF23, WG_CF24
Total	1194 (100%)	1244 (100%)	

⁴⁴ P-value = 0.001, logistic regression

⁴⁵ P-value = 0.005, logistic regression

⁴⁶ P-value = 0.038, logistic regression

The Washington Group Set of Questions was used to identify girls with each of the above impairments. The set of questions were designed by the Washington Group on Disability Statistics to “provide comparable data across cross-nationally for populations living in a variety of cultures with varying economic resources.”⁴⁷

The primary caregivers’ answers to the 24 questions asked about their girls are provided in the table below by intervention and comparison groups. A girl meets any particular disability indicator below if the primary caregiver answers in the affirmative (i.e. she wears glasses, uses a hearing aid, or uses equipment/receives assistance walking), if the primary caregiver says the girl has “a lot of difficulty” or “cannot do at all” with the indicated task, or the primary caregiver says that the girl experiences the indicated feeling (i.e. she seems very anxious or very sad) “Daily,” “Weekly,” or “Monthly”. Primary caregivers said that their girls struggled with both anxiety and sadness, with anxiety affecting marginally more girls than sadness (23.0% vs 18.7%).

Table 8: Evaluation sample breakdown (by Washington Group of disability questions)

Disability indicator	Intervention		Comparison		Source
	n	%	n	%	
Wears glasses	10	0.8%	11	0.9%	WG_CF1
Difficulty seeing even wearing glasses	3	0.3%	0	0.0%	WG_CF2
Difficulty seeing	5	0.4%	6	0.5%	WG_CF3
Uses a hearing aid	4	0.3%	6	0.5%	WG_CF4
Difficulty hearing sounds like peoples’ voices or music even with hearing aid	0	0.0%	0	0.0%	WG_CF5
Difficulty hearing sounds like peoples’ voices or music	4	0.3%	7	0.6%	WG_CF6
Uses any equipment or receive assistance walking	2	0.2%	2	0.2%	WG_CF7
Without equipment or assistance, difficulty walking 100 meters on level ground	0	0.0%	0	0.0%	WG_CF8
Without her equipment or assistance, has difficulty walking 500 meters on level ground	0	0.0%	0	0.0%	WG_CF9
With her equipment or assistance, has difficulty walking 100 meters on level ground	0	0.0%	0	0.0%	WG_CF10

⁴⁷ “Extended Set of Question on Functioning,” *Washington Group on Disability Statistics*, 2018, <http://www.washingtongroup-disability.com/washington-group-question-sets/extended-set-of-disability-questions/>

With her equipment or assistance, has difficulty walking 500 meters on level ground	0	0.0%	0	0.0%	WG_CF11
Has difficulty walking 100 meters on level ground	7	0.6%	9	0.7%	WG_CF12
Has difficulty walking 500 meters on level ground]	6	0.5%	10	0.8%	WG_CF13
Has difficulty with self-care such as feeding or dressing herself?	25	2.1%	41	3.3%	WG_CF14
Difficulty being understood by people inside of household	1	0.1%	6	0.5%	WG_CF15
Difficulty being understood by people outside of this household	11	0.9%	8	0.6%	WG_CF16
Has difficulty learning things	31	2.6%	38	3.1%	WG_CF17
Has difficulty remembering things	44	3.7%	47	3.8%	WG_CF18
Has difficulty concentrating on an activity that she enjoys doing	26	2.2%	37	3.0%	WG_CF19
Has difficulty accepting changes in her routine	22	1.8%	51	4.1%	WG_CF20
Has difficulty controlling her behaviour	20	1.7%	53	4.3%	WG_CF21
Has difficulty making friends	16	1.3%	40	3.2%	WG_CF22
Seems very anxious, nervous or worried	279	23.4%	282	22.7%	WG_CF23
Seems very sad or depressed?	225	18.8%	231	18.6%	WG_CF24
Total girls	1194	100.0%	1244	100.0%	

Disabilities were generally balanced between the intervention and comparison groups, however girls from comparison school areas were significantly more likely to have difficulty accepting changes in routine,⁴⁸ controlling their behaviour,⁴⁹ and making friends.⁵⁰

⁴⁸ P-value = 0.001, logistic regression

⁴⁹ P-value = 0.000, logistic regression

⁵⁰ P-value = 0.003, logistic regression

3.3 Educational Marginalisation

The proportions of cohort girls who have characteristics that relate to educational marginalisation are shown below in the table below. The families of cohort girls most commonly met the criteria for indicators of poverty. Over two-thirds of households (67.2%) reported that their home uses poor roofing material such as mud, thatch/grass, wood, tin/iron sheets, asbestos, cardboard, tarp/plastic, banana leaves, or papyrus. Over one-third of households (33.2%) said that they are unable to meet basic needs.

Focus group discussion respondents affirmed that poverty is a key barrier to girls' access to education: "First of all, it is difficult to feed the family, so how will we have the means to send our children to school?"⁵¹ The prohibitive cost of schooling for poor families means that families must choose which of their children to send to school. A respondent indicated that older children received priority, "In case boys near the end of secondary school, you can sacrifice the education of his younger sisters that will follow. Those who are already finish their studies can educate their younger brothers and sisters," and another indicated that children in the community take turns going to school with their siblings, "[Because of a lack of means], we have already seen in our community situations in which in one year a child goes to school, and in the next year, it will be the turn of another. When we get jobs, and there is money, then all of them will study."⁵²

Table 9: Girls' characteristics

	Intervention (Baseline)	Comparison (Baseline)	Source (Household and Girls School survey)
Sample breakdown (Girls)			
Family (%)			
Single orphans	84 (7%)	90 (7.2%)	PCG_11g, PCG_13g
Double orphans	8 (0.7%)	10 (0.8%)	PCG_11g, PCG_13g
Living without both parents (%)	67 (5.6%)	69 (5.5%)	PCG_10g PCG_12g
Living in female headed household (%)	179 (15%)	187 (15%)	hoh2
Married (%)	4 (0.3%)	4 (0.3%)	PCG_22g
Fairly or very unsafe travel to schools in the area	16 (1.3%)	27 (2.2%)	PCG_9
High chore burden (more than 4 hours)	38 (3.2%)	51 (4.1%)	PCG_26g_1
Girl has no choice in whether to attend school	1015 (85%)	974 (78.3%)	H2
Mothers (%)			
Under 18	4 (0.3%)	3 (0.2%)	PCG_23g
Under 16	4 (0.3%)	3 (0.2%)	PCG_23g
Poor households (%)			

⁵¹ Focus Group, Parents, Tanganyika, Kifungo

⁵² Focus Group, Credit and Savings Group, Kasai-Oriental, Kalenda Mudishi.

Household doesn't own land for themselves	368 (30.8%)	296 (23.8%)	PCG_11econ
Home uses poor roofing material*	807 (67.6%)	842 (67.7%)	PCG_2econ
Household unable to meet basic needs	373 (31.2%)	426 (34.2%)	PCG_5econb
Gone to sleep hungry for many days in past year	278 (23.3%)	334 (26.8%)	PCG_7econ
Parental education			
HoH has no education (%)	95 (8%)	96 (7.7%)	hoh6
Primary caregiver has no education (%)	258 (21.6%)	258 (20.7%)	PCG_6
Total girls	1194 (100%)	1244 (100%)	

While the sample was balanced with regard to nearly all of these indicators of education marginalisation, there were significantly more households of intervention girls with households that had no land,⁵³ and more intervention girls felt that they had no choice in whether they will attend school.⁵⁴ Significantly more comparison girls had caregivers who said that travel to school was unsafe.⁵⁵

Barriers

The table below presents the data on in-school girls in the sample who face potential barriers to learning and transition in the domains of safety, parental/caregiver support, attendance, school facilities, and teachers across comparison and intervention areas. Teaching quality barriers were among the most prevalent: of the overall sample, 64.5% said that the teacher punishes/disciplines when students get lessons wrong, and 64.6% of girls said that they witnessed physical punishment last week. Girls participating in focus groups discussions affirmed the use of punishment to manage the classroom, “When you arrive late, you will be forced to go clean the toilet or be severely punished,”⁵⁶ or to punish students when they do not understand the lesson, “If a student does not understand something that the teacher explains, the student is exposed to punishments to correct her fault.”⁵⁷

Language difficulties were cited by the majority of households: 84.3% of households indicated that the language of instruction at their girls’ schools were different from the girls’ mother tongue, and 30.6% of girls do not speak the language of instruction. Key informant interviews with teachers also revealed how teachers struggled to teach students who had diverse mother tongues: “Some children who come to school have difficulties speaking Swahili and speak in their mother tongues that we do not know. We try to use gestures that can help us to understand the child and after the first month the child can adapt.”

Table 10: Potential barriers to learning and transition

	Intervention (Baseline)	Comparison (Baseline)	Source
Sample breakdown (Girls)			

⁵³ P-value = 0.000, logistic regression

⁵⁴ P-value = 0.000, logistic regression.

⁵⁵ P-value = 0.045, logistic regression

⁵⁶ Focus Group, Girls, Tanganyika, Katanga.

⁵⁷ Focus Group, Girls, Tanganyika, Katanga.

Home – community			
Safety:			
Doesn't feel safe travelling to/from school	919 (98.4%)	902 (96.2%)	safetravel_school
Girl travels more than 30 minutes to school	57 (6.1%)	41 (4.4%)	CS_W1s
Parental/caregiver support:			
Difficult to afford for girl to go to school	682 (73%)	680 (72.5%)	PCG_7enr
Doesn't get support to stay in school and do well	63 (6.7%)	65 (6.9%)	H17
Family decides for girl whether she will attend school	554 (59.3%)	597 (63.6%)	H22, H23
Parent has never visited school	126 (13.5%)	172 (18.3%)	PCG_TQC1
School level			
Attendance:			
Attends school half the time	38 (4.1%)	35 (3.7%)	PCG_6enr
Attends school less than half time	6 (0.6%)	13 (1.4%)	PCG_6enr
Doesn't feel safe at school	24 (2.6%)	34 (3.6%)	safe_school
School facilities:			
No seats for all students	253 (27.1%)	289 (30.8%)	CS_W5s
Doesn't use drinking water facilities	37 (4%)	26 (2.8%)	use_water
Doesn't use toilet at school	115 (12.3%)	149 (15.9%)	use_toilet
No computers in class	898 (96.1%)	906 (96.6%)	CSG_2s
Cannot use books or other learning materials at school	239 (25.6%)	242 (25.8%)	CS_W2s
Teachers:			
Disagrees teachers make them feel welcome	44 (4.7%)	37 (3.9%)	tq_1
Agrees teachers treat boys and girls differently in the classroom	586 (62.7%)	512 (54.6%)	tq_2
Agrees teachers often absent from class	355 (38%)	352 (37.5%)	tq_11
Afraid of teacher	414 (44.3%)	398 (42.4%)	tq_9
Uncomfortable asking teachers question	92 (9.9%)	99 (10.6%)	tq_7
Teacher punishes/disciplines when students get lesson wrong	590 (63.2%)	617 (65.8%)	tq_42
Physical punishment witnessed last week	613 (65.6%)	597 (63.6%)	tq_49
Caregiver rates quality of teaching as poor	78 (8.4%)	72 (7.7%)	TQ_3h
Language difficulties:			
Lol different from mother tongue (%)	768 (82.2%)	821 (87.5%)	PCG_2enr, PCG_1enr
Girl doesn't speak Lol (%)	273 (29.2%)	304 (32.4%)	PCG_3enr
Total girls	934 (100%)	938 (100%)	TQ_3h

There were a number of indicators in which statistically significant differences between intervention and comparison schools were observed. Significantly more comparison girls did not feel safe traveling to school,⁵⁸ had a mother tongue different from the language of instruction,⁵⁹ did not speak the language of instruction,⁶⁰ had parents who never visited the school,⁶¹ and attended schools that did not have sufficient seats for all students, while significantly more intervention girls said that their teachers treat boys and girls differently in the classroom.⁶²

Girls with disabilities appear to experience unique set of barriers to learning and transition as shown in the table below. Significant correlations between a barrier and a disability are marked in the table with a footnote indicating the P-value of the relationship, positive correlations are marked with red, and negative correlations are marked in blue. The small sub-sample for some of the impairments such as vision, hearing, and mobility limit the ability to make strong conclusions on the basis of statistical analysis, but a few patterns emerge. First, girls with impairments tend disagree significantly more often that teachers make them feel welcome as was the case among girls with vision, mobility, cognitive, self-care, and communication impairments. Second, in addition to not feeling welcomed by the teacher in class, girls with cognitive impairments were uncomfortable asking teachers questions, making it more difficult for these students to learn, and were more likely to be in schools that had insufficient seats for all students. Third, compared with girls without mental health impairments, girls with mental health impairments tend not to receive support from either their parents or their teachers to stay in school with 8.9% saying that they do not receive support to stay in school and do well, and 64.6% saying that teachers treat girls and boys differently in the classroom. Moreover, slightly less than half say they are afraid of the teacher (47.5%) and that their teacher is often absent from class (42.6%).

Table 11: Potential barriers to learning and transition by disabilities

	Vision impairment	Hearing impairment	Mobility impairment	Cognitive impairment	Self-care impairment	Communication impairment	Mental health impairment
Sample breakdown (Girls)							
Home – community							
Safety:							
Doesn't feel safe travelling to/from school	0 (0%)	0 (0%)	0 (0%)	4 (2.8%)	0 (0%)	3 (5.8%)	14 (2.7%)
Girl travels more than 30 minutes to school	0 (0%)	0 (0%)	0 (0%)	9 (6.3%)	0 (0%)	1 (1.9%)	32 (6.2%)
Parental/caregiver support:							
Difficult to afford for girl to go to school	8 (66.7%)	5 (62.5%)	11 (68.8%)	96 (67.1%)	30 (88.2%)	27 (51.9%)	375 (73%)
Doesn't get support to stay in school and do well	1 (8.3%)	0 (0%)	1 (6.3%)	12 (8.4%)	3 (8.8%)	2 (3.8%)	46 (8.9%)

⁵⁸ P-value = 0.002, logistic regression

⁵⁹ P-value = 0.000, logistic regression

⁶⁰ P-value = 0.002, logistic regression

⁶¹ P-value = 0.002, logistic regression

⁶² P-value = 0.002, logistic regression

Family decides for girl whether she will attend school	7 (58.3%)	8 (100%)	13 (81.3%)	88 (61.5%)	33 (97.1%)	32 (61.5%)	305 (59.3%)
Parent has never visited school	1 (8.3%)	0 (0%)	2 (12.5%)	27 (18.9%)	8 (23.5%)	6 (11.5%)	79 (15.4%)
School level							
Attendance:							
Attends school half the time	0 (0%)	0 (0%)	0 (0%)	9 (6.3%)	1 (2.9%)	1 (1.9%)	22 (4.3%)
Attends school less than half time	0 (0%)	0 (0%)	0 (0%)	2 (1.4%)	3 (8.8%)	0 (0%)	5 (1%)
Doesn't feel safe at school	1 (8.3%)	0 (0%)	0 (0%)	10 (7%)	2 (5.9%)	0 (0%)	24 (4.7%)
School facilities:							
No seats for all students	4 (33.3%)	2 (25%)	4 (25%)	63 (44.1%)	13 (38.2%)	16 (30.8%)	136 (26.5%)
Doesn't use drinking water facilities	0 (0%)	0 (0%)	0 (0%)	5 (3.5%)	1 (2.9%)	2 (3.8%)	24 (4.7%)
Doesn't use toilet at school	3 (25%)	0 (0%)	4 (25%)	26 (18.2%)	5 (14.7%)	11 (21.2%)	55 (10.7%)
No computers in class	12 (100%)	7 (87.5%)	15 (93.8%)	131 (91.6%)	33 (97.1%)	49 (94.2%)	487 (94.7%)
Cannot use books or other learning materials at school	5 (41.7%)	1 (12.5%)	8 (50%)	45 (31.5%)	9 (26.5%)	19 (36.5%)	138 (26.8%)
Teachers:							
Disagrees teachers make them feel welcome	3 (25%)	0 (0%)	5 (31.3%)	11 (7.7%)	7 (20.6%)	7 (13.5%)	29 (5.6%)
Agrees teachers treat boys and girls differently in the classroom	5 (41.7%)	8 (100%)	9 (56.3%)	78 (54.5%)	15 (44.1%)	39 (75%)	332 (64.6%)
Agrees teachers often absent from class	4 (33.3%)	3 (37.5%)	7 (43.8%)	57 (39.9%)	11 (32.4%)	18 (34.6%)	219 (42.6%)
Afraid of teacher	7 (58.3%)	2 (25%)	8 (50%)	68 (47.6%)	18 (52.9%)	21 (40.4%)	244 (47.5%)
Uncomfortable asking teachers question	2 (16.7%)	2 (25%)	3 (18.8%)	32 (22.4%)	12 (35.3%)	2 (3.8%)	47 (9.1%)
Teacher punishes/disciplines when students get lesson wrong	8 (66.7%)	6 (75%)	10 (62.5%)	91 (63.6%)	20 (58.8%)	37 (71.2%)	333 (64.8%)

Physical punishment witnessed last week	9 (75%)	6 (75%)	10 (62.5%)	97 (67.8%)	27 (79.4%)	29 (55.8%)	330 (64.2%)
Caregiver rates quality of teaching as poor	1 (8.3%)	2 (25%)	2 (12.5%)	16 (11.2%)	6 (17.6%)	8 (15.4%)	43 (8.4%)
Language difficulties:							
LoI different from mother tongue (%)	10 (83.3%)	8 (100%)	13 (81.3%)	116 (81.1%)	34 (100%)	39 (75%)	407 (79.2%)
Girl doesn't speak LoI (%)	3 (25%)	7 (87.5%)	5 (31.3%)	52 (36.4%)	18 (52.9%)	17 (32.7%)	146 (28.4%)
Total girls	12 (100%)	8 (100%)	16 (100%)	143 (100%)	34 (100%)	52 (100%)	514 (100%)

3.4 Intersection between key characteristics and barriers

The table below presents the intersection between prevalent key characteristics of in-school, cohort girls and their barriers to education. The table presents the girls who met the criteria for both the characteristic and the barrier as a cell percentage of the grand total. The most common key characteristics, presented as columns in the table, relate to poverty and the girls' sense of agency. The most frequently cited barriers, presented as rows in the table, relate to teaching quality, lack of resources, and language barriers. Statistically significant correlations between characteristics and barriers are marked with a footnote.

As shown in the table, there is substantial overlap of key characteristics and barriers that may prevent girls from accessing education, particularly between poverty and teacher quality. Households with poor roofing materials, that are unable to meet basic needs, do not own land, and in which members often go to sleep hungry in the past year also frequently have girls who have observed physical punishment in the classroom recently and have a language of instruction that

Household poverty indicators intersect with challenges in affording for the girl to go to school, as would be expected. Households with poor roofing materials, an inability to meet basic needs, and who have to sleep hungry frequently, are significantly more likely to say that it is difficult to afford for the girl to go to school.

Table 12: Examples of barriers to education by characteristic

Characteristics						
Barriers:	Girl has no choice in whether to attend school	Home uses poor roofing material	Household unable to meet basic needs	Household doesn't own land for themselves	Gone to sleep hungry for many days in past year	Total
No computers in class	1460 (78%)	1204 (64.3%)	505 (27%)	535 (28.6%)	416 (22.2%)	1804 (96.4%)

Lol different from mother tongue	1275 (68.1%)	1026 (54.8%) ⁶³	453 (24.2%) ⁶⁴	460 (24.6%)	371 (19.8%)	1584 (84.6%)
Difficult to afford for girl to go to school	1116 (59.6%)	971 (51.9%) ⁶⁵	462 (24.7%) ⁶⁶	424 (22.6%)	381 (20.4%) ⁶⁷	1356 (72.4%)
Physical punishment witnessed last week	1031 (55.1%)	816 (43.6%)	313 (16.7%) ⁶⁸	335 (17.9%)	323 (17.3%) ⁶⁹	1210 (64.6%)
Total	1512 (80.8%)	1252 (66.9%)	522 (27.9%)	553 (29.5%)	431 (23%)	1872 (100%)

3.5 Appropriateness of project activities to the characteristics and barriers identified

REALISE project activities address four barriers faced by girls in accessing quality education: 1) high school costs and low family income, 2) teacher experience, 3) families and communities not prioritizing girls' education, and 4) conflict as a potential disruptor. The first three barriers listed correspond with prevalent household characteristics and barriers identified in the survey data. The evidence for conflict as a disruptor is present in the data, although less common than other barriers.

As mentioned above, indicators of household poverty such as poor roofing material, inability to meet basic needs, lack of land ownership, and often going to sleep hungry are among the most prevalent indicators. Moreover, these household poverty indicators are significantly correlated with difficulty in affording the cost of sending girls to school, affirming the Theory of Change's proposed link between household poverty and school enrolment.

The Theory of Change's identification of teacher experience/quality as a primary barrier is consistent with findings within the survey data. Girls are uncomfortable in asking questions in class, they are taught in a language different from that of their mother tongue, and physical punishment remains routine.

The prioritisation of boys' education above that of girls' education is borne out in the enrolment rates of boys vis-à-vis that of girls. Survey teams recorded the enrolment status of *all* the girls and boys in households with at least one cohort girl. Table 13: Enrolment rates of household boys and girls presents the findings on their enrolment rates as estimated based on the household survey household roster data, and shows that boys have a significantly higher rate of enrolment than girls.

⁶³ Coefficient = -.0614367, P-value = 0.014, linear regression

⁶⁴ Coefficient = .0552938, P-value = 0.033, linear regression

⁶⁵ Coefficient = .1530605, P-value = 0.000, linear regression

⁶⁶ Coefficient = .227723, P-value = 0.000, linear regression

⁶⁷ Coefficient = .1726955, P-value = 0.000, linear regression

⁶⁸ Coefficient = -.1085167, P-value = 0.001, linear regression

⁶⁹ Coefficient = .098424, P-value = 0.012, linear regression

Table 13: Enrolment rates of household boys and girls

Enrolment	Rate	Std. Err.	N	[95% Conf. Interval]	
Boys' enrolment	81.1%	1.0%	3824	79.1%	83.0%
Girls' enrolment	76.3%	0.7%	1615	74.9%	77.6%

Conflict was not found to be a common problem among the cohort girls' households, but there is nevertheless evidence that conflict has been a clear and present danger to a substantial number of households in the sample. Of all cohort girls' households, 10.4% said that in their area there is conflict and open fighting, and 4.6% said that they have been personally affected by the conflict. In addition to the violent threats present, the continuing political instability warrants preparation for disruption by conflict.

Given these barriers, project activities largely appear to be well-designed to address obstacles girls face in accessing education:

1. **High school costs and low family income:** Bursaries, provision of school supplies, and facilitated savings groups should help to lower the cost of schooling and increase family income.
2. **Teacher experience:** Investing in teacher professional development (TPD) approaches that will provide trainings on literacy and numeracy teaching methodologies, and accelerated learning methodologies should improve teachers' knowledge, skills, and lesson content. These interventions however do not directly address findings in the data which indicate that girls are uncomfortable with speaking up in class when they have a question and that both corporal punishment and linguistic barriers are commonplace. Folding in lessons on classroom management techniques and teaching in a multilingual context into professional development may help to address these issues.
3. **Families and communities not prioritizing girls' education:** By mobilising citizens in the community to advocate for and monitor education services through the Citizen Voice and Action approach, REALISE should be able to mitigate the de-prioritisation of girls' education relative to that of boys' education.
4. **Conflict as a potential disruptor:** In addition to REALISE's preparation of contingency plans to provide education in emergency interventions, teachers will be trained in psychological first aid and to work with children traumatised by violence and war which should help schools continue to provide access to education if conflict should break out and to meet the needs of conflict-affected students.

Besides the barriers presented in the Theory of Change, this round of evaluation identified a substantial proportion of girls (27.7%) struggling with mental health impairments, having feelings anxiety and/or depression daily, weekly, or monthly. There are no interventions currently targeting students with mental health impairments. However, there are mechanisms in the current intervention to support the students and participants who may be affected by anxiety and/or depression. These mechanisms would include working with teachers during professional development to raise awareness and learn to mitigate the effect of these problems on learning as well as working through safe spaces and clubs to provide communal and social support to girls.

Project's contribution:

The EE sample characteristics of the wider beneficiary population and target population correspond on the whole to the project's mapping and identification of beneficiary population and marginalized target population. The population in the 6 provinces is mainly rural and poor, and many live in zones that have been affected by recent conflict. The EE was unable to access Ituri due to conflict, where the project is supporting 7 AEP centres. Girls' enrolment rates are lower than boys, and a significant number have problems with the language of instruction.

The key barriers identified by the EE--high school costs and low family income, low level of teacher experience, families and communities not prioritizing girls' education, and conflict as a potential disruptor—correspond well with the barriers/restraining factors delineated in the project's Theory of Change: school costs are too high and household incomes too low to send girls to schools; families do not value girls education; low level of teacher experience or effective pedagogic skills, conflict disrupts schools and education, and challenges to child protection and child wellbeing threaten access to education and quality learning.

The project has designed its interventions to address these barriers. Therefore, the project does not plan to review its Theory of Change at this time

4. Key Outcome Findings

4.1 Learning Outcome

REALISE targets two primary learning outcomes: literacy and numeracy, as well as transition of in school girls from primary school to secondary school and transition of out of school girls to formal education institutions or accelerated learning programs. This section presents key findings on learning outcomes, with emphasis on the identification of learning gaps and barriers, along with the discovery of sub-populations that tend to have the lowest learning outcomes. The section begins with a brief summary of the learning tests used and the scoring methods for those examinations. For literacy and numeracy assessments, a list of subtasks administered is provided for reference. Score distributions are explored for floor effects, and aggregate scores are presented by grade and by intervention versus comparison group.

Assessment Design

As with other GEC projects, REALISE focuses on numeracy and literacy as core learning outcomes. The learning assessments will combine aspects of two different levels of assessments. Specifically, the literacy assessment will be for French literacy and will be based primarily on the Early Grade Reading Assessment (EGRA). All students will complete the full EGRA assessment, while subtasks from the Secondary Grade Reading Assessment (SeGRA) will be included for students depending on their age. Students who are 9-10 years old at the time of the baseline will complete a reading assessment that includes the full EGRA module and one subtask from SeGRA; students who are 11 years old, in contrast, will complete the full EGRA module and two subtasks from SeGRA. This approach is designed to guard against “ceiling effects” – the possibility that students will achieve perfect scores on the assessment, making it impossible to distinguish between different levels of high-achieving students and making it more difficult to identify the effect of the project on learning outcomes in later evaluation waves. By tailoring the assessment design by age, this design will reduce the likelihood of ceiling effects without requiring younger students to complete unrealistically difficult subtasks drawn from SeGRA/SeGMA.

The analysis of learning outcomes below will present comparable outcomes, meaning that scores for the second SeGRA and SeGMA subtasks will not be included in the calculation of average scores. The notable exception is that the second SeGRA and SeGMA subtasks will be used for establishing benchmark scores for learning. Thus, scores presented for the purpose of benchmarking in the Outcomes Spreadsheet will be calculated using the second SeGRA and SeGMA subtasks for girls aged 11 and older.

The project’s learning assessments were translated and adapted by the Evaluator in consultation with Save the Children, using assessments originally developed by NEFR for the GEC baseline in Mozambique. The assessments test the following general skills (full-text versions of the assessments are provided in Annex 7):

Numeracy

- EGMA Subtask 1: Number Identification
- EGMA Subtask 2: Quantity Discrimination
- EGMA Subtask 3: Missing Number
- EGMA Subtask 4: Addition (levels 1 and 2)
- EGMA Subtask 5: Subtraction (levels 1 and 2)

- EGMA Subtask 6: Word Problems
- SeGMA Subtask 1: Advanced multiplication and division, proportions (fractions, percentages), space and shape (geometry), and measurement (distance, length, area, capacity, money) presentation questions
- SeGMA Subtask 2: Algebra questions

Literacy

- EGRA Subtask 1: Letter Name Identification
- EGRA Subtask 2: Letter Sound Identification
- EGRA Subtask 3: Familiar Word Reading
- EGRA Subtask 4: Invented Word Reading
- EGRA Subtask 5: Oral Passage Reading
- EGRA Subtask 6: Reading Comprehension
- SeGRA Subtask 1: Longer, more complicated comprehension paragraph, with more analytical questions
- SeGRA Subtask 2: Longer, more complicated comprehension paragraph, with more inferential questions

Each subtask comprised a set of individual items, ranging from one to 25 per subtask. Forcier performed 100 pilot interviews in the commune of Selembao, in Kinshasa, from July 19 to July 22, 2018. Based on the results of the pilot, Save the Children and the Evaluator jointly revised the assessments. Particular care was taken to prevent ceiling and floor effects, adjusting content to reflect learning levels observed during the pilot and adding an easier letter identification subtask to mitigate potential floor effects in reading.

The scoring methodology ensured that each subtask was weighted equally in the final aggregate score. Specifically, each subtask was scored as the percentage of items correct out of the total number of items (hence ranging from 0 to 100). In keeping with FM guidance, the reading tasks that involved a word-per-minute (WPM) score were censored at a cap of 100 WPM, with individuals who scored above 100 WPM being assigned a score of 100 WPM. The result is that all subtasks were individually standardized to range from 0 to 100. The total score for the numeracy and literacy assessments was then generated by taking the average of the subtask scores for that assessment (with each subtask being given equal weight), presenting the total percentage score based on the averaged subtasks, ranging between 0 and 100. This procedure ensured that each subtask (and the associated skills) made an equal contribution to the final score for a given assessment, and that the final scores for each assessment have a comparable range from 0 to 100. For further details on assessment scoring and piloting, please see Annex 9.

Baseline Results

In reviewing the distributions of baseline scores, each score was first reviewed in terms of its reliability using Cronbach’s alpha, which tests for the degree of inter-item correlations among subtasks within each assessment. The results are summarized in the table below:

<i>Assessment</i>	<i>Literacy</i>	<i>Numeracy</i>
<i>Alpha</i>	0.85	0.87

Internal consistency

High

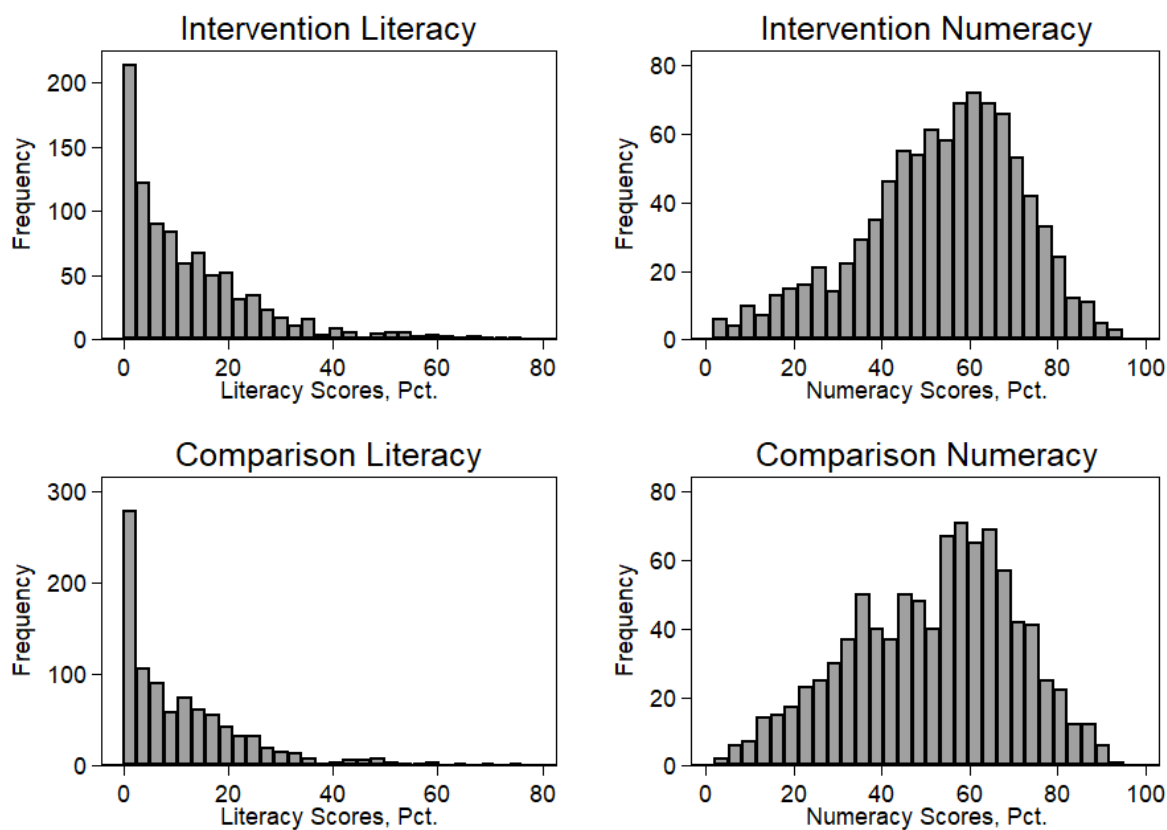
High

The Cronbach's alpha is about 0.8 for each of the two assessments, indicating that the level of internal consistency is high.

The panel of graphs below shows the distribution of literacy and numeracy scores for in-school cohort girls. The graphs on the panel are also separated out by intervention versus comparison, with the first two graphs (on top) showing intervention group scores and the second two graphs (on the bottom) showing comparison group scores. It should also be noted that these graphs exclude scores for girls in AEP schools. The reasons for excluding AEP schools from this diagnostic analysis will be explored in greater detail below, but for now it will suffice to observe that the sample of intervention and comparison schools is balanced without the inclusion of AEP schools (i.e. 56 intervention and 56 comparison schools), and AEP girls have much higher assessment scores on average than girls from non-AEP schools.

These graphs are presented for diagnostic purposes to identify floor and ceiling effects. Looking across the intervention and comparison groups, the distributions of assessment scores are relatively similar. For example, where there are floor effects in the intervention group for literacy, we see the same floor effects in the comparison group.

Figure 1: Histograms of assessment score distributions



Literacy scores for in-school cohort girls have a mean of 12.3 percent and are heavily right-tailed.⁷⁰ There are moderate floor effects in literacy, and these effects are somewhat more severe in comparison schools. Floor effects in literacy were also detected in the learning assessment pilot, and an easier subtask was added in order to mitigate this problem. Notwithstanding the observed floor effects in literacy, these distributions of assessment scores are in keeping with distributions of assessment scores for other GEC projects in countries, such as Somalia, where literacy levels are extremely low.⁷¹ In contrast with literacy scores, numeracy scores are far closer to being normally distributed, and have a mean of 52.9 percent.⁷²

Over all, the distributions of these scores suggest that assessments were well calibrated to suit the target populations. The moderate floor effects in literacy may pose some challenges in terms of masking increases in learning scores over time, but it is unlikely that this will pose a serious problem.

⁷⁰ Literacy scores have a skewness of 1.74 and kurtosis of 6.61.

⁷¹ Note, this observation is based on comparing these data and score distributions with data from SOMGEP-T and EGEP-T, both in Somalia, as well as the endline study for GEC 1 in Sierra Leone. English literacy scores for SOMGEP-T were particularly low at the baseline, and have a very similar distribution to the baseline scores for this study.

⁷² Numeracy scores have a skewness of -0.40 and kurtosis of 2.66.

The midline targets were calculated based on baseline benchmark scores for girls in grades 4-7 (as well as OOS girls) and are summarised in the table below for reference:

Grade	Literacy Target (over and above comparison group)	Numeracy Target (over and above comparison group)
OOS	2.7	4.5
5	3.9	4.1
6	3.9	3.9
7	4.5	6.6

Note: these figures are derived from the Outcomes Spreadsheet.

The tables below summarise learning outcomes for cohort girls, by grade level and by intervention versus comparison schools. AEP schools have been separated out in this analysis because AEP grade-levels are defined differently and because scores for AEP girls were found to be significantly higher on average than scores for non-AEP girls at the same age. For both literacy and numeracy, learning scores increase monotonically by grade, providing evidence of the assessments' validity and the quality of the data obtained.

Table 14: Literacy (EGRA/SeGRA)

Grade	Intervention Group Mean	Comparison Group Mean	Standard Deviation in the intervention group	AEP Grade Level	AEP Mean
OOS	3.0	3.5	10.8	OOS	14.7
Grade 4	10.2	9.2	10.9	AEP 1	15.0
Grade 5	16.2	14.3	15.7	AEP 2	28.4
Grade 6	19.5	19.4	15.5	AEP 3	48.0

At each grade level, average literacy scores for the intervention group are slightly higher than average literacy scores for the comparison group, but the observed aggregate differences between intervention and comparison literacy scores are small and are not statistically significant. This analysis suggests that intervention and comparison schools are well-matched in terms of their literacy learning outcomes at the baseline.

The mean literacy scores for AEP girls are significantly higher than non-AEP girls in the aggregate and at each AEP grade level. The fact that AEP scores are so different from those of other cohort girls at the baseline justifies separating out AEP girls in our analysis of learning outcomes and suggests that outcomes for AEP girls should be tracked and analysed separately over time.

Table 15: Numeracy (EGMA/SeGMA)

Grade	Intervention Group Mean	Comparison Group Mean	Standard Deviation in the intervention group	AEP Grade Level	AEP Mean
OOS	24.0	24.8	24.0	OOS	49.4
Grade 4	49.6	48.2	18.0	AEP 1	49.2
Grade 5	58.4	56.9	16.3	AEP 2	69.8
Grade 6	63.5	63.7	15.7	AEP 3	83.1

Similar to the findings for literacy above, average numeracy scores for the intervention group are very slightly higher than scores for the comparison group. As above, the difference between intervention and comparison scores is not statistically significant in the aggregate, suggesting that intervention and comparison schools are well-matched in terms of their numeracy learning outcomes at the baseline.

The average numeracy scores for AEP girls are far higher than the average numeracy scores for non-AEP girls. Again, these significant differences between AEP and non-AEP girls justify separating AEP girls out in our analysis.

Identifying Foundational Skill Gaps

This section identifies potential skill gaps through an analysis of learning outcomes by subtask and by achievement category (non-learner, emergent learner, established learner, and proficient learner). The tables below present the percentage of in-school, cohort girls in the intervention group (and excluding AEP girls) who fall into a given learning category for a given subtask.⁷³ The total number of respondents who fall into this category is 925, and this forms the N or relevant sub-sample for all skill gap calculations below.

Numeracy

Compared with literacy, girls' numeracy skills are far more developed. The majority of girls are proficient at number identification and quantity discrimination. The first skill gap that is apparent is in missing number identification, where the proportion of proficient learners drops by 43.5 percentage points from quantity discrimination to missing number identification. However, the skill of missing number identification does not appear to be highly consequential for subsequent skill development and performance because the inability to identify missing numbers does not predict the ability to do addition or subtraction (i.e. a much higher proportion of girls are proficient at addition and even subtraction than are proficient at missing number identification).

⁷³ All tabulated results are weighted to adjust for the fact that the number of in-school girls in each cluster varies widely (from 4 to 23). Weights are applied such that each school-cluster counts evenly toward the estimated percentages. Thus, the school-level weight is $\frac{23}{n}$ where n = the number of in-school girls in a given school-cluster. This weighting is necessary in order to avoid a possible scenario in which the number of in-school girls in a given cluster is correlated with learning outcomes.

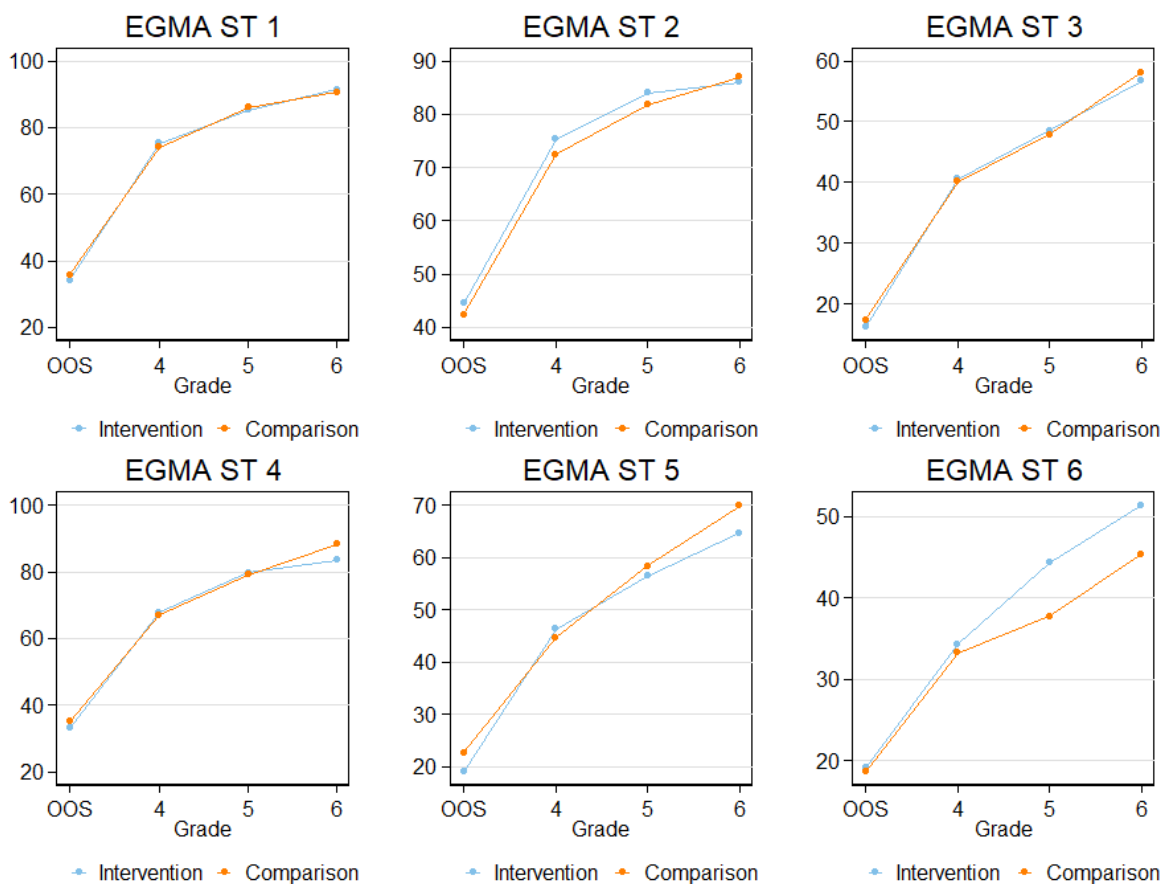
The most consequential skill gap in numeracy is clearly at the level of subtraction, where the proportion of girls who are non-learners increases by 10.9 percentage points (as compared with the number of non-learners for addition). Correspondingly, the proportion of proficient learners drops by 21.8 percentage points from addition to subtraction. Girls who had difficulty with the subtraction subtasks also appear to have had difficulty with word problems. Finally, the first SEGMA subtask (which involved multiplication and division) was a major increase in difficulty over the EGMA subtasks, and most girls dropped into the non-learner category in the first SEGMA subtask. Multiplication and division are clearly above girls' current learning levels, even for grade 6 girls.

Table 16: Foundational numeracy skills gaps (adapt subtasks list to test)

Categories	EGMA ST1 Number Identification	EGMA ST2 Quantity Discrimination	EGMA ST3 Missing Number	EGMA ST4 Addition (Level 1 & 2)	EGMA ST5 Subtraction (Level 1 & 2)	EGMA ST6 Word Problems	SEGMA ST1
Non-learner 0%	3.2	1.6	4.8	1.5	12.4	19.3	72.0
Emergent learner 1%-40%	11.0	9.7	49.1	12.6	25.8	36.0	21.1
Established learner 41%-80%	22.9	36.6	37.4	41.2	38.9	33.3	6.8
Proficient learner 81%-100%	62.8	52.2	8.7	44.7	22.9	11.4	0.1
	100.0	100.0	100.0	100.0	100.0	100.0	100.0

The panel of graphs below allows for an analysis of learning skill gaps by grade-level. At higher skill levels, the graphs show a slight plateau in learning from grade 5 to grade 6, but the general trend is that facility in a given skill increases in a fairly linear fashion by grade. The graphs also reveal that skill levels are extremely similar, at any given grade-level, between girls at intervention schools and girls at comparison schools. The only exception is that learners in the intervention group consistently outperform learners in the comparison group at the level of subtask 6 (word problems). This divergence may simply be the product of sampling error and the fact that the sample size of grade 5 and grade 6 girls is increasingly small.

Figure 2: EGMA Subtasks, by Grade Level



Literacy

Literacy levels in the sample are generally low, as was already evidenced in the moderate floor effects in the distributions of literacy scores presented above. Among in-school, cohort girls 13.3 percent could not identify a single letter, and more than half of the learners fell into the emergent-learner category, being able to identify fewer than 50 percent of the letters that they were presented with. Even fewer girls were able to correctly identify the sound that a given letter makes, with 29.0 percent of girls being unable to identify the sound made by any of the letters that they were presented with. This fundamental lack of proficiency at knowing letters and knowing the sounds associated with letters is the most important learning gap among in-school cohort girls. Girls who fail at letter identification and letter sound identification lack the foundational skills to learn how to read words and to progress in learning to read and comprehend what they are reading.

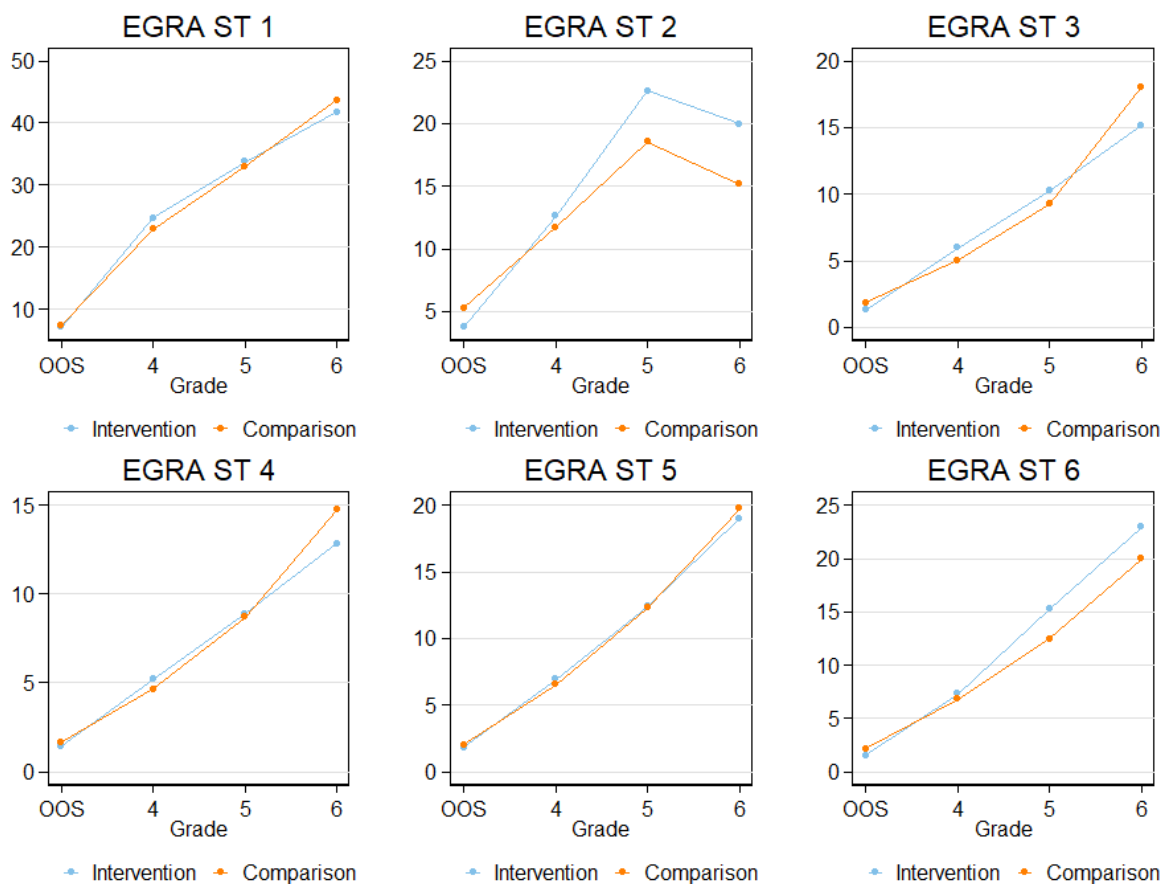
Among the very small proportion of learners who can identify letters and read words, the next important skill gap is between reading and reading comprehension. Even though approximately half of the sampled learners can read at least a few words, the majority of them cannot answer questions testing their comprehension of what they are reading (with 78.7 percent of learners falling into the non-learner category for reading comprehension).

Table 17: Foundational literacy skills gaps (adapt subtasks list to test)

Categories	EGRA ST1 Letter Name Identification	EGRA ST2 Letter Sound Identification	EGRA ST3 Familiar Word Reading	EGRA ST4 Invented Word Reading	EGRA ST5 Oral Passage Reading	EGRA ST6 Reading Comprehension	SEGRA ST1
Non-learner 0%	13.3	29.0	39.8	47.3	50.5	78.7	77.7
Emergent learner 1%-40%	54.5	55.6	56.0	50.3	42.9	11.2	14.5
Established learner 41%-80%	31.0	14.0	4.2	2.4	3.2	7.8	7.3
Proficient learner 81%-100%	1.2	1.3	0.0	0.0	3.3	2.3	0.5
	100.0	100.0	100.0	100.0	100.0	100.0	100.0

The panel of graphs below allows for a deeper analysis of gaps, including the highly consequential gap that emerges at the level of letter sound identification. Learning the phonemes associated with each letter of the alphabet is a foundational skill to be able to read complete words. This skill appears to level off severely at grade 5, and sampled learners at grade 6 are no better (or even a little worse) at identifying the sounds associated with letters than learners in grade 5. This sharp plateau of skill across grade-levels strongly suggests that there are major limitations to teacher’s skills in teaching phonemes.

Figure 3: EGRA Subtasks, by Grade Level



Finally, the graphs above provide further evidence of the comparability of the intervention and comparison groups in terms of their girls' literacy scores, showing that the learning trajectories across grades are almost identical for girls at intervention schools and girls at comparison schools. As with numeracy skills, there is a slight gap that emerges between intervention and comparison at the level of subtask 6 (reading comprehension), but this gap is minimal, and the general trajectories are parallel.

Grade levels achieved

This section reports the share of girls that have achieved each grade level of literacy and numeracy based on an analysis of available documents provided by the Ministry of Primary, Secondary, and Professional Education. At present, the DRC does not have well-developed curricula for each school subject by grade, and the curricula that were available for analysis concern mathematics and French writing literacy only. The mathematics curriculum reviewed for this section of the report covers grades one through six, but lumps together grades one and two, grades three and four, and grades five and six. In other words, differences in expected learning outcomes are not distinguished between students in grade one versus grade two, grade three versus grade four, or grade five versus grade six. Therefore, the table below also does not make distinctions between these grades. For literacy, a French writing curriculum was used to infer reading levels, as there is no available French reading curriculum that shows learning outcomes by grade. We assume here that students who are expected to write at a given level are also

expected to read at that level and use this to infer which sub-tasks are associated with which grade levels. The subjective nature of the mapping was necessitated by the lack of clear curricula but nevertheless represents a limitation for the analysis.

Table 18: Grade level standards for French literacy

	Relevant subtasks	French Literacy
Grade 1 achieved		N/A
Grade 2 achieved		N/A
Grade 3 achieved	Subtask 4 (EGRA)	Invented Word Reading
Grade 4 achieved	Subtask 5 (EGRA)	Oral Passage Reading
Grade 5 achieved	Subtask 6 (EGRA)	Reading Comprehension
Grade 6 achieved		N/A

Table 19: Grade level standards for numeracy

	Relevant subtasks	Numeracy
Grade 2 achieved	Subtask 1 (EGMA)	Number Identification
	Subtask 2 (EGMA)	Quantity Discrimination
	Subtask 4 (EGMA)	Addition – levels 1 and 2
	Subtask 5 (EGMA)	Subtraction – levels 1 and 2
Grade 4 achieved	Subtask 1 (SeGMA)	Advanced multiplication and division, proportions (fractions, percentages), space and shape (geometry), and measurement (distance, length, area, capacity, money) presentation questions
Grade 5 achieved		N/A
Grade 6 achieved		N/A

A full description of the curriculum of DRC, is provided in Annex 14. The table above describes the standards developed by the evaluation team for grade level achievement in mathematics and French literacy. In cases where no standard is described, the learning assessments utilised in the evaluation did not include a skill specific to that grade level, or no information was available to define a set of skills for that grade level. In order to achieve a given grade level, a student must achieve a score of approximately 80 per cent on subtasks for that grade, and those for the preceding grades.

Table 20: French literacy grade level achieved, by grade

Grade Level Achieved	Out-of-School	Grade 4	Grade 5	Grade 6
Below Grade 3	100%	100%	100%	100%
3	0.0%	0.0%	0.0%	0.0%
4	0.0%	0.0%	0.0%	0.0%
5	0.0%	0.0%	0.0%	0.0%

Table 21: Numeracy grade level achieved, by grade

Grade Level Achieved	Out-of-School	Grade 4	Grade 5	Grade 6
Below Grade 2	96.4%	87.6%	73.1%	60.4%
2	3.6%	12.3%	26.9%	39.6%
4	0.0%	0.0%	0.2%	0.0%

The tables above present a grade-by-grade breakdown of achievement levels in French literacy and numeracy for all cohort girls in the sample (excluding AEP girls). Across both numeracy and literacy, no cohort girls (i.e. 0%) are performing at their grade level based on the achievement levels defined above. In keeping with the results presented above, achievement levels are significantly higher in numeracy than in literacy, and at least 12 per cent of girls in grade 4 have achieved grade-2 performance in math. In contrast, 100% of cohort girls lie below the grade 3 performance threshold in reading.

The primary findings here are twofold: 1) national standards are not yet clearly articulated and remain ill- or un-defined for lower grade-levels; and 2) the vast majority of primary school girls are currently performing well below their grade level.

4.2 Subgroup analysis of the Learning Outcome

This section presents an analysis of learning outcomes by key subgroups of the population of in-school cohort girls, as well as an analysis of potential barriers to learning.

The table below presents literacy and numeracy scores for key subgroups of in-school cohort girls, revealing a number of key subgroups that have learning outcomes that are significantly different from the average. The analysis below reveals that the most disadvantaged subgroups of girls are those who do not speak the language of instruction, those who are disabled, and those who come from less economically well-off households.

The quantitative and qualitative evidence collected suggests that teachers find it difficult to adapt and teach girls who have special learning needs. Girls who do not speak the language of instruction at their school have significantly lower literacy and numeracy scores on average than their peers. One teacher in a relatively remote area of Haut Katanga suggested that girls who do not know the language of instruction are simply placed in classes with the rest of their peers, and teachers have limited means to support them because they do not speak the girl’s primary language: “Some children who come to school have difficulties speaking Swahili and speak in their mother tongues that we do not know. We try to use gestures that can help us to understand the child and after the first month the child can adapt.”⁷⁴

In addition, girls who have disabilities (especially those with mental health impairments) score lower on average than their peers on both literacy and numeracy, suggesting that teachers also have limited training and ability to deal with girls who have difficulty learning because of a disability. The qualitative evidence further suggests that teachers may be less aware of disabilities arising from mental health issues such as anxiety. In the qualitative data, many teachers were conspicuously silent on the issue of disabilities, especially the issue of cognitive and mental health impairments. In all qualitative interviews with teachers, respondents were explicitly asked about issues surrounding girls with disabilities, and

⁷⁴ Key Informant Interview, Teacher, Haut-Katanga.

many teachers simply responded that, “There are no disabled children in this school.” For example, a teacher in Tanganyika reported in the qualitative interview that there were no disabled children at the school, but the quantitative data suggests that there is a fairly high proportion of girls from the teacher’s school in the sample who have a mental health disability (as reported by the primary caregiver).⁷⁵ This conflict between quantitative data and teachers’ understandings as captured in the qualitative data suggests that many teachers are unaware of the full range of disabilities that their students may experience, and that issues of anxiety and trauma are going unrecognised and unappreciated by many teachers.

To further emphasise the degree to which teachers felt unprepared to deal with children who had mental health impairments, the teachers who did speak directly about such impairments tended to suggest that such children would need a “specialist.” One teacher was particularly direct on this point: “Psychologically [a handicapped child] is not a child that we should supervise, he has to go to a specialist.”⁷⁶ It is thus apt that the project plans to train teachers on the issue of trauma and anxiety. It is likely that additional training will help to sensitise teachers to these issues, helping them to identify students who may be suffering from post-traumatic stress, and giving them a better toolkit with which to address such students’ needs.

The subgroup analysis also strongly suggests that girls in poorer households are likely to have lower learning outcomes. The qualitative data most commonly suggests that economic distress is a primary reason for girls dropping out of school. However, qualitative evidence also suggests that girls in economically distressed households may have to take on a larger burden in terms of household work. For example, parents in a focus group in Kasai Oriental suggested that in families under severe economic distress, “the child is given a workload that exceeds her capacities...but it will provide something for the family’s survival.”⁷⁷ If children do remain enrolled in school, they have little time to study when their family relies on their work for its survival. In the quantitative data, the strongest socioeconomic predictor of learning outcomes is mobile phone ownership. Girls have significantly higher learning assessment scores on both literacy and numeracy if they belong to a household whose members own at least one mobile phone. Mobile phone ownership is potentially an important proxy of household wealth. Correspondingly, a number of indicators of economic distress (i.e. inability to obtain needed medical treatment and the household often going without income) are also correlated with lower learning scores although the correlations between economic distress and learning are not always statistically significant. High chore burden is also potentially an indicator of economic distress at the household level, and girls with a high chore burden tended to have lower than average learning outcomes, with the correlation being statistically significant for numeracy scores.

Finally, the strongest and most consistent predictor of lower learning outcomes is girls being out of school. This finding was apparent in the summary of learning outcomes by grade, presented above, and the finding is further confirmed by the analysis of subgroups in this section.

There are moderate differences in learning outcomes by region, but the majority of these are not statistically significant. However, it is worth noting that girls in Haut Katanga have lower than average learning scores in both literacy and numeracy, and the difference for numeracy is statistically significant. This finding can potentially be attributed to the fact that Haut Katanga has the highest proportion of girls

⁷⁵ Key Informant Interview, Teacher, Tanganyika.

⁷⁶ Key Informant Interview, Teacher, Haut-Katanga.

⁷⁷ Focus Group, Parents, Kasai-Oriental.

who do not speak the language of instruction at their school (which is also a consistent and strong predictor of lower learning outcomes). The qualitative data do not provide any further insight into differences by province. It is likely that some of these province-level differences are a result of important school-level factors such as attendance and teaching quality. These elements will be explored in greater detail following the completion of Phase 2 data collection.

The most consistent geographic predictors of learning outcomes relate to urbanicity and accessibility of areas. Girls living in urban areas have higher than average learning outcomes, and correspondingly, girls living in remote areas (i.e. areas that are comparatively distant from the capital and difficult to access by road) have lower than average learning outcomes. These findings are statistically significant in the case of numeracy outcomes and are on the verge of statistical significance for literacy outcomes.

Table 22: Learning scores of key subgroups

	Average literacy score (aggregate)	Average numeracy score (aggregate)	Number of observations for subgroup
Characteristics:			
All in-school girls	12.06	52.26	1856
Haut Katanga	10.09	46.00*	286
Lualaba	13.41	52.99	344
Lomami	14.41	54.71	245
Kasai Oriental	12.41	53.34	569
Tanganyika	11.15	54.66	412
Living without both parents	10.04	52.35	75
Girl does not speak LOI	8.53*	48.67*	566
Disability			
Vision impairment	15.64	51.98	12
Hearing impairment	8.54	45.89	8
Mobility impairment	13.87	54.83	16
Cognitive impairment	9.92	48.65	141
Self-care impairment	10.98	50.88	35
Communication impairment	11.28	51.84	52
Mental health impairment	10.57*	49.99*	511
Any disability	10.80*	50.48*	632
HOH and Carer Characteristics			
HOH no education	11.62	53.10	110
HOH female	14.15	52.30	238
Carer no education	10.39*	51.38	327
Household Assets			
Owns mobile phone	13.18*	54.05*	1290

Owns land	11.72	51.50*	1307
Poverty			
House is informal/temporary structure	17.35	55.92	11
Gone to sleep hungry many days	12.96	52.35	428
Gone without enough clean water many days	11.58	50.85	360
Gone without medicines or medical treatment many days	11.17	51.00*	799
Gone without cash income many days	11.32	51.25*	1010
Migration and Regional Characteristics			
Migrated in past 12 months	13.14	53.57	285
Displaced	10.14	44.89	31
Conflict area	13.34	55.25	204
Urban area	13.61	54.87*	620
Remote area	11.64	51.31*	1186
Other			
High chore burden (whole day spent on chores)	8.73*	49.57	52
Married	6.81	55.37	7
Mother, under 16	9.39	51.22	6
Out of school girls	3.29*	24.42*	582

*An asterisk is placed by all subgroup categories that are statistically significant predictors of learning outcomes (with a 95% confidence level) in a bivariate regression with cluster-robust standard errors.

While many of the subgroups above would be expected to affect learning (literacy and numeracy) equally, there are some indicators such as caregiver education levels that may tend to affect one learning outcome, but not the other. Caregiver education, especially caregiver literacy, is an important (and statistically significant) predictor of girls' literacy levels. The primary mechanism that explains this correlation is that better educated caretakers are in a better position to help girls with studying and learning at home, and such help is particularly important in the case of practicing the alphabet and learning to read. The qualitative data provides narrative evidence to support this mechanism, with community leaders reporting that a child with educated parents "has an advantage – if they [the parents] have studied then the child must also study."⁷⁸ When caretakers are poorly educated or even illiterate, their ability to help girls with their homework (and the likelihood that they prioritize girls' studies over the performance household chores) is much lower. The fact that high chore burden is also a statistically significant predictor of lower literacy provides further support to the hypothesized relationship between caretaker education, the level of support that caretakers provide for girls studying at home, and girls' literacy levels.

Moving beyond the subgroup analysis above, the table below presents girls' literacy and numeracy scores by specific barriers to learning. This analysis can identify school-level or environmental variables that may contribute to learning outcomes and that might be productively targeted by the project in order to make progress toward removing the most important barriers.

⁷⁸ Key Informant Interview, Religious Leader, Haut-Katanga, Kitabataba.

Table 23: Learning scores of key barriers

	Average literacy score	Average numeracy score	Number of observations for subgroup
Barriers:			
All girls	12.06	52.26	1856
School Infrastructure			
Doesn't use drinking water facilities	14.92	52.94	61
Doesn't use toilet at school	13.82	55.16*	260
School Resources			
No computers at school	12.22*	52.44	1782
School does not have learning materials	9.77*	49.76*	472
Not enough seats for children at school	11.38	52.11	533
Teaching Quality			
Uncomfortable asking teacher questions	8.84*	45.94*	189
Disagrees teachers make them feel welcome	9.05	48.70	79
Agrees that they are afraid of teacher	10.49*	50.15*	801
Agrees teachers treat boys and girls differently in the classroom	11.93	51.92	1086
Agrees teacher is often absent from class	10.55*	50.03*	699
Teacher punishes students who get things wrong	11.67	51.51*	1193
Teacher uses corporal punishment	11.73	51.21	1200
Other Barriers			
Agrees she has no choice in schooling decisions	13.06*	53.60*	939
Over 30 minute travel time to school	9.79*	52.33	96
Feels unsafe on way to school	12.05	52.19	1798
Feels unsafe at school	12.51	52.21	57
Caretaker has never visited school (disengaged)	10.44	46.67*	289
Difficult to afford to go to school	11.75	51.90	1339
Does not get support from family to stay in school	7.68*	49.21	126

*An asterisk is placed by all subgroup categories that are statistically significant predictors of learning outcomes (with a 95% confidence level) in a bivariate regression with cluster-robust standard errors.

Low teaching quality is the strongest and most consistent predictor of lower learning outcomes. Multiple proxies for poor teaching quality – including girls’ reporting that they are uncomfortable asking their teacher questions, afraid of their teacher, or their teacher is often absent from class – are each statistically significant predictors of girls’ literacy and numeracy scores being lower than average. Teachers using corporal punishment and teachers punishing wrong answers are also strong predictors of lower learning outcomes (and these results are statistically significant in the case of numeracy scores). The qualitative data provides further evidence that teachers who punish children in ways that make them fearful will strongly discourage girls and retard their learning. As one girl in a focus group in Lomami

suggested that she was so afraid of her teacher that: “If I did not do my homework, I do not go to school [for fear of punishment].”⁷⁹

Looking beyond the findings related to teaching quality, the qualitative data contains many complaints from caretakers, and the girls under their care, about inadequate school infrastructure and inadequate resources at school. In a focus group, parents put forward the following complaints about the state of the school that their children attend: “The walls have aged, there are no desks, children run the risk of injury from collapsing walls during the rainy season. Every time when there is the risk of rain we send the children home for fear that the rain does damage to the buildings.”⁸⁰ While these are potentially important issues, the quantitative analysis of barriers suggests that school infrastructure is ultimately far less important than teaching quality as a determinant of girls’ learning outcomes.

In contrast to infrastructure, a school’s learning resources do seem to have a quantifiable impact on girls’ learning. Girls attending schools that do not have adequate learning materials have literacy and numeracy scores that are significantly lower than average.

Finally, girls with disengaged caretakers or unsupportive families also tended to have lower than average scores in literacy and numeracy. These findings reinforce the point made in the subgroup analysis above that girls perform better when their caretaker has at least some formal education and can thus provide them with more support and encouragement. The relationship between family support and learning outcomes is further corroborated by qualitative evidence. As a community leader in Haut-Katanga observed, “If the parents want her to study, she will study, but if the parents neglect her she too will neglect her studies.”⁸¹

Profile of at-risk and high-achieving girls

In order to determine the characteristics of the most at-risk girls, and the most high-achieving girls, the subsample of in-school, cohort girls in the intervention group were divided into quintiles by their scores, and the bottom 20 percent were classified as at risk, while the top 20 percent were classified as high-achieving. The characteristics of both groups were analysed in terms of key subgroup categories that tended to predict girls belonging to the top or bottom 20 percent. The analysis of at-risk girls and high-achieving girls involved all of the subgroups and barriers considered above. In the interest of space, full tables by subgroups and barriers are not provided here. Rather, the key, statistically significant results are summarised in narrative form.

At-risk girls

In terms of regional characteristics, the highest proportion of at-risk girls are in Haut Katanga. As noted above, Haut Katanga also has the highest proportion of girls who do not speak the language of instruction at their school and also has a relatively high proportion of remote schools. Both of these characteristics of Haut Katanga help to explain the extremely high proportion of at-risk girls in that province as compared with the others sampled.

The average at-risk girl does not speak the language of instruction at her school, has a disability (especially a cognitive or mental health disability), belongs to a household in a remote area, or belongs to

⁷⁹ Focus Group, Girls, Lomami.

⁸⁰ Focus Group, Parents, Tanganyika.

⁸¹ Key Informant Interview, Religious Leader, Haut-Katanga.

a household where the primary occupation of the head of household is farming (or some combination of these traits). These findings are consistent with the subgroup analysis above, and make it even clearer that the project should consider girls with learning disabilities and girls who are located in remote, agrarian communities to be those who are the most marginalised – i.e. those who tend to have the lowest learning outcomes and who are at highest risk of dropping out of school. Girls in remote, agrarian communities are also the most likely to not speak the language of instruction, so all of these geographically clustered characteristics are correlated and probably interrelated because families that live in remote communities and practice subsistence farming have little incentive to learn French or one of the national languages (of which Kiswahili is the most widely spoken). Ideally, the project would focus on removing barriers for these individuals, beginning with a focus on better training for teachers to deal with students who do not know the primary language of instruction.

At-risk girls consistently face barriers related to teaching quality and to insufficient learning materials. In terms of the specific proxies of teaching quality, at-risk girls were far more likely to report teacher absenteeism, and to complain that they are afraid of their teacher and to report that they are uncomfortable asking their teacher questions. This analysis suggests that school-focused interventions would potentially be the most impactful, and such interventions should focus on improving the availability and quality of learning materials, improving teacher pay and incentives (to reduce absenteeism), educating teachers about the importance of positive reinforcement techniques (as opposed to negative feedback or corporal punishment), and providing teachers with better techniques for dealing with students with learning disabilities.

High-achieving girls

There are very few factors that are strong predictors of girls being high-achieving, but household wealth (as proxied through phone ownership) is a significant predictor of girls having high levels of achievement on both literacy and numeracy. Correspondingly, indicators of economic distress are negatively correlated with girls having high levels of achievement in learning outcomes. Girls in agrarian households (that also tend to have lower incomes) are also significantly less likely to belong to the set of high-achieving girls. Thus, we can tentatively conclude that high-achieving girls tend to belong to households that have higher incomes than those of other girls.

As might be expected from the analysis of at-risk girls above, high-achieving girls tend to have higher quality teachers, and attend schools that are better-resourced in terms of their learning materials. In particular, it is worth noting that high-achieving girls expressed a far higher level of comfort than average in asking their teachers questions. In turn, girls' reported level of comfort asking their teacher questions is also strongly correlated with all of the variables that serve as proxies for self-esteem (for a more detailed analysis of these variables, please see Section 5.7 on Girls' self-esteem). This relationship is worth noting because it affirms the hypothesised role of self-esteem in supporting improvements in girls' learning outcomes – namely, girls who have higher self-esteem will be more likely to participate in the classroom, and their participation and active engagement in the classroom will correspondingly improve their learning outcomes.

4.3 Testing the TOC – Learning

Attendance and girls' learning

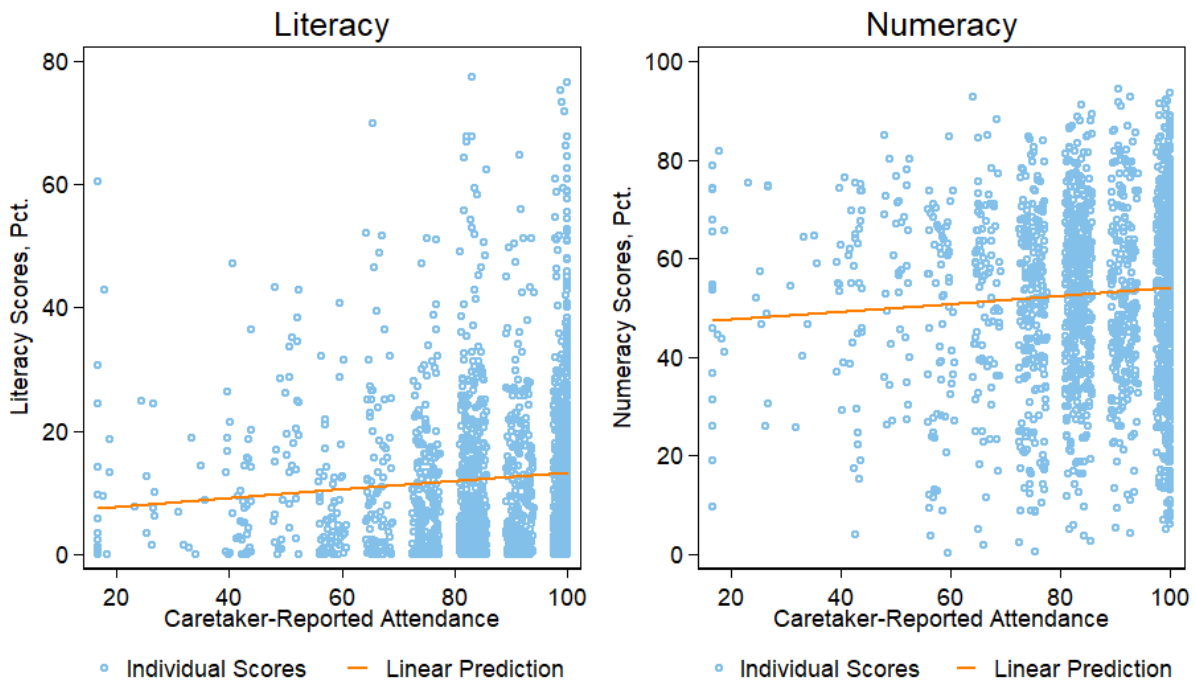
Attendance is a key intermediate outcome because the TOC hypothesises that if girls improve their attendance and spend more time in school (other things being equal) their learning will improve. The

mechanism for this improvement is that when girls spend more days in the classroom, they will be both learning new skills and also practicing (and therefore retaining) what they already know.

In order to test this hypothesis, we use caretakers' estimates of girls' attendance rates within a typical two-week period (i.e. what percentage of school-days the girl attended). This estimate is more subjective (and subject to error) than attendance estimates such as the headcount, but these caretaker estimates have the advantage of being directly linked with each girls' learning outcomes, thus facilitating individual-level analysis.

The panel of graphs below visualize the relationship between girls' percentage of days attended (as reported by their primary caretaker), and girls' literacy and numeracy scores.⁸²

Figure 4: Scatterplots of caretaker-reported attendance against literacy and numeracy



⁸² Attendance levels, as estimated by the girls' primary caretaker, are not a continuous variable – rather, the variable is effectively ordinal, taking on one of 11 possible values. In order to facilitate visualization of the distribution of attendance levels, the scatterplots of attendance have been *jittered* horizontally.

The graphs show that higher attendance levels are a strong and statistically significant predictor of higher literacy and numeracy scores.⁸³ These findings provide strong evidence in support of the TOC and the linkage between girls' attendance and their learning outcomes.

Attendance data of various types will be subject to further analysis below, but it is worth noting here that this strong positive correlation between attendance and learning outcomes helps to explain the strong regional differences in learning outcomes observed above. In particular, Haut Katanga has the lowest levels of reported attendance of any Province, which helps to explain why learning scores in Haut Katanga are also the lowest of any Province.

Teaching quality and girls' learning

The ToC hypothesises that improved skill-specific teaching quality – i.e. addressing specific teaching skill gaps that are reflected in girls' learning – will translate into improved learning outcomes for girls. The barriers analysis above provides clear support for this hypothesis. There is a strong correlation between low teaching quality (as proxied through multiple barriers above) and lower learning outcomes. Girls fearing their teacher or being uncomfortable asking their teacher questions are both indications that teachers are tending to intimidate their students and are probably not using student-centred teaching techniques. In addition, teacher absenteeism is also a broad indication of teachers being poorly motivated to do their work. All of these factors are statistically significant predictors of lower learning outcomes.

The qualitative data also reveals another important aspect of teaching quality that was not captured in the quantitative data – namely teachers' often limited abilities to speak and teach French. A teacher from Kasai-Oriental explained that many teachers have a difficult time teaching French because they are most comfortable speaking to children in their local language: "In many places you find teachers who only speak to children in Tshiluba, but we send the children to school so that they can learn French. Now they speak to our children in Tshiluba, it's no different from [how they communicate] at home, not at all. This way does not satisfy me, in no way. The child studies, out of 50 students in class, there are six who know French."⁸⁴ The teacher's explanation here suggests a clear linkage between limitations in teachers' language skills and corresponding limitations in students' skills. This finding helps to explain why the majority of girls in the sample have difficulty identifying letters and the sounds that they make in French.

School infrastructure/resources and girls' learning

Another hypothesis implied by the theory of change is that improving the resources available to teachers and students will lead to improved learning outcomes. This hypothesis also finds strong support in the barriers analysis above. Students in schools with inadequate learning materials perform far worse than their peers in both literacy and numeracy (and by a statistically significant margin).

Life skills, self-esteem, and girls' learning

The project ToC hypothesises that if girls improve their life-skills and self-esteem, that they may perform better in school as a result of being more confident in their abilities and being able to participate more actively in the classroom. A straightforward test of this hypothesis is whether girls' learning outcomes are strongly correlated with the life-skills index and with proxies for self-esteem (with the life-skills index and proxies for self-esteem being explored in greater detail below). Each of the individual proxies for self-

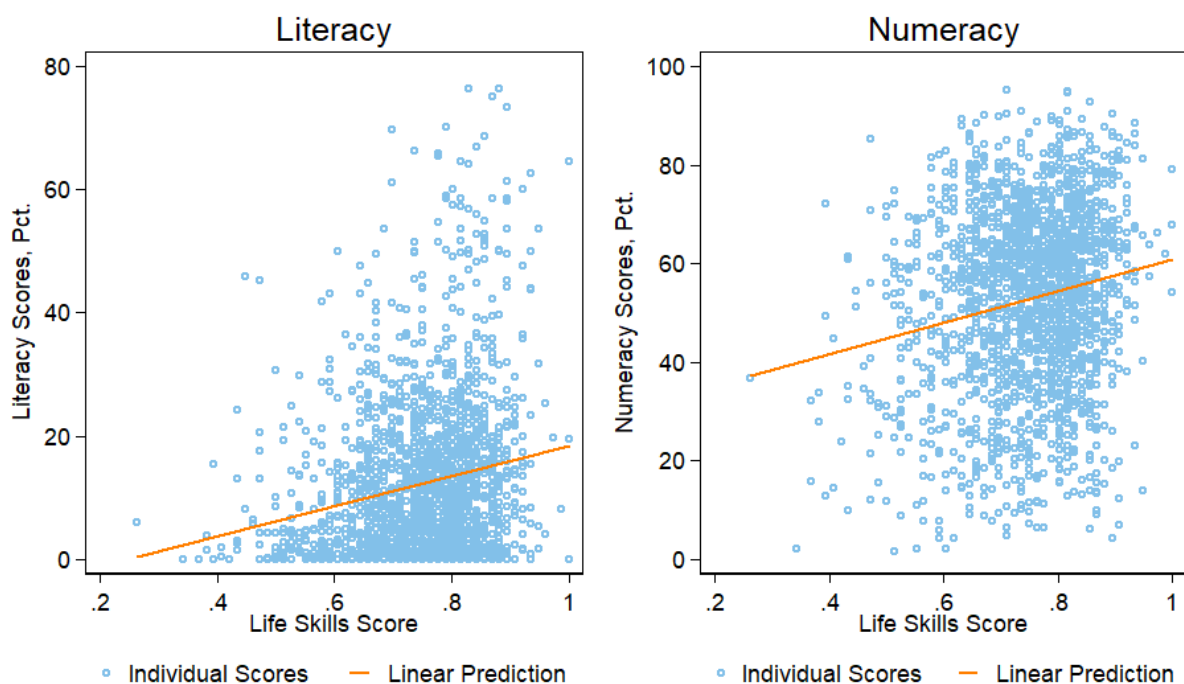
⁸³ In a linear regression predicting learning outcomes with cluster-robust standard errors, caretaker-reported attendance is positively correlated with literacy at $p = 0.003$, and with numeracy at $p = 0.005$.

⁸⁴ Key Informant Interview, Teacher, Kasai-Oriental.

esteem are strongly correlated with both literacy and numeracy outcomes, with higher levels of self-esteem predicting higher assessment scores.

In addition, the life-skills score, which combines the proxies of self-esteem along with other proxies for self-efficacy and self-awareness, are also positively and significantly correlated with learning outcomes. The panel of graphs below visualizes the bivariate relationship between the life-skills score and girls' learning outcomes for all in-school, cohort girls. In the graphs below, blue points represent individual cohort girls, and the orange line represents the line of best-fit for a linear, bivariate regression of the two variables.

Figure 5: Scatterplots of Life Skills score against literacy and numeracy



The analysis above provides significant evidence to support the hypothesis that improved life-skills or increased confidence will lead to higher academic performance.

4.4 Transition Outcome

The second core outcome for all GEC-T programming is successful transition. Transition concerns the progression of children from year to year, either through subsequent grades of the schooling system or into or out of accelerated education programs and formal-sector employment. By definition, transition is considered relative to a student's starting point – what they were doing in the year prior to the evaluation, compared to what they are doing now. The GEC-T approach to defining successful transition is fairly

liberal, typically considering enrolment in accelerated education programs or vocational training – and, depending on the age of the child, formal paid employment – to constitute a successful outcome. However, because the REALISE project and its evaluation are focused primarily on girls aged 9-11 years old at the baseline, formal-sector employment is not considered a successful outcome, as girls this young are considered too young to be in viable and safe employment.

The table below details successful and unsuccessful transition outcomes for girls in REALISE communities. Transition pathways are defined relative to a girl’s starting point. In the first row are typical cohort girls, who are enrolled in the upper primary grades 4-6. For these girls, progression to the next grade within school – or into secondary school, as appropriate – constitutes the classic transition pathway; an alternative is a shift from formal schooling to an accelerated learning program, especially at the project’s AEPs. For girls who are out-of-school to begin with, successful transition involves re-enrolment in school at an appropriate grade level, or enrolment in an AEP. Finally, for girls who are currently enrolled in accelerated education, successful transition is defined as progression through the levels of accelerated education (i.e. from level 1 to level 2) or re-enrolment in school. Importantly, this definition of transition requires progression from grade to grade or level to level, meaning that girls who are not promoted to the next grade or AEP level are considered unsuccessful cases of transition.⁸⁵

Table 24: Transition pathways

	Baseline point	Successful Transition	Unsuccessful Transition
Upper primary school	Enrolled in Grades 4, 5, or 6	<ul style="list-style-type: none"> In-school progression or appropriate transition to secondary school Drops out but enrolled in accelerated learning program 	<ul style="list-style-type: none"> Drops out of school Remains in same grade
Out of school	Dropped out of school	<ul style="list-style-type: none"> Re-enroll in appropriate grade level Enroll in accelerated learning program 	<ul style="list-style-type: none"> Remains out of school and is not enrolled in accelerated learning program Remains out of school and engaged in employment
Accelerated education program	Enrolled in accelerated learning program	<ul style="list-style-type: none"> In-AEP progression from one level to the next Re-enroll in appropriate grade level 	<ul style="list-style-type: none"> Drops out of AEP Remains in same AEP level

As with learning, the goal of the baseline evaluation with regard to transition was two-fold: first, the baseline sought to establish benchmark levels of transition in REALISE intervention communities and their comparison group counterparts, against which progress in the midline and endline will be assessed. Second, the baseline was intended to shed light on differences in transition rates across relevant demographic subgroups, taking note of factors that might pose particularly substantial barriers to

⁸⁵ Because cohort girls are all aged 9-11 years old at the baseline, it is not necessary to define transition beyond secondary school into employment or further education, as cohort girls will not have reached the age requiring these decisions by the time of the endline evaluation.

transition and testing the assumptions regarding transition underlying the project's Theory of Change. In the following two sections, we establish benchmark values for transition in intervention and comparison communities and we analyse the impact of individual- and household-level characteristics on transition rates.

4.5 Benchmarking Transition Outcome

Before turning to the establishment of benchmarks, it is important to note several characteristics of the sample used for this analysis. The baseline evaluation took a somewhat non-standard approach to sampling for the purposes of benchmarking transition rates. Note that learning benchmarks, described above, were calculated from two distinct groups of respondents: cohort girls and benchmark girls. Cohort girls aged 11, for instance, constitute the benchmark at midline for girls aged 10 years at the baseline. Similarly, benchmark girls aged 12 years serve as the benchmark, at midline, for girls aged 11 years at the time of the baseline. Transition outcomes were collected from these same two groups of girls; however, the evaluation team also collected transition data during the completion of the household roster at the start of each household survey. This approach allowed us to record transition data for *every girl* aged 9-16 years old, even if they were unavailable for interviewing at the time, if they did not qualify as a member of the primary cohort of girls, and if they were not selected for interviewing in cases where households included multiple eligible girls.⁸⁶

As a result of these differences, the population of girls captured through the household roster is slightly different from those that comprise the cohort girl and benchmark girl samples. To be clear, the cohort girl sample constitutes a random sample of girls who meet the cohort eligibility criteria in targeted communities. Meanwhile, the benchmark girl sample is a blended sample of girls aged 12-16 years who live in a household with a cohort girl and a true random sample of girls aged 12-16 years in targeted communities.⁸⁷ In contrast, the set of girls captured through the household roster is a random sample of all girls aged 9-16 years in households with at least one eligible cohort girl. While not a true random sample of all girls in this age range – because cohort-age girls are overrepresented, as we note below – there is little reason to expect that older girls in households with younger girls are systematically different from older girls in households *without* younger girls. That is, we do not expect the fact that the sample is drawn by targeting households with cohort-age girls to bias the estimated transition rates of older girls. As we discuss in greater detail when analysing subgroup differences in transition rates, we utilize the sample of selected cohort girls only when performing subgroup and barriers analysis, because the household roster did not capture detailed individual-level data about every girl in each household.

To summarize our perspective on sampling for benchmark transition outcomes, there are three primary advantages to using the data collected through the household roster. First, the sample is more coherent in that it does not represent a blend of different approaches to finding and selecting benchmark girls.

⁸⁶ For benchmark girls, the only eligibility criterion was age; as a result, the sample of girls captured through the household roster is not substantially more comprehensive than the standard benchmark girl sample. One point of difference, as discussed below, is that the household roster captured data from girls who were unavailable for interviewing at the time of the survey, alleviating availability bias. Cohort girls, on the other hand, faced a more stringent criterion: they needed to be between the ages of 9 and 11 and either out-of-school or enrolled specifically in grades 4-6. As a result, girls aged 9-11 but enrolled in grade 3 were excluded from the cohort systematically. In contrast, the household roster captures transition data for these girls as well.

⁸⁷ The former describes the manner in which benchmark girls were incorporated via the standard household survey, which was exclusively administered to households with an eligible cohort girl. The latter describes benchmark girls who were incorporated via additional sampling of households where benchmark girls were present, to ensure that a sufficient number of benchmark girls were surveyed and given learning assessments.

Second, the household roster provides a larger overall sample size for benchmarking, because all girls in each household are included, rather than just those selected as cohort or benchmark girls – as a result of multi-girl households, the resulting sample size is significantly larger. Third, and most importantly, the household roster includes girls who were unavailable for interviewing at the time of the survey, reducing availability bias in estimating transition outcomes. Given that girls who are unavailable are likely to have lower transition rates – because many have migrated temporarily or are working outside the home – limiting availability bias provides a better measure of baseline transition rates.

Transition outcomes, as noted above, were captured through a complete enumeration of girls aged 9-16 in selected households. Data on each girl was collected from the head of household, including their enrolment status in school and in accelerated education programs, and their grade level. For all relevant transition variables, data was recorded for the most recent school year (ended in May 2018, i.e. 2017-2018) and the previous school year (2016-2017). This allows us to determine existing transition rates prior to the start of the program’s interventions. As described above, transition data was collected for 3,674 girls in total, with a heavy overrepresentation of girls aged 9-11. Overrepresentation of this kind is not problematic from a sampling perspective, because transition rates are generally calculated for individual age-cohorts, i.e. for 9-year old girls and 10-year old girls separately.⁸⁸ As such, imbalance with respect to age range does not introduce any imbalance in estimating age-specific transition rates.

The table below details baseline transition rates in REALISE communities – both intervention and comparison – by age. For each age range, the sample size is provided in parentheses; as noted above, girls aged 9-11 years make up a disproportionate 79.3 percent of the sample. The overall transition rate in the baseline sample is 73.8 percent, with dramatic differences observed across age ranges. Contrary to expectations, transition rates are lowest in the two youngest age groups: typically, dropout rates and the share of OOS girls increase with age. This general expectation is reflected by the decline in successful transition among 15- and 16-year old girls, but the evidence regarding the youngest girls does not fit this pattern. In practice, the relationship between age and successful transition within the sample is driven largely by the sampling criteria used to select households, an issue which we discuss in more detail below.

Table 25: Benchmark transition rates, by age

Age	Transition Rate (n)
9	59.1% (523)
10	66.6% (785)
11	80.4% (1607)
12	75.4% (126)
13	81.3% (150)

⁸⁸ Overrepresentation of girls aged 9-11 years is a natural consequence of the sampling strategy. Because households were only eligible for the completion of the household survey if they included a cohort girl (age 9-11), *all* households completing a household roster included at least one girl in this age range. In contrast, only *some* households also included a benchmark-age (12-16 years) girl. This point is similar to that raised in Section 3 above, in which we noted that girls are overrepresented in the household roster vis-à-vis boys, because *all* selected households included at least one girl, but not all selected households included at least one boy, since selection was not contingent on the presence of a boy in the household.

14	83.2% (161)
15	74.8% (159)
16	73% (163)
Total	73.8% (3674)

Our use of data collected through the household roster is justified primarily by the possibility of availability bias in transition outcomes. The household roster, by collecting data about girls who were not available for personal interviews, both reduces availability bias and allows us to estimate the extent of this bias in our sample. From a sample of 3,674 girls, 7.9 percent were unavailable for a personal interview at the time of the household survey. Importantly, transition rates were lower among this subgroup, with 70.5 percent of unavailable girls experiencing successful transition, compared to 74.1 percent of available girls. By excluding unavailable girls from the sample, alternative approaches to estimating transition rates would be biased slightly upward, meaning that reported transition rates would be higher than their true values.

Moving beyond overall successful transition, the evaluation disaggregated transition processes into six primary pathways. While the overall transition rate in the sample was 73.8 percent, this represents success of three different forms: in-school progression and equivalent progression within accelerated education programs; enrolment in an accelerated education program, by transitioning either from school or OOS status to accelerated education; and re-enrolment in school, either from accelerated education or OOS status. Similarly, unsuccessful transitions can be decomposed into three general categories: girls who drop out of school or an accelerated education program; girls who are held back a grade or an equivalent level in an accelerated education program; and girls who remain OOS year-on-year.

The table provides transition rate results, broken down by age group and specific transition pathways. As in the aggregate rate of successful transition shown previously, transition rates do not follow a monotonic relationship with age – they are lowest among the youngest age groups, increasing among girls aged 11-14, and falling again among girls 15-16 years old. The results in the table also show milder variation in specific pathways across age groups. For instance, the oldest girls are least likely to re-enrol in school, which is consistent with the idea that, once they have dropped out, older girls are less likely to re-enter education.

Table 26: Transition pathways, by age

Benchmark Group, Overall								
		Benchmark Transition Pathway						Transition Rates
		Successful Transitions			Unsuccessful Transitions			
Age	Sample Size (#)	In-School Progression	Enrolled in Accelerated Education	Re-enrolled in School	Dropped Out	Held Back a Grade	Perpetual OOS	
9	523	53.3%	1.7%	4.0%	14.7%	4.6%	21.6%	59.1%
10	785	61.4%	2.7%	2.5%	14.6%	5.0%	13.8%	66.6%
11	1,607	76.0%	1.7%	2.6%	8.7%	4.8%	6.1%	80.4%
12	126	72.2%	0.8%	2.4%	9.5%	4.0%	11.1%	75.4%

13	150	78.7%	2.0%	0.7%	7.3%	4.0%	7.3%	81.3%
14	161	80.1%	0.6%	2.5%	6.2%	3.7%	6.8%	83.2%
15	159	73.0%	1.3%	0.6%	7.5%	6.3%	11.3%	74.8%
16	163	73.0%	0.0%	0.0%	7.4%	6.7%	12.9%	73.0%
Overall	3674	69.6%	1.8%	2.5%	10.6%	4.8%	10.7%	73.8%

In other areas, there is consistency across age groups. In general, the share of girls enrolling in accelerated education programs is very low, as are re-enrolment rates. Relatively few girls (4.8 percent overall) are held back a grade year-on-year, though it is possible that many girls who *would* have been held back instead drop out of school. Drop-out rates are extremely high among the youngest girls, which is somewhat unexpected – typically, we assume that many girls will complete a low level of schooling, but drop-out in the early teenage years to either get married, take up employment, or allow household resources to be shifted toward younger children. High drop-out rates among girls aged 9-10 suggest that households may lack resources to provide even a basic education to girls, or that other, structural, factors are at work.

As shown in the table, we do not distinguish between in-school progression and transition from primary to secondary school. While REALISE programming is targeting many girls who will be faced with the decision to enrol in secondary school during the project lifecycle, our analysis focuses on in-school progression more generally. According to the benchmark data, there is no systematic difference in transition rates for girls moving from grade 6 into secondary school, when compared to movement from grade 4 to 5 or grade 5 to 6. Among girls in grade 6 in the previous year, 88.8 percent successfully moved either to the next grade or into accelerated education. In contrast, just 81.1 percent of girls in grade 5 in the previous year transitioned successfully. Based on these results, there is little reason to view the move from primary to secondary school as an especially significant barrier to transition.

This finding is somewhat surprising, given the context of the Congolese educational system and the reports of qualitative interviewees. Students moving into secondary school are required to pass an entrance examination, which poses both a financial and academic barrier to transition. On the financial side, the Test National de Fin d'Études Primaires (TENAFEP) costs approximately \$7.50, which represents about 12 percent of monthly income for the average Congolese household, and a much higher share of a month's income among the typical beneficiary household. A number of FGD participants described the financial burden of the examination fees, not to mention the enrolment costs for secondary school, where fees are typically higher than at the primary level.⁸⁹ At the same time, most parents reported both high aspirations for their daughters' education and a viewpoint that children who have shown sufficient potential by finishing primary school should be allowed and encouraged to enter secondary school as well.⁹⁰ As one participant described, continued schooling was justified "because she has shown potential, that should be encouraged and supported."⁹¹ Others indicated that purpose of education is not limited to or even primarily focused on primary education; they described a viewpoint that the purpose of education is to complete secondary school or even university.⁹² High parental aspirations

⁸⁹ Focus Group, Credit and Savings Group, Kasai-Oriental, Saint-Léonard; Focus Group, Parents, Kasai-Oriental, Kalenda Mudishi.

⁹⁰ Focus Group, Parents, Katanga;

⁹¹ Focus Group, Parents, Tanganyika, Katanga.

⁹² Focus Group, Parents, Lomami.

for their daughters were also documented in the quantitative data, where almost all caregivers hoped that their daughters would complete enrol in and finish secondary school.⁹³ The prevalent viewpoint that secondary school is necessary for girls, that it constitutes a positive outcome in its own right, and that girls who have made it that far should be encouraged to continue schooling may help explain the lack of an observable drop in transition rates between finishing primary and enrolling in secondary school.

Communities slated for REALISE programming appear to have significantly higher baseline transition rates. This is not altogether surprising, given that Save the Children and its partners have worked in these communities previously during the first phase of GEC programming. As the table below shows, transition rates are 4.3 percentage points higher in intervention areas than comparison areas; while this gap varies by age group, we attribute this variation to relatively smaller numbers of girls aged 12-16 in the sample, and the sampling variation or noise that accompanies those smaller sample sizes.

Table 27: Benchmark transition rates, by intervention status

Age	Intervention Areas	Comparison Areas
9	61.1%	57.5%
10	70.4%	62.7%
11	81.2%	79.6%
12	74.3%	76.8%
13	84.5%	75.5%
14	86.1%	77.4%
15	77.4%	69.8%
16	70.8%	79.1%
Total	75.9%	71.6%

Though not reported in the table, the gap between intervention and comparison stems partially from differences in enrolment rates in accelerated education programs. In intervention communities, 3.1 percent of girls were enrolled in such programs, compared to 0.3 percent in comparison communities. However, intervention communities also had marginally lower drop-out rates and higher rates of in-school progression. The important conclusion from disaggregating transition by intervention and comparison area is that baseline rates in intervention areas are higher, which will need to be actively controlled for – using the evaluation’s difference-in-differences design – at the midline and endline.

It is also important to note that the overall transition rates described in this section may still overestimate baseline transition, even while taking into account availability bias. While our sample captured girls who are temporarily unavailable for interviewing, it did not incorporate girls who have permanently migrated away from their households. According to our data, in one out of every 9.4 households one girl aged 9-16 years old has left the household. This implies that approximately 6.4 percent of girls in this age range have left their households. Though full transition data was not recorded for these girls, heads of their

⁹³ Only 1.1 percent of caregivers reported aspirations for their girls that did not include at least some secondary schooling. A total of 91.6 percent of caregivers hoped that their daughter would either finish secondary school, at a minimum, or attend university as well.

households report that just 53.2 percent are currently enrolled in school, to the best of their knowledge. By failing to include these girls, baseline transition rates may be marginally inflated.⁹⁴

The Relationship between Age and Transition

In both the benchmark sample – discussed above – and the sample of cohort girls – discussed in the following section – transition rates follow an unexpected relationship relative to age. Transition rates are lowest among the youngest members of either group, rising dramatically from age 9 to age 11 and then fluctuating in a more typical fashion above this range. As shown in Table 23, above, transition rates climbed from 59.1 percent among 9-year old girls to 80.4 percent among 11-year old girls in the benchmark sample. This pattern runs counter to experience in other GEC projects, as well as more general patterns observed in enrolment rates in developing countries.

The observed relationship can be explained as a function of the criteria used to select households into the sample. Households were eligible for selection if they included at least one girl aged 9-11 years who was either enrolled in grades 4-6 or out-of-school.⁹⁵ The effective sample of 9-year old girls that this produces is biased toward those who are out-of-school (i.e. those with an unsuccessful transition). To illustrate, note that there are four types of 9-year old girls in the overall population:

- 9-year old girls enrolled in grades 4-6
- 9-year old girls enrolled in grades below grade 4
- 9-year old girls enrolled in grades above grade 6
- 9-year old girls who are out-of-school

Only the first and the fourth type are specifically selected into the sample. The third type, 9-year old girls enrolled in grades 7 and above, are extremely rare. But the second type, 9-year old girls enrolled in grades 1-3, are both common and excluded from the sample. In practice, this means that OOS girls make up a larger share of the 9-year old girls in the sample than they in the overall population, pushing down the estimated transition rates for this group.

A closer review of the data makes it clear that this form of sample selection bias has occurred. Among 11-year old girls in the sample, the majority are *not* enrolled in grade 6, as we might expect. Rather, 47.5 percent of in-school 11-year old girls are enrolled in grade 4, implying that most in-school girls are behind their expected grade level. This large number of 11-year old girls enrolled in grade 4 – and a similarly large share who are in grade 5 – implies that *most* in-school 9-year old girls in the population are in grades 2 or 3, and are therefore excluded or underrepresented in the sample.

Publicly-available data also confirms this trend. Using the Demographic and Health Survey from 2013-2014 in the DRC, we studied the grade level of enrolled 9-11 year old children. Among 9-year old in-school children, only 24.5 percent met the inclusion criteria of our sample (i.e. enrolled in grades 4-6). The vast majority of the remainder were enrolled below grade 4. In contrast, among 11-year old in-school children, 60.3 percent met the sample's inclusion criteria in terms of grade level. By excluding those

⁹⁴ While such girls were not eligible for inclusion in the cohort to be tracked in later evaluation waves, out-migration is a pathway available to cohort girls going forward. By systematically excluding girls who have already migrated, transition rates are biased upward, though the extent of this bias is likely to be small.

⁹⁵ To simplify this discussion, we ignore the role played by girls who do not meet these criteria but who live in households with a girl who does. In practice, there are relatively few such girls, and they do not alter the underlying logic.

younger children who are enrolled but have fallen behind in terms of grade level, the sample underrepresents younger in-school children and underestimates the rate of successful transition among younger cohorts.

As noted in Section 2.5, the sampling criteria – and its effect on transition rates – will need to be considered during the midline and endline evaluations. In particular, benchmark transition rates for girls aged 10 years old may need to be adjusted, based on data from the baseline, to ensure that the 9-year old baseline cohort is being assessed a comparable sample of 10-year old benchmark girls from the baseline.

4.6 Sub-group analysis of the transition outcome

In this section, we present additional analysis of transition outcomes, investigating a number of factors that are correlated with transition rates. We separate this analysis into two components: the first focuses primarily on demographic characteristics of individual girls and their households, including geography, disability, and poverty. The second focuses on non-demographic barriers to transition, which typically have less to do with a girl’s innate characteristics and more to do with the nature of the school in her community, the quality of her teachers, and the engagement of her parents or caregiver in her education.

Notably, the transition outcomes reported below do not constitute or align with the benchmarks documented in the previous section. In contrast to our benchmark transition rates, the sample analysed in this section consists exclusively of cohort girls (n = 2,500). While the data analysed previously has significant advantages for calculating benchmarks, it does not include sufficient individual-level information about girls – including disability status, their perspectives on school or teacher quality, or their caregiver’s engagement – to study predictors of transition rates. As a result, we turn to this more limited, but still large, sample to provide insight into the factors that shape transition rates at an individual level.

The two samples are not markedly different with respect to overall transition rates, as shown in the table below: among the cohort-girl sample, transition rates are 72.8 percent, compared to 73.8 percent among the benchmarking sample. We also report transition rates, disaggregated by intervention status, for cohort girls. The trends across age groups mirror those reported in the previous section; given that cohort girls make up a large share of the benchmark transition sample, this replication of the earlier result is not surprising. Across each age group, intervention areas have higher baseline transition rates among cohort girls, though the gap is less pronounced among 11-year old girls.

Table 28: Cohort transition rates, by intervention status

Age	Intervention Areas	Comparison Areas	Overall
9	56.6%	46.9%	51.6%
10	68.4%	62.2%	65.4%
11	81.5%	80.5%	81.0%
Total	74.6%	70.9%	72.8%

As noted above, the advantage of analysing data from the cohort girl sample is that it includes detailed information about each girl and the household in which they live, including their perceptions of schooling and their experiences at school. The table below reports transition rates, disaggregated by a variety of individual- and household-level characteristics. In the top panel, we report rates across the five provinces

targeted by the project, as well as among girls who do not live with their parents and who do not speak the language of instruction at the local school.

More dramatic than the gaps between intervention and comparison areas documented in the previous section are differences across provinces. Rates are lowest in Haut Katanga and Lualaba, at just 56.8 and 61.0 percent, respectively. In contrast, documented rates in Lomami and Kasai Oriental were much higher, at 94.8 percent and 90.6 percent. These stark differences cannot be explained away easily as sampling variation, because each province has a relatively large sample size.⁹⁶ Nor are these differences strictly an artifact of the sample of cohort girls: among non-cohort girls included in the benchmarking exercise, broadly similar rates obtain across provinces. To some extent, the shape of across-province differences is consistent with other, nationally representative samples of households in the DRC, where enrolment rates are highest in Lomami and Kasai Oriental. However, in such samples, enrolment rates in Haut Katanga and Lualaba, while lower overall, are not as starkly different as in our sample.⁹⁷

Transition rates are generally lower – often significantly so – among girls whose upbringing or family situation renders them at a disadvantage. For instance, girls living in households where their parents are both absent are much less likely to remain in school or enrol in accelerated education programs. Similarly, girls in female-headed households have transition rates of just 62.3 percent, compared to an overall average of 72.8 percent. Finally, the relative level of education among adults in the household is also a strong predictor of girls' transition rates, consistent with inter-generational persistence of educational gaps that have been documented in most countries: girls in households where the household head has no education have a transition rate of just 52.6 percent. Caregiver education is also a strong predictor of transition rates, though less so than the education of the household head.⁹⁸

Table 29: Transition outcomes by sub-group

	Transition Rate	Number of observations for subgroup
Characteristics:		
All cohort girls	72.8	2500
Haut Katanga	56.8	484
Lualaba	61.0	518
Lomami	94.8	248
Kasai Oriental	90.6	606
Tanganyika	68.9	644

⁹⁶ Indeed, the differences between Lomami, Kasai Oriental and Tanganyika, on one hand, and Haut Katanga – the worst-performing province – on the other, are all positive and statistically significant at the 5 percent level, even when accounting for within-community clustering that inflates standard errors.

⁹⁷ In the 2013-2014 Demographic and Health Survey, enrolment rates among children 9-16 were highest in Lomami, at 93.4 percent. However, even the worst-performing province, Tanganyika, had enrolment rates of 82.3 percent, suggesting that the sample reported here includes particularly poor-performing communities in Haut Katanga, Lualaba, and Tanganyika, relative to the rest of their respective provinces.

⁹⁸ We do not report transition rates for girls who do not speak the language of instruction at school, because this question presumes – and was filtered upon – that the girl is enrolled in school in the previous year. During the second phase of fieldwork, the evaluation team will collect data on language of instruction from head teachers or principals, which may allow for more detailed analysis of the impact of language on local transition rates.

Living without both parents	55.0	140
Disability		
Vision impairment	71.4	14
Hearing impairment	63.6	11
Mobility impairment	63.6	22
Cognitive impairment	60.4	225
Self-care impairment	51.5	68
Communication impairment	68.0	75
Mental health impairment	72.2	697
Any disability	70.0	894
HOH and Carer Characteristics		
HOH no education	52.6	192
HOH female	62.3	385
Carer no education	61.4	528
Household Assets		
Owns mobile phone	78.3	1633
Owns land	70.3	1804
Poverty		
House is informal/temporary structure	52.2	23
Gone to sleep hungry many days	68.5	639
Gone without enough clean water many days	70.6	524
Gone without medicines or medical treatment many days	68.6	1164
Gone without cash income many days	68.7	1447
Migration and Regional Characteristics		
Migrated in past 12 months	61.7	473
Displaced	50.0	70
Conflict area	73.5	260
Urban area	84.0	706
Remote area	67.0	1677
Other		
High chore burden (whole day spent on chores)	49.5	91
Married	66.7	9
Mother, under 16	71.4	7

In the second panel of the table, we report transition rates among girls with a variety of physical, cognitive and mental health-related disabilities. Most notably, among girls with any of the disabilities assessed using the full set of Washington Group questions ($n = 894$), transition rates are 70.0 percent – while this rate is significantly different from transition rates among girls without any disability ($p = .07$), the gap between the two groups is not substantively large. Importantly, the analysis of disabilities is driven almost entirely by girls with cognitive and mental health-related disabilities, which were – by far – the disabilities

most commonly observed. As shown in the table, only a handful of girls were reported to have standard physical disabilities, such as impaired vision, impaired hearing or impaired mobility. The small sample sizes for individual impairments make it difficult to draw conclusions regarding their disparate effects, but it does appear that girls with mental health conditions are at no discernible disadvantage with regard to transition, while girls with impaired cognitive, communication skills, and limited ability for self-care are at more marked disadvantages.

The qualitative evidence also makes clear that children with physical impairments – or significant cognitive or communicative impairments – are at a serious disadvantage in terms of schooling. One parent interviewed in Lomami suggested that the burden of physical impairments falls entirely on families, with little assistance from the community.⁹⁹ A teacher in the same area indicated that children with disabilities were particularly disadvantaged in terms of attendance, which may reduce the likelihood of successful transition from year to year, although they also reported that their school makes special efforts to help those students stay in school.¹⁰⁰ When prompted, most teachers and parents participating in qualitative interviews indicated that disabled students faced unique challenges.¹⁰¹ However, participants generally did not distinguish between different types of disabilities. Based on the context of their discussion, it is clear that most were referring to students with physical, cognitive and communicative impairments, rather than mental health disabilities. One teacher was an exception, as he specifically noted that children with visual or communication impairments have an especially difficult time staying in school.¹⁰² An important line of inquiry at the midline should be to qualitatively assess the differential impact of varied disabilities on learning and transition outcomes.

Household wealth or poverty, based on the results in this analysis, appears to have small but consistent impact on transition outcomes. Girls in households with a mobile phone enjoy higher transition rates, and those who have experienced some form of deprivation – going to sleep hungry, going without cash income or needed medicine – many or most days in the past year are somewhat less likely to remain in school. Recent migration and displacement are also strong predictors of unsuccessful transition, though exposure to conflict does not appear to impact transition rates overall. Households in rural and remote areas experience significantly lower transition rates, at just 68.3 and 67.0 percent, respectively.

The relationship between poverty, conflict, and school enrolment or transition is complicated further by the qualitative data. On one hand, qualitative interviewees confirmed the importance of household economic conditions in shaping enrolment decisions: a consistent theme throughout the qualitative interviews was the trade-off between paying for schooling and paying for other essential household needs, including food. As one interviewee described, “First of all, it is difficult to feed the family – so how will we have the means to send our children to school?”¹⁰³ Financial shortfalls are exacerbated by the large families common in the DRC, often forcing parents and caregivers to choose which children they would educate; such decisions, unfortunately, often result in girls – and younger children more generally – being kept out of school to ensure continued support for boys and older children.¹⁰⁴

⁹⁹ Focus Group, Parents, Lomami.

¹⁰⁰ Key Informant Interview, Teacher, Lomami.

¹⁰¹ Key Informant Interview, Teacher, Kasai Oriental.

¹⁰² Key Informant Interview, Teacher, Kasai Oriental.

¹⁰³ Focus Group, Parents, Tanganyika, Kifungo.

¹⁰⁴ Focus Group, Loans and Savings Group, Haut-Katanga, Kitabataba; Focus Group, Parents, Kasai-Oriental, Kalenda Mudishi; Focus Group, Parents, Lomami, Tutante; Focus Group, Credit and Savings Group, Kasai-Oriental, Kalenda Mudishi.

At the same time, interviewees also emphasized the role of conflict and violence in affecting enrolment decisions, often through economic mechanisms. That is, although conflict itself is not correlated with transition rates in the quantitative data, interview participants report that conflict reduces the ability of adults to earn money, limiting the resources they have available to pay for school fees and other costs.¹⁰⁵ Violence has more drastic consequences as well, as many interviewees described the loss of parents as a critical blow to enrolment: “The challenge that can make children not go to school is when one of the parents is dead, father or mother, and the child sees that the one who paid for her to go to school is already dead. Those who remain as guardians, like paternal uncles and maternal aunts, have nothing. So this child is prevented from studying and stays at home.”¹⁰⁶ Parental mortality and orphanhood was cited repeatedly as a barrier to enrolment.¹⁰⁷ This idea is also reflected in the quantitative data: among children in households without either parent, transition rates are just 55.0 percent, and transition rates among “single orphans” (i.e. those who have lost one, but not both, parents) are 62.4 percent, compared to 73.6 percent among children with both parents living.

In short, conflict has a variety of consequences, but it poses a barrier to enrolment primarily through its financial consequences. Safety on the way to school was rarely raised as an issue in qualitative interviews, and few caregivers highlighted danger during the journey to school as a reason why their girls were not in school. Among caregivers whose girls were not enrolled in school, just 1.9 percent indicated that safety on the way to school was a major concern that precluded their enrolment; similarly, a relatively small proportion of in-school girls – 2.4 percent – expressed concern about their own safety on the way to and from school. Girls also did not cite safety or conflict as major reasons for their absences on specific days, as opposed to overall enrolment.¹⁰⁸ While this analysis does not preclude additional indirect effects of conflict, through such channels as migration or displacement, it does suggest that proximate conflict is not the most important barrier to attendance, enrolment, or successful transition outcomes.

In addition to demographic characteristics of the kind described above, we also disaggregated transition outcomes by other predictors of transition, such as the quality of the local school, the perceived quality of a student’s teacher, safety on the journey to school, parental and familial engagement. The table below reports transition outcomes among girls faced with particular barriers, organized by general theme. Note that each of the results described here are measured in the context of in-school girls only: for instance, only in-school girls can describe whether there are computers at their school or whether they use drinking water facilities at their school. For this reason, we report the transition rate among girls described as in-school during the household survey at the top of the table (93.4 percent). This figure should be used as the comparison for the barriers in the table, all of which are contingent on enrolment.¹⁰⁹

In the first three panels – school infrastructure, school resources and teacher quality – the results are generally mixed, but suggestive of an effort on transition rates. To illustrate, transition rates are about 2-2.5 percentage points lower among girls who report that their school has insufficient learning materials

¹⁰⁵ Focus Group, Parents, Tanganyika, Katanga.

¹⁰⁶ Focus Group, Parents, Kasai-Oriental, Kalenda Mudishi.

¹⁰⁷ Focus Group, Girls, Tanganyika, Katanga; Focus Group, Parents, Tanganyika, Kifungo.

¹⁰⁸ Among in-school girls, 1.7 percent indicated that they had missed at least one day of school in the past year due to conflict in the area; meanwhile, 1.4 percent reported the an unsafe route to school caused them to be absent. It is important to note that danger on the route to school may arise from either conflict or other hazards, including general crime, objective hazards, traffic, and so forth. As such, the first measure reported, focused specifically on conflict reported by girls, better captures the impact of conflict on day-to-day attendance.

¹⁰⁹ The sole exception concerns girls who indicate that they have no personal choice in schooling decisions, a question which was asked of all cohort girls. For the sake of consistency, we limit the analysis – even in this case – to in-school girls, to avoid confusion.

and too few seats for all the students. Students who report that they are afraid of their teacher or that their teacher is often absent from class have marginally lower transition rates than those among all in-school girls, but these differences are too small to be statistically distinguishable from zero.

Table 30: Barriers to transition for in-school girls

	Transition Rate	Number of observations for subgroup
Barriers:		
In-school girls	93.4	1891
School Infrastructure		
Doesn't use drinking water facilities	90.5	63
Doesn't use toilet at school	94.0	267
School Resources		
No computers at school	93.4	1822
School does not have learning materials	91.0	488
Not enough seats for children at school	91.5	552
Teaching Quality		
Uncomfortable asking teacher questions	93.5	1686
Disagrees teachers make them feel welcome	89.2	83
Agrees that they are afraid of teacher	92.7	818
Agrees teachers treat boys and girls differently in the classroom	93.7	1103
Agrees teacher is often absent from class	92.5	711
Teacher punishes students who get things wrong	93.7	1220
Teacher uses corporal punishment	93.5	1222
Carer says teaching at school is poor	92.0	150
Other Barriers		
Agrees she has no choice in schooling decisions	94.0	899
Over 30 minute travel time to school	88.2	102
Feels unsafe on way to school	93.6	1839
Feels unsafe at school	90.0	60
Caretaker has never visited school (disengaged)	92.0	299
Difficult to afford to go to school	93.3	1373
Does not get support from family to stay in school	91.5	129

Other barriers measured here also do not appear to have a significant impact on transition rates, generally. Among those barriers reported in the bottom panel of the table, most have no substantive effect on transition rates relative to the general population of in-school girls. Among girls with a disengaged caretaker, or who report that they do not get the necessary support from their families to stay in school, transition rates are 92.0 percent and 91.5 percent, marginally lower than the sample average.

Two exceptions to this general trend stand out somewhat: girls who live over 30 minutes from school, and girls who report that they feel unsafe *while at school*. Among girls who live over 30 minutes from school, transition rates are 5.5 percentage points lower than those who live closer to school. Similarly, girls who report feeling unsafe at school have transition rates 3.6 percentage points lower than the rest of the sample. However, even these relatively larger differences are not statistically significant at conventional levels.¹¹⁰

Other barriers discussed in the qualitative data may shape transition outcomes among older girls, but are not relevant to younger girls. In our sample of cohort girls, just nine were married and even fewer had borne children. But interviewees noted the allure of marrying off a daughter for families who have fallen on hard economic times, both because of the promise of bride price and because her marriage will reduce the number of household members who must be fed.¹¹¹ This is important to note, as many of the girls targeted by REALISE programming will have reached common marriageable ages by the conclusion of the project. Despite the emphasis placed on this issue by qualitative interviewees, though, very few respondents to the household survey cited marriage or pregnancy as the primary barrier preventing their girls from enrolling in school, even among girls aged 12-16 years.¹¹²

Finally, a number of qualitative interviewees described household responsibilities that girls face, and the impact this can have on their attendance at school. While the sample of girls in our data who are classified as having a high chore burden was relatively small (n = 91), transition rates among this group are especially low, at 49.5 percent. Qualitative interviewees describe households that rely on girl-child labor to function, both for agricultural work and for caring for younger children.¹¹³ Orphaned girls who live with their relatives are especially vulnerable, because they constitute an unexpected extra mouth to feed and an extra economic burden in terms of school costs – as a result, they are often made to “earn their keep” through additional household work that prevents them from enrolling even when financial circumstances allow.¹¹⁴

4.7 Testing the TOC – Transition

In the previous section, we analysed the core outcome of transition and differences in transition rates across subgroups. Our analysis attempted to shed light on variation in transition rates across relevant subgroups, which can be used to guide project design and beneficiary targeting, as well as test assumptions regarding the project's Theory of Change. In this section, we focus more specifically on the project's Theory of Change, testing whether the intermediate outcomes identified by the project – and the project outputs designed to influence those intermediate outcomes – influence transition rates. Given the available data, we are able to study the relationship between household economic empowerment, and a

¹¹⁰ One factor important to this analysis is the relatively small sample of many of the subgroups defined by these “other barriers.” Just 60 girls report that they feel unsafe at school, making comparisons of this kind relatively under-powered from a statistical perspective. Likewise, just 52 girls reported that they feel safe on their way to school (i.e. 1839 report feeling unsafe), meaning that comparisons between these two subgroups may be similarly under-powered, once we account for clustering at the school level.

¹¹¹ Focus Group, Boys, Haut-Katanga, Kitabataba; Focus Group, Parents, Kasai-Oriental, Kalenda Mudishi; Focus Group, Parents, Kasai-Oriental, Saint-Léonard; Focus Group, Parents, Kasai-Oriental, Kalenda Mudishi; Key Informant Interview, MINAS, Kasai-Oriental.

¹¹² Of 140 girls aged 12-16 who were not enrolled at the time of the survey, just two heads of household listed marriage as the primary reason their girl was not enrolled, and a further four listed pregnancy as the main reason. Even among this subgroup, economic factors dominated responses.

¹¹³ Focus Group, Girls, Lomami, Tutante; Focus Group, Parents, Kasai-Oriental, Kalenda Mudishi; Focus Group, Parents, Lomami, Tutante; Focus Group, Girls, Tanganyika, Katanga.

¹¹⁴ Key Informant Interview, MINAS, Kasai-Oriental.

girl's life-skills, on one hand, and transition outcomes, on the other. In short, we address three research questions:¹¹⁵

- Are girls in households with greater economic resources and less economic deprivation more likely to stay in school?
- Are girls in households with savings (a key project output via savings and loans associations) more likely to stay in school?
- Are girls with better-developed life skills more likely to stay in school?

Our results from the previous section showed that transition rates were lower among girls facing household poverty. At times, the correlation between an indicator of relative poverty and transition was strong: for instance, 78.3 percent of girls in households with a mobile phone transitioned successfully in the previous year, compared to just 62.4 percent among those in households without a phone. At the same time, other indicators of poverty were less predictive: in households where members went to bed hungry many or most nights over the previous year, transition rates were 68.5 percent, compared to 74.2 percent in households with less frequent or no hunger of this kind. While this gap is statistically significant, it does not have the substantive predictive power we might expect.

To afford a stronger test of the assumptions underlying the REALISE Theory of Change, we estimated a linear regression model predicting successful transition. A regression model of this kind allows us to control for confounding factors which are correlated with both transition outcomes and the independent variables or predictors of interest (indicators of household poverty, household savings, and life-skills). By controlling for these additional variables, we are able to more precisely estimate the correlation between our variables of interest and transition outcomes.¹¹⁶

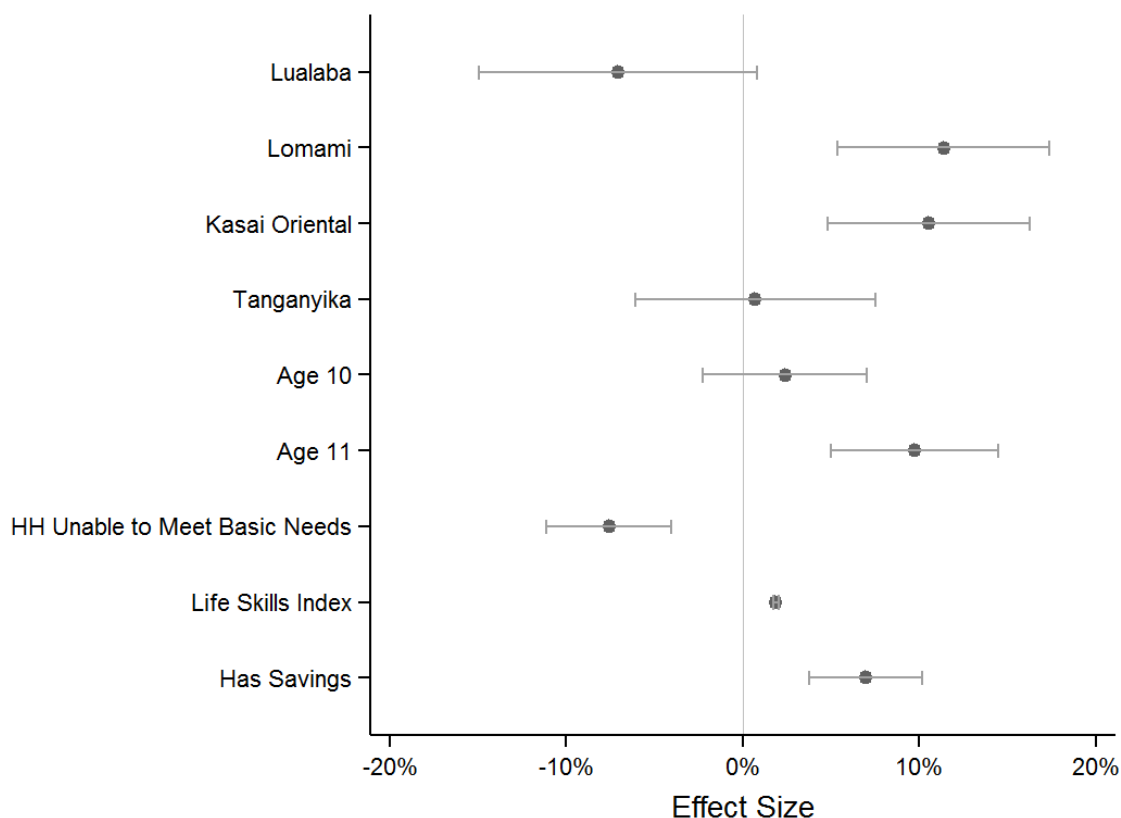
We report the results of this model in the figure below, plotting the beta coefficients and 95 per cent confidence intervals for individual independent variables. The vertical line at zero represents a null effect – for variables whose 95 per cent confidence interval crosses the vertical line, the correlation between the variable and transition rates is not statistically significant. The model includes a binary variable representing each province – with Haut Katanga as the omitted reference category – and binary variables for ages 10 and 11 years, such that 9-year olds constitute the omitted reference category with respect to age.

We include three variables of interest in the regression. The first is a binary indicator for households that self-report that they are unable to meet their basic needs ($n = 830/2501$). The second is a binary indicator of households that report having savings ($n = 663/2501$). Finally, the third is an index of each life skills, aggregating girls' responses to a series of questions gauging their confidence levels, ability to navigate social situations, and their perception of the importance of hard work versus luck. Further details on the construction of this index are provided in Section 5.7, where we report baseline levels of life-skills among cohort girls. The life-skills index is measured on a 0-100 scale, with higher values representing more positive skills.

¹¹⁵ We do not assess the relationship between all IOs and transition, because data on other IOs – such as attendance and teaching quality – were only partially captured during phase 1 of data collection.

¹¹⁶ We use a linear regression model, rather than logistic regression, for ease of interpretation. While our outcome is a binary variable (successful or unsuccessful transition), linear regression allows us to report the raw coefficients from the model, which can be interpreted directly as the change in probability of transition associated with a change in the independent variable in question. Under reasonable functional form assumptions, such a linear probability model produces unbiased estimates of this relationship.

Figure 6: Predictors of successful transition



In the top half of the figure, we report the relationship between province and transition rates. Given that the omitted reference province is Haut Katanga, the results suggest that Lomami and Kasai Oriental have significantly higher transition rates than either Haut Katanga or Lualaba, consistent with the univariate analysis reported previously. Similarly, age is positively correlated with transition among the cohort sample, with 11-year old girls experiencing transition rates approximately 10 percent higher than 9-year old girls.

In the bottom half of the graph, we report the results of primary interest. Girls in households that are economically deprived are substantially less likely to remain in school year-on-year – girls in such households are 7.6 percentage points less likely to transition successfully. Importantly, this finding is robust to a number of different measures of relative poverty that we do not report due in the interest of conserving space: the material from which a household’s floor is constructed, mobile phone ownership, and frequent hunger are all correlated with transition rates, such that greater poverty predicts less frequent transition. Related to this fact, girls in households that self-report having savings are much more likely to remain in school. Savings are associated with a 7.0 percentage point increase in transition rates; in alternative models, we find that participation in a savings groups – which is highly correlated with saving itself – is also predictive of higher transition rates.

The importance of household economic status is consistent with both quantitative and qualitative results presented earlier in this section. Qualitative interviewees emphasized the role of financial considerations in a wide range of processes that reduce enrolment among girls: conflict reduces household economic stability and undermines the ability of parents to pay school fees; the death of parents manifests in non-enrolment primarily because the economic burden of schooling is insurmountable for most orphans and their new caretakers; even marriage, to the extent that it prevents enrolment, is often couched in economic terms thanks to the system of bride price and the need to reduce the number of mouths to feed in a girl's household. Importantly, the economic cost of schooling is not strictly related to school fees: ancillary costs, such as materials and uniforms – the lack of which will prevent a girl from attending school – also pose an obstacle.¹¹⁷ Students who want to continue to secondary school also must take an entrance examination that interviewees describe as a significant barrier to continued schooling (the examination costs approximately \$7.50).¹¹⁸ In summary, the financial burden of school comprises the direct costs of school fees, the cost of ancillary school materials and supplies and examination fees, as well as the opportunity cost of lost household labour or lost wages for girls who would otherwise work in the home or outside the home if they were not enrolled. The combination of these costs poses a significant burden for households and a significant barrier to continued schooling for girls.

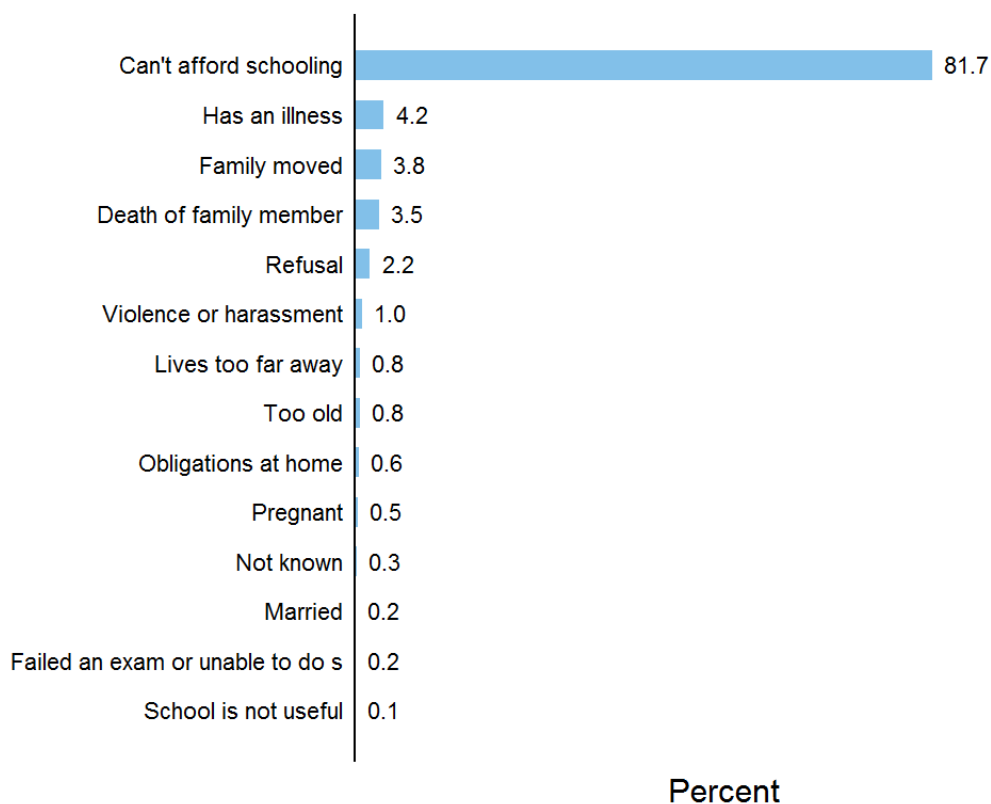
Finally, the results suggest that life skills are an important correlate of transition. For a 1-standard deviation shift in the life-skills index – equivalent to moving from the mean of 56.5 to 68.5 – the probability of successful transition increases 22.3 percentage points. It is important to note that, as with all of the results described above, it is not possible for us to make causal claims regarding predictor variables and transition outcomes. Indeed, girls who remain in school may have greater self-confidence or other life-skills precisely *because* they remained in school. Our results do suggest, however, that the two outcomes are associated with one another in a manner consistent with the project's Theory of Change.

The findings in this section highlight the relationship between relative poverty and school enrolment in the Congolese context. In general, indicators of poverty are strongly associated with worse transition outcomes, suggesting that project activities that seek to alleviate household economic hardship and, especially, the economic burden of school enrolment and attendance on households are likely to improve transition outcomes. To investigate whether households also agree with this assessment, the baseline evaluation collected data on *why* OOS girls were out-of-school during the previous year. Specifically, for each girl reported to be out-of-school during the previous year, enumerators queried the head of household regarding the primary reason that the girl was not enrolled. The results, provided in the figure below, show an overwhelming economic focus – 81.7 percent of respondents (n = 864) cited the cost of schooling as the primary reason their daughter or female family member was not in school. Illness, the death of a family member, and household migration are also relevant barriers, each accounting for between 3.5 and 4.2 percent of all responses, but none compares to the importance of schooling costs and the economic burden of education.

¹¹⁷ Focus Group, Parents, Kasai-Oriental, Saint-Léonard.

¹¹⁸ Focus Group, Credit and Savings Group, Kasai-Oriental, Saint-Léonard.

Figure 7: Primary barrier to enrolment, according to heads of household



This analysis was based on responses from heads of household, who could indicate a single, primary reason why a given girl was not presently enrolled. However, caregivers of cohort girls were asked a similar question and afforded more flexibility in their responses; specifically, they were given a list of reasons why a given girl was not enrolled and could select *all* of the reasons they felt were relevant. Results drawn from this data confirm our general conclusions: 88.1 percent of caregivers whose girls are out-of-school cited the costs of their schooling as one reason they were not enrolled, far more than any other justification. These results are indicative that it is specifically the cost of schooling – i.e. school fees and ancillary costs – that present a burden, because relatively few (4.2 percent) caregivers indicated that the girl needed to work or was needed for household chores. In other words, it is specifically the direct cost of schooling, rather than the indirect opportunity costs – the economic benefits foregone by having a girl in school instead of working or at home – that caregivers cite most commonly as keeping their girls out of school.

4.8 Cohort tracking and target setting for the transition outcome

The baseline evaluation has two distinct transition samples, as described above. The first is the sample of cohort girls, for which both learning and transition outcomes were measured at the baseline. It is this sample that informs our analysis of barriers to transition; it is also this sample that will be actively tracked over the life of the evaluation, to assess changes in transition and learning outcomes in both intervention and comparison areas over time. The second is the broader sample of girls aged 9-16 years, whose data was collected via the household roster described above. This sample is used for establishing benchmark

transition rates, against which outcomes at the midline and endline will be evaluated. Because girls in this sample are only studied for the purpose of benchmarking, they are not tracked in future evaluation waves, except to the extent that they are also overlapping members of the cohort-girl sample.

In order to track girls for re-contact during the midline study, the Evaluator created a tracking form for the enumerators, to be used for each girl. Please see the Evaluator's Inception Report for an example of the form. This form records the full name of the girl, caregiver, and head of household, along with all geographic and tracking information that is collected in the household survey. To facilitate that the tracking of girls in the midline and endline evaluation waves, caregivers of cohort girls were asked to provide a primary and secondary phone number for the purposes of re-contacting households. Unfortunately, the share of households who were able to provide telephone numbers for follow-up was lower than expected, owing to the relatively low share of households who own mobile phones. In all 41.3 percent of households provided the evaluation team with a single phone number, and 24.5 percent provided both a primary and a secondary phone number; 34.3 percent of households did not provide any phone number for follow-up, broadly consistent with underlying mobile phone ownership rates (65.3 percent) in the sample. In addition to telephone numbers, enumerators recorded a description of key landmarks and directions that would be sufficient to allow the household to be located again in the future. Midline and endline transition rates will be calculated on the basis of re-contacted cohort girls in both intervention and comparison communities.

Overall, the transition rate among the benchmark sample was 73.8 percent. While rates were higher among intervention communities, this pre-existing gap will be explicitly controlled for using the difference-in-differences approach. Using guidance provided by the FM, this benchmark transition rate suggests a target increase in transition rates of 7 percent by the midline (year 2) and a further 5 percent per annum increase by the endline (year 4).

4.9 Sustainability Outcome

This section of the report provides an overall score for sustainability, as well as scores for each specific indicator selected by the project for assessing sustainability. For each indicator of sustainability, scores were assigned on a 0-4 scale, ranging from negligible (0) to established (4). Negligible indicates that no progress has been made in establishing this outcome, implying no current sustainability of project progress. Established indicators are those that have taken root in schools, communities, or the broader educational system, which will contribute to lasting change after the end of the project.

As would be expected from a baseline evaluation, the results in this section suggest that REALISE programming is not presently sustainable. In general, school-level efforts have shown the greatest progress toward full establishment, likely as a result of programming during the first phase of GEC and to existing efforts at schools. In contrast, no progress has been made on system-level indicators of sustainability.

The table below reports the project's current sustainability scorecard. In the discussions that follow, we describe the project's performance on each of eight sustainability indicators, drawn from both qualitative and quantitative data – this narrative analysis informs the scores assigned in the scorecard. Beyond simply measuring the baseline level of each indicator, we also attempt to provide contextual details that may be useful for guiding program implementation, where possible.

Table 31: Sustainability indicators

	Community	School	System
Indicator 1:	Number of community stakeholders (village leaders, private sector, MoE) actively participating in the development and monitoring of school improvement plans through Citizen Voice in Action (CVA) groups Score: 1 – Latent	Percentage of schools implementing Teacher Professional Development program/curriculum Indicator Score: 1 – Latent	Creation of a platform to disseminate research results for advocacy purposes Score: 0 – Negligible
Indicator 2:	Perception among VSLA group members around their capacity to sustain its model Score: 1 – Latent	Percentage of schools with a functioning case reporting system (to ensure child safeguarding and protection) Score: 2 – Emerging	Implementation and validation of AEP end-of-year exams by MINAS Score: 0 – Negligible
Indicator 3:	Number of functioning SRH clubs Score: 0 – Negligible	Change in teachers' attitudes and knowledge about positive discipline in classrooms Score: 1 – Latent	
Baseline Sustainability Score (0-4)	0.67	1.33	0
Overall Sustainability Score (0-4, average of the three level scores)	0.67		

Indicator 1: Number of community stakeholders (village leaders, private sector, MoE) actively participating in the development and monitoring of school improvement plans through Citizen Voice in Action (CVA) groups

If REALISE interventions are to be sustainable over the long-term, they require buy-in from community stakeholders. A key role for stakeholders is holding schools accountable in terms of their management. During the transition phase of the REALISE project, schools will continue to develop and implement school improvement plans. This indicator of sustainability focuses on the role of local stakeholders in helping to develop these plans further and monitor their implementation in practice.

The current status of Citizen Voice in Actions groups is unclear based on the data available at the baseline. In qualitative interviews, community leaders were asked whether they had heard of these groups and whether they participated in them. Several community leaders indicated that they were aware of the groups and participated in their activities; they also tended to list parents or parents committees as other active participants.¹¹⁹ However, this knowledge was not uniformly shared – in fact, of the interviews conducted with community leaders, a slight majority indicated that they were not aware of such groups in

¹¹⁹ KII, Religious Leader, Tanganyika; KII, Religious Leader, Lualaba.

their areas.¹²⁰ In at least one case an interviewee reported that they were aware of the groups, but seemed to describe actions taken by a different organization or group, suggesting the need to brand the groups consistently and ensure that researchers at the midline and endline can adequately explain the nature of the groups to potential interviewees.¹²¹ The midline should also ask a broader set of community stakeholders about these groups, including teachers and parents, rather than exclusively community leaders. This will provide a fuller picture of the current status of Citizen Voice in Action groups than the current data allows.

Indicator Score: 1 – Latent

Indicator 2: Number of functioning SRH Clubs

The evaluation did not include direct measures of the presence of SRH clubs at schools at the baseline, because such clubs had not been established in any schools at the time of baseline data collection. STC anticipates establishing and supporting SRH clubs prior to the midline, at which point it will be possible to measure progress against a baseline in which no schools had active SRH clubs, to the best of our knowledge. Exclusively for the purposes of providing contextual details that may be useful for project implementation, we report results concerning the availability of information regarding sexual and reproductive health within schools, though we emphasize that these findings do not constitute a baseline level for this sustainability indicator.

When asked to describe the availability of information within their schools concerning SRH topics, teachers generally reported limited availability of even relatively innocuous information essential to girls' sexual and reproductive health, as shown in the table below. Even information that should not be considered sensitive – such as information about puberty and menstruation, rather than about preventing pregnancy – is seldom available: just 22.8 percent of teachers reported that girls could find this kind of information at their schools.

Table 32: Availability of SRH information and services at schools

Province	Information about Puberty and Menstruation	Information about Birth Control	Provisions for Girls who Begin Menstruation at School
Lomami	45.8%	50.0%	41.7%
Kasai Oriental	33.3%	13.0%	3.7%
Lualaba	27.1%	45.8%	14.6%
Tanganyika	16.1%	32.3%	22.6%
Haut Katanga	2.3%	6.8%	18.2%
Total	22.8%	27.6%	17.7%

As the table above shows, schools in Lomami had systematically friendlier policies toward SRH topics among girls than schools in other provinces. Schools in Lomami were much more likely than schools elsewhere to make information available to girls, and were also more likely to have provisions in place for

¹²⁰ See, e.g.: KII, Community Leader, Kasai Oriental; KII, Religious Leader, Lualaba; KII, Community Leader, Haut Katanga.

¹²¹ KII, Community Leader, Lualaba.

girls who begin to menstruate while at school.¹²² Schools in Haut Katanga and Kasai Oriental were typically less likely to provide information to girls or have such provisions in place. Notably, female teachers were more likely to report that their schools provided information about puberty and menstruation and that their schools have provisions for girls who began to menstruate, suggesting that female teachers may be a conduit for such information. However, even female teachers were no more likely to report that their schools provided information about preventing pregnancy, highlighting the fact that very few schools provide such information in any form currently.

Likely owing to efforts during the first round of GEC programming, intervention schools were somewhat more likely to report positive outcomes on all three of the measures discussed above. For instance, 31.7 percent of teachers in intervention schools indicate that information on preventing pregnancy is available, compared to 23.2 percent at comparison schools. Nonetheless, these broadly low rates suggest that the establishment of SRH clubs will help fill a significant gap in information regarding SRH topics at project schools.

The baseline evaluation also collected data on perceived community opposition to SRH education. While it is not a direct indicator of project sustainability, the data collected at the baseline do suggest that there is opposition within communities to the provision of SRH to adolescent girls. If SRH education programs are going to be maintained into the future at schools where communities exercise oversight and management, it is essential that community members see the value of these efforts and support them.

The qualitative data suggests occasional resistance to SRH education among community members. Community leaders, teachers, and girls alike reported such opposition among parents and community leaders.¹²³ As one community leader described, “Some leaders, some parents, they come to tell us ‘why are you teaching our children these things?’”¹²⁴ At the same time, qualitative interviewees seemed to imply the need for formal education in this area, asserting that parents were ill-equipped to provide information to their children when they also lacked understanding of SRH topics.¹²⁵ Community leaders themselves tended to claim that they supported the provision of SRH information, either by parents or through schools, even for young adolescent girls.¹²⁶

Teachers surveyed as part of the baseline were asked to describe attitudes within their community, and generally confirmed the existence of opposition to SRH education. For instance, when asked whether community leaders support providing information about puberty and menstruation to girls in grades 4-6, 20.8 percent of teachers stated that community leaders in their area opposed – either strongly or somewhat – the provision of such information. A further 13.9 percent described community leaders who were ambivalent. When asked about other types of SRH information, broadly similar findings emerged, as shown in the figure below. In general, the results suggest that the *typical* community leader, either religious or non-religious, supports providing SRH information to young adolescent girls, but that a sizable minority opposes such practices.

¹²² It is important to note that it is possible to design provisions for such circumstances that could actually stigmatize menstruation further and contribute to embarrassment and shame among girls. For instance, if schools have a provision that encourages sending girls home when they begin to menstruate, this could increase stigma, in addition to reducing attendance about puberty-age girls. Therefore, the mere existence of generic provisions should not be assumed to represent *good* policies or procedures.

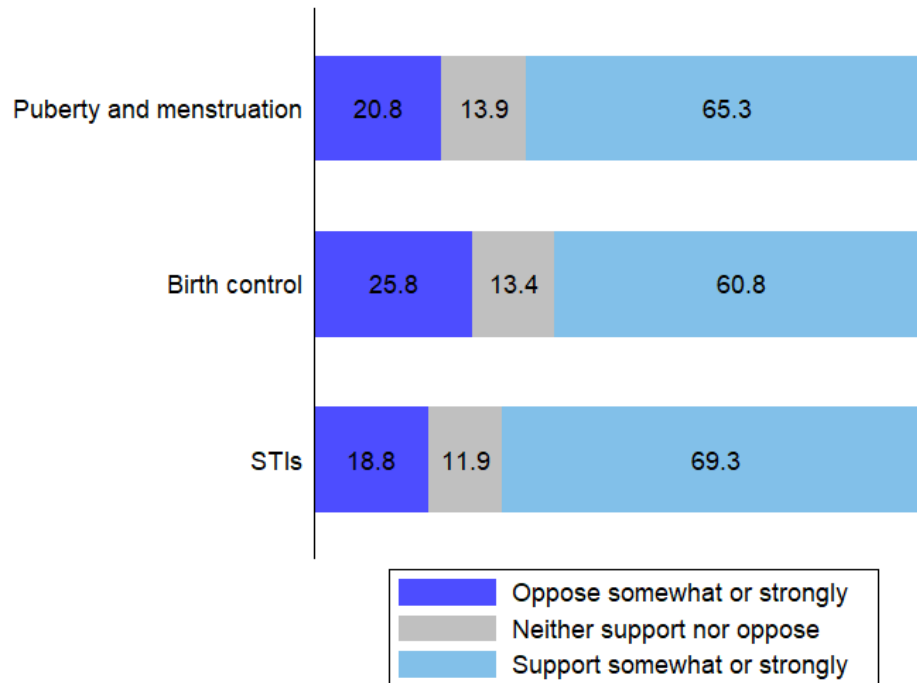
¹²³ FGD, Girls, Tanganyika; KII, Community Leader, Kasai Oriental; FGD, Teachers, Tanganyika.

¹²⁴ KII, Community Leader, Kasai Oriental.

¹²⁵ KII, Religious Leader, Haut Katanga.

¹²⁶ FGD, Community Leaders, Tanganyika; KII, Religious Leader, Lomami.

Figure 8: Perceived opposition to SRH education among community leaders



Two additional findings of note emerged from surveys with teachers. First, rates of support for providing SRH information were not systematically different between religious and non-religious community leaders; teachers did not suggest that religious leaders were more opposed to the provision of SRH information. Second, teachers reported the highest rates of opposition to the teaching of birth control and pregnancy prevention, when compared to more innocuous topics, like puberty and menstruation or the risks of sexually-transmitted infections (STIs). This suggests that community opposition to SRH education may focus on topics that are perceived to encourage promiscuity (birth control), as opposed to topics that are not overtly sexual (puberty and menstruation) or which may actually reduce promiscuity (the risk of STIs). Qualitative interviewees also suggested divergence in what was acceptable, indicating that teaching young adolescents about safe sexual practices was taboo, but other forms of SRH would be more acceptable.¹²⁷

Indicator Score: 0 – Negligible

Indicator 3: Perception among VSLA group members around their capacity to sustain its model

Sponsorship and promotion of savings and loans groups is one of the REALISE project’s key outputs. The savings that households achieve from participating in these saving groups not only allow them to invest in new economic opportunities, but also enable them to better deal with the costs of their children’s education. As discussed in the previous sections, this is a critical factor in promoting girls’ education, as girls in economically-disadvantaged households have lower literacy and numeracy scores on average and are less likely to remain in school. The role of savings groups in promoting education is reflected in

¹²⁷ KII, Teacher, Haut Katanga.

the views of parents – as one parent interviewed described it, "I take part of the money [given to me] ... and I divide it, I pay the school so [my child] is not chased [from it] and part of it I put into my business."¹²⁸

When it comes to participation in VSLA groups and household savings, significant differences were found between the intervention and comparison group, as well as across provinces. Caregivers in the intervention areas participate more actively (27.9 percent) in saving groups' activities compared to their counterpart in comparison areas (18.7 percent). More participations in saving groups may be an important factor for higher savings among caregivers in the intervention areas – 30.4 percent of caregivers in intervention areas report having savings, compared to 26.6 percent of caregivers in comparison areas. Across the provinces studied, caregivers in Kasai Oriental were most likely to participate in savings groups and most likely to personally have savings.¹²⁹

To understand the sustainability of saving groups, members were asked to share their perception around their capacity to sustain the VSLA groups mode during qualitative interviews. The group members' responses revealed that the groups are generally capable of sustaining VSLA activities and are satisfied with the benefits they receive by participating in saving activities, including gaining interest by contributing to the cash box: "What we [place] in the cash box, what we get [out of it] in the end is the interest."¹³⁰ However, the VSLA groups face risks posed by the possibility of free-riding among group members. For instance, some members benefit from participating in the group, but do not contribute back to the group (i.e. cash box): "We don't want people [in the group] who do no work. Because you can give to someone who has nothing to do and, in that moment, the group risks falling apart."¹³¹

In general, the VSLAs seem to have developed mechanisms to overcome these risks, such as excluding the members who are not considered trustworthy. As one member described, "In this group we were many, but those who were not honest, we have excluded them. If a new person wants to join, let him join, but first we test [his honesty]."¹³² One way to test members' trustworthiness or credit-worthiness is to see if they participate in group meetings, follow the rules, and meet the group's expectations: "When someone borrows money in the correct manner, then he has to be present at all the meetings, where we explain that he must save money and reimburse loans within a certain time period. It is this type of person that we will then be able to trust when we give him money."¹³³

Indicator Score: 1 – Latent

Indicator 4: Percentage of schools implementing Teacher Professional Development program/curriculum

Teacher training is a central component of the REALISE project, and its effects are expected to be felt in terms of both learning and transition outcomes. As Section 5.2 discusses in more detail, teaching quality is a key intermediate outcome for the project, and teacher training programs that outlive the project itself are important to promote long-term sustainability.

The baseline data shows that most schools already have teacher training programs in place, both locally at their schools and – to a lesser extent – provided through the Ministry of Education. For instance, 82.8 percent of head teachers report that their schools have an active teacher training program and the vast

¹²⁸ Key Informant Interview, MINAS, Kasai-Oriental.

¹²⁹ Additional analysis of VSLA groups is provided in Section 5.5.

¹³⁰ Key Informant Interview, MINAS, Lomami.

¹³¹ Key Informant Interview, MINAS, Kasai-Oriental.

¹³² Key Informant Interview, MINAS, Kasai-Oriental.

¹³³ Key Informant Interview, MINAS, Lomami.

majority – 87.5 percent – indicate that these programs are well-established, having been started prior to 2015.¹³⁴

Unfortunately, as the table below illustrates, the mere existence of training programs is not sufficient to ensure teachers actually receive training. In the last three years, just 34.1 percent of teachers report having received any additional training. This outcome is not correlated with the stated existence of a teacher training program, suggesting that many training programs considered active by both teachers and head teachers are not actually providing training to very many teachers – among schools where the head teacher reports an active program, *fewer* teachers report having been trained in the past three years.¹³⁵ These findings suggest two conclusions: first, training programs currently provided through sample schools are not particularly active; second, at least some training of teachers occurs via other organizations or the Ministry of Education, as opposed to school-based programs currently in existence.

Table 33: Teachers reporting the receipt of recent training

Subgroup of Teachers	Share receiving training in the previous three years
School with an active training program	31.3%
School without an active training program	47.5%
Haut Katanga	34.1%
Kasai Oriental	16.7%
Lomami	37.5%
Lualaba	41.7%
Tanganyika	41.9%

The table also highlights geographic gaps in the establishment of training programs. Based on reports from teachers, training rates over the past three years are lowest in Kasai Oriental, where just 16.7 percent of teachers have received training over that period. As noted above, this does not appear to be correlated with systematic gaps in the *existence* of training programs – in fact, almost all teachers and head teachers in Kasai Oriental report that their school has an active teacher training program. Rather, Kasai Oriental’s under-performance in terms of actual training received must be related to programs that exist but are comparatively less active, not providing significant amounts of training in recent years.

Beyond school-based programs, a majority of teachers report that training programs are available to them through the Ministry of Education and through NGOs or other organizations. To some extent, these reports may reflect activities performed during the first round of GEC programming. In addition, the mere existence of such programs does not mean that teachers truly have access to training services. Nonetheless, the widespread reported availability of training programs suggests that Save the Children

¹³⁴ Staff teachers agree with these rates: 81.5 percent say that training programs or courses are available through their school itself.

¹³⁵ The same finding holds when we consider schools where staff teachers report the existence of a training program. In schools where teachers report such a program, 31.2 percent of teachers had been trained in the previous three years, compared to 46.5 percent who report having been trained in those schools without an active program provided through the school.

may benefit from a comprehensive mapping of current training programs provided by different organizations, to ensure that their efforts are targeted to schools where training opportunities are most scarce. Based on reports from teachers, training through the Ministry of Education is least available in Haut Katanga and Tanganyika, while training through NGOs and other organizations is least commonly available in Lomami, belying simple classifications of high- and low-availability areas based on geography.

Indicator Score: 1 – Latent

Indicator 5: Percentage of schools with a functioning case reporting system (to ensure child safeguarding/protection)

As part of their effort to improve the learning environment and increase safety for students, STC is making efforts to promote sound child protection policies and procedures and reduce the prevalence of corporal punishment within project schools. In order to sustain any improvements made with respect to child protection, the project aims to help schools develop child protection case reporting systems that will allow cases to be tracked, followed up on, and eventually resolved, as well as facilitating reporting to the Ministry of Education for further action.

At present, only a handful of schools have an established case reporting system for child protection cases, and other policies and procedures for child protection are also under-developed generally. Only 18.1 percent of head teachers in the sampled schools reported that their schools maintain a record of cases related to child protection, a critical component of any case reporting system. Record-keeping of this kind is most common Lualaba and Lomami, where 37.5 and 33.3 percent of head teachers, respectively, report keeping records. In contrast, under 10 percent of head teachers in Haut Katanga and Kasai Oriental reported the same. Notably, 20 head teachers report that their schools are currently developing case reporting systems, though they are not yet active.

In fact, while record-keeping systems are rare, other procedures related to child protection are more common. For instance, just under half – 49.1 percent overall – have an established procedure for following up on child protection cases, and 46.6 percent have a focal point – an individual who is assigned responsibility for following up on those same cases. The establishment of a focal point is especially important because it places responsibility within a single individual who can be held accountable for failure to act on reported cases. One important caveat to the otherwise positive finding that nearly half of schools have a focal point is the general reliance on men as points of contact for receiving reports from students: 27.6 percent of head teachers say that students should make reports to a male teacher, while another 34.7 percent said reports should be made to the head teacher. Given the high proportion of head teachers who are male, this means that around 60 percent or more of students schools have a man in charge of receiving child protection reports.

Reports from head teachers broadly match those provided by their staff teachers, who were also asked a series of questions about child protection procedures. Out of 232 teachers surveyed, 41.0 percent say their schools have formal policies in place for child protection, with the highest rates found in Lualaba and the lowest rates in Kasai Oriental. Fewer report that a reporting system is in place, however, in line with reports by head teachers.

Finally, the establishment of training programs for teachers and staff on child protection could be greatly improved. Currently, just 37.1 percent of head teachers report that their schools train new teachers on child protection when they are hired. Even this relatively low frequency of induction training overstates the

number of teachers who have actually received such training. Indeed, two additional gaps in child protection training are potentially problematic: teachers who were hired prior to the establishment of such training policies have typically not received training on child protection since their hiring, and school staff other than teachers are rarely trained on child protection issues. Under one-quarter (24.6 percent) of teachers report that they received induction training on child protection when they were hired, with correspondingly lower rates among teachers who were hired further in the past.¹³⁶ While this suggests that training systems have improved over time, it leaves an even larger share of teachers who have never been subject to training on this important topic, especially since only a small number of teachers have received child protection training recently.¹³⁷

Indicator Score: 2 – Emerging

Indicator 6: Change in teachers' attitudes and knowledge about positive discipline in classrooms

Teachers' attitudes toward and knowledge about proper disciplinary practices is a critical component of REALISE programming. The project has emphasized the quality of teaching throughout its monitoring and evaluation approach, focusing on teaching quality as a key intermediate outcome thought to impact learning and transition outcomes, and incorporating teacher training programs into sustainability efforts.

As with teacher training programs, the project hopes to impact teachers' attitudes toward and knowledge of positive disciplinary practices, in an effort to improve girls' learning outcomes. REALISE will strengthen the capacity and competencies of teachers by providing a series of trainings on positive discipline and gender-sensitive pedagogy. As a result of an improved learning environment brought about by improved teaching practices, girls are expected to attend school more consistently, achieve higher scores on examinations, and transition more smoothly and frequently through grades and between school levels. As discussed in section 3, both qualitative and quantitative evidence shows that teaching quality is among the most common barrier to learning and transition, with the majority of girls in the baseline sample reporting that teachers punish students who do poorly on their lessons and that they witnessed physical punishment in the classroom during the previous week.

This finding is consistent with the information provided during KIIs with teachers, where they were asked to share their thoughts on the role of physical punishment on students' discipline and learning and if applying physical punishment was appropriate, regardless of the student's gender. The majority of teachers believed that physical punishment can have destructive effects on students and can cause "trauma" and "fear" among them. One teacher suggested using other ways of inspiring students to study when they do not do well in their lessons, stating that "things are evolving with punishments. If you teach students like that, with corporal punishment, you're not going to get kids to learn better. You have to show the children, play with them, share with the pupils. Even with the one who failed, you cannot discourage him/her. We will always show him/her and also bring him/her to a better understanding of what others are doing."¹³⁸ Despite these statements, the majority of teachers reported using physical punishment in cases when students do not understand something, refuse to obey orders, or are disruptive during class. Among these teachers, boys appear to be more likely to be punished than girls.

¹³⁶ For instance, among teachers hired at their current schools 10 or more years in the past, just 18.8 percent received induction training on child protection. Among teachers hired in the last 10 years, that rate is 28.7 percent.

¹³⁷ When asked whether they have received additional teacher training in the last three years and what kind of training they received, only 7.3 percent of teachers reported receiving child protection training.

¹³⁸ Key Informant Interview, Teacher, Kasai-Oriental

To understand teachers' viewpoint about using punishment in their classrooms, teachers were asked to indicate the relative effectiveness of detention, physical punishment and positive rewards in encouraging good behavior in class. Overall, more than half of teachers (55.2 percent) believed that using detention would be very or somewhat effective in encouraging good behavior among students while the vast majority (78.8 percent) stated that physical punishment was ineffective. Most of the teachers (89.2 percent) also mentioned that rewarding students with special privileges – one type of positive discipline – would be “very effective.” No significant differences were found between the intervention and comparison groups in terms of how they viewed the effectiveness of varied punishment types.

Teachers' survey responses align broadly with observations made in their classrooms. During classroom observations conducted by enumerators, detention was applied in 11.5 percent of classes, while students were physically punished for bad behavior in just 5.2 percent of the classrooms visited.¹³⁹ Similarly, in 88.8 percent of classrooms observed, enumerators reported the use of positive rewards or praise as a method of promoting good behavior among students. Teachers in comparison schools were, overall, more likely (9.0 percent) to use physical punishment than teachers in intervention schools, where just 1.7 percent of teachers used physical punishment during the observation period.

Indicator Score: 1 – Latent

Indicator 7: Creation of a platform to disseminate research results for advocacy purposes

The evaluation did not include either direct or indirect measures of this sustainability outcome, as efforts to create such a platform were not yet underway at the time of the baseline data collection.

Indicator Score: 0 – Negligible

Indicator 8: Implementation and validation of AEP end-of-year exams by the Ministry of Social Affairs

At present, no official end-of-year examinations exist for AEPs, although individual teachers can decide to have an unofficial final examination for their students. Students in AEPs would, like all students in DRC, take the Test National de Fin d'Études Primaires (TENAFEP); in the case of AEP students, they would take this examination at the end of the AEP's Level 3. The TENAFEP is a national examination that all children – whether enrolled in formal or informal schooling – can take, and it is organized by the Ministry of Education.

Currently, no AEP end-of-year examinations are being administered by the Ministry of Social Affairs (MINAS). If such examinations are under development, this was not made clear during qualitative interviews with MINAS officials. Interviewees indicated that AEP students were eligible to take the TENAFEP and that such eligibility was important, as to do otherwise would constitute discrimination against AEP students.¹⁴⁰ MINAS officials do not organize end-of-year examinations themselves and do not appear to be able to accept or validate examinations performed by outside organizations, at least in lieu of national examinations like TENAFEP. In general, there appeared to be concern about the idea of alternative examinations on the basis that alternative examinations would be unfair to AEP students, as passing would not make them eligible for further education. Additionally, interviewees cited concerns about circumventing national-level examinations, whether these alternative examinations were performed

¹³⁹ It is important to note that teachers may have been less likely to physically discipline students during classroom observations, as they were aware of the observer and their affiliation with the REALISE project. In cases where teachers have received training that discourages or stigmatizes the use of corporal punishment, the presence of an observer may reduce the likelihood that they actually employ physical punishment during the observation period.

¹⁴⁰ KII with MINAS Official, Kasai Oriental; KII with MINAS Official, Lomami; KII with MINAS Official, Kasai Oriental.

by MINAS or outside organizations.¹⁴¹ This portion of the project may require additional research and input from national-level education officials, given the centralization of testing under the national Ministry of Education.

Indicator Score: 0 – Negligible

The following sub-section and Table 25 should be completed by the project.

- 1) Set reasonable expectations: At each of the three levels of sustainability, what changes need to take place to ensure that attitudes, behaviours or approaches are established which provide for ongoing learning and successful transition for future cohorts of girls and boys? Who are the stakeholders involved in these changes? What are the factors that help or hinder changes? Refer to your sustainability plan, theory of change and log frame. Be brief in the table and provide narrative analysis below the table that refers back to the mixed-methods analysis under 1)

¹⁴¹ See, e.g.: KII, MINAS Official, Lomami.

Table 34: Changes needed for sustainability: SCI

	Community	School	System
Change: what change should happen by the end of the implementation period	A positive change in community awareness, knowledge and attitudes about gender and SRH issues will result in increased support for SRH curriculum, and girls wellbeing and girls' education.	The TPD approach will enable teachers to use improved gender and conflict-sensitive teaching methods, resulting in improved learning environment. The teachers will retain these improved teaching skills throughout their career which will serve them for any grade and subject matter.	REALISE will contribute to a sustainable change in accelerated education by working with MINAS and MOE to integrate standardized level exams to allow for transition to formal education at all levels. Research and advocacy efforts, and collaboration with partners will result in a national platform to disseminate results and develop strategies to address issues.
Activities: What activities are aimed at this change?	SRH Curriculum and Clubs will be introduced in schools and communities; SRH Hot line will be established.	Provincial TPD TOTs are followed by introduction of School-based TPD on Pedagogy, LB, NB modules on quarterly basis.	Research on Girls Drop Out and two research papers by IDS will be produced and disseminated. Quarterly Interministerial Meetings will be held. Meetings with MINAS and MOE to advocate and support change will be held.
Stakeholders: Who are the relevant stakeholders?	Parents, Community leaders, teachers	Teachers, School Directors, Provincial School Inspectors; TPD coaches	Ministries of Education, Social Affairs (Non-formal Education), and Gender; other Education projects (Accelere), UNICEF, Consortium partners
Factors: what factors are hindering or helping achieve changes? Think of people, systems, social norms etc.	Social, cultural and gender norms, and religious belief and practices are strong and can hinder change. National curriculum on SRH and Life Skills is in place.	The TPD approach and guide has been validated by MOE at the National level as it fits within MOE plan and addresses national competencies	Project MOU signed with all three ministries who have provided focal points to facilitate collaboration. Strong research design.

Provide narrative analysis here of the points raised in the table above. Explain the change the project intends to achieve. Highlight cross-cutting activities, stakeholders and factors, but also those that relate to only one level of sustainability. Link the analysis here with that under section

1) drawing on the scores given for each level. Link the analysis to the other Outcomes and Intermediate Outcomes.

5. Key Intermediate Outcome Findings

5.1 Attendance

Indicator	Description
Indicator 1.1	Percentage improvement in marginalised girls' attendance rate in intervention schools
Indicator 1.2	Average attendance rate in project AEP centres
Indicator 1.3	Girls' views on the strength of barriers that may prevent girls' ability to attend school regularly

Improving attendance of girls at school is a key intermediate outcome of the REALISE project and an important step in improving the learning outcomes of girls. The evaluation establishes the baseline attendance rates within both formal schools and AEP centres. This section will present attendance rate findings from the two surveys in which survey respondents are asked about school attendance: the headcount survey and the household survey. These findings are then triangulated and compared for consistency.

5.1.1 Attendance from Headcount Survey

Survey teams went to schools and recorded student attendance from the attendance register for the day before the visit, the day of the visit, and through a direct headcount of students. The teams arrived at the school approximately an hour after the beginning of classes and up to one hour before the lunch break in order to allow teachers the time to record attendance and to collect data on students who may only attend half of the day. A headcount was conducted for grade 4, 5, and 6 classes in formal schools and AEP levels 1, 2, and 3 in AEP centres.

Headcount Survey Questions

- B3. Enter the number of GIRLS enrolled in this class
- B4. Teacher count on record: Number of girls marked in class YESTERDAY
- B5. Teacher count on record: Number of girls marked in class TODAY.
- B6. Girls HEAD COUNT in class (done by Enumerator): Enter the total number of GIRLS present in the class by counting
- B7. Enter the number of BOYS enrolled in this class
- B8. Teacher count on record: Number of boys marked in class YESTERDAY
- B9. Teacher count on record: Number of boys marked in class TODAY
- B10. Boys HEAD COUNT in class (done by Enumerator): Enter the total number of BOYS present in the class by counting

On average, the headcount attendance rates gathered by the survey team were lower than those gathered from the attendance registers of the day before the visit, but were roughly the same as those

from the attendance registers of the day of the visit. This suggests that attendance rates across surveyed schools are regularly and accurately recorded. As shown in the table below, the average attendance rate of all girls was 90.4 percent the day before the visit, 86.7 percent the day of the visit, and 86.8 percent when the headcount was conducted. The average attendance rate of all boys was 91.2 percent the day before the visit, 88.9 percent the day of, and 89.1 percent for the headcount.

Table 35: Attendance Yesterday, Today, and of Headcount for Girls and Boys in Formal Schools and AEP Centres – Headcount Survey

Attendance	Total		Formal Schools		AEP Centres	
	Girls	Boys	Girls	Boys	Girls	Boys
Yesterday (%)	90.4	91.2	90.3	91.1	93.3	91.7
Today (%)	86.7	88.9	86.7	89.1	86.6	83
Headcount today (%)	86.8	89.1	86.8	89.3	87.6	85.3

In total, the attendance rates of girls in intervention schools was 87.7 percent, and that of girls in comparison schools was 85.7 percent. The differences in attendance between intervention and comparison schools were not found to be statistically significant.

There were, however, significant differences by province. The schools visited in Kasai Oriental on average had the lowest attendance records for both genders. As shown in the figure below, the headcount conducted by the enumerator the day of the visit found that 84 percent of girls in Kasai Oriental attended school, 86.9 percent in Lualaba, 87.6 percent in Tanganyika, 91.8 percent in Haut Katanga, and 95.8 percent in Lomami.¹⁴²

Table 36: Attendance Yesterday, Today, and of Headcount for Girls and Boys in Formal Schools and AEP Centres by Province – Headcount Survey

Total	Girls					Boys				
	Haut Katanga	Lualaba	Lomami	Kasai Oriental	Tanganyika	Haut Katanga	Lualaba	Lomami	Kasai Oriental	Tanganyika
Yest.	92	93.4	98.1	87.3	90.4	94.2	92.7	98.1	86.7*	91.9
Today	89.3	87.5	97.3	85.4	86.7	91.9	91.3	94.8	86.5	89
HC	91.8	86.9	95.8	84*	87.6	95.1	91.1	95	85.1*	89.9
Formal Schools										
Yest.	92	93.4	98.1	87.3	90.4	94.2	92.7	98.1	86.7	91.9
Today	89.3	87.5	97.3	85.4	86.7	91.9	91.3	94.8	86.5	89

¹⁴²Statistically significant results are marked with an asterisk* ($p < 0.05$ in a bivariate regression with cluster-robust standard errors).

HC	91.8	86.9	95.8	84	87.6	95.1	91.1	95	85.1	89.9
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AEP Centres

Yest	N/A	N/A	N/A	88.1	94.3	N/A	N/A	N/A	80.4	96.1
Today	N/A	N/A	N/A	88.1	83.2	N/A	N/A	N/A	79.5	85
HC	N/A	N/A	N/A	88.1	85.2	N/A	N/A	N/A	79.5	87.2

Although significant differences were not generally found by grade, a downward trend in attendance was observed in girls in formal schools as grade levels advanced, and an upward trend in attendance was observed in boys between AEP levels 1 and 3.

Table 37: Attendance Yesterday, Today, and of Headcount for Girls and Boys in Formal Schools and AEP Centres by Grade – Headcount Survey

	Girls			Boys		
	Grade 4	Grade 5	Grade 6	Grade 4	Grade 5	Grade 6
Formal Schools						
Yesterday	92.9	91	90.1	92.5	90.4	93.4
Today	92.4	86*	86.7	90.9	88.8	91.1
HC	90.7	88	86.1	89.8	91.3	91.1
AEP	AEP Level 1	AEP Level 2	AEP Level 3	AEP Level 1	AEP Level 2	AEP Level 3
Yesterday	95.8	87	95.8	80.5	92.4	95.9
Today	97.2	73.6	91.5	79.2	79.9	90.1
HC	97.2	73.6	91.5	79.2	79.9	91.6

5.1.2 Attendance from Household Survey

In the interview with primary caregivers within the household survey, primary caregivers were asked a number of questions about their cohort girls' school attendance

Household Survey Questions

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?

PCG_6enr. Has she attended more than half the time, about half the time, or less than half the time?

PCG_6enr_na. In a typical two-week period, how many days of schooling did GIRL miss?

conflict_area. Would you say that there is conflict or open fighting in this area?

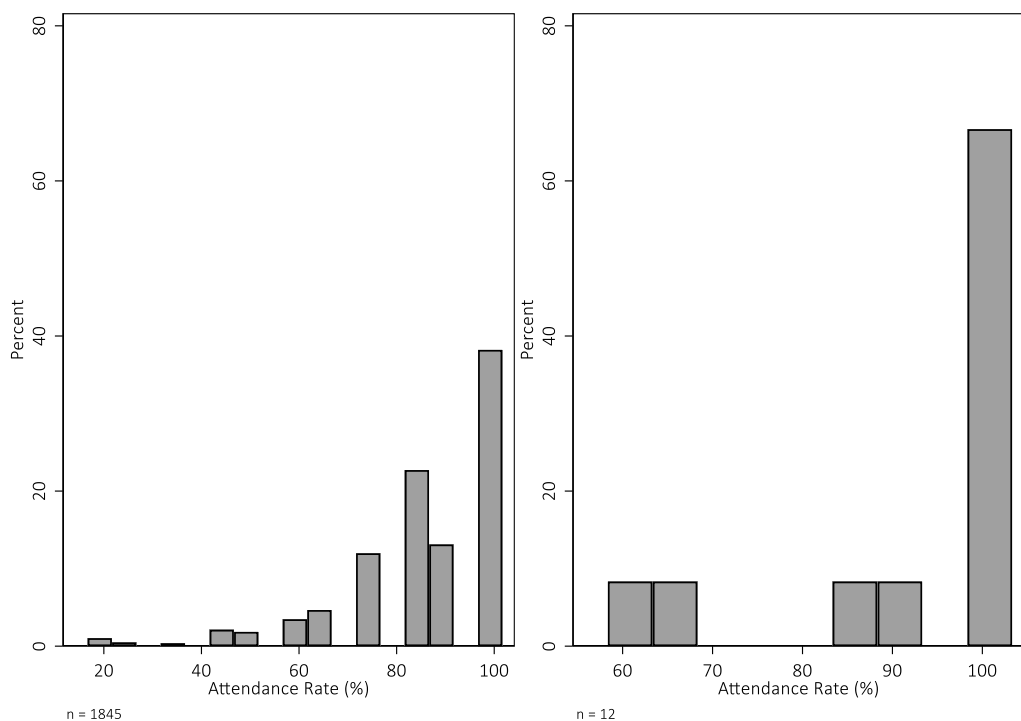
Of the 1,855 primary caregivers of girls who were in school last year, 96.4 percent said that their girl attended most days since the start of this school year. Among the same number of caregivers, 95.0

percent of girls said she attended more than half the time, 3.9 percent about half the time, and 1.1 percent less than half the time.

Based on the number of days of schooling the caregiver said that the cohort girl missed in a typical two-week period, a rough estimate of her attendance rate was calculated. The estimated average attendance rate of girls enrolled in formal schools is 85.5 percent (n=1845) and the estimated average attendance rate of girls enrolled in AEP centres is 91.7 percent (n =12).¹⁴³

Attendance rates estimated from the household survey are left-tailed, and, as shown in the figure below, the attendance rates of girls in formal schools are more closely clustered than those of girls in AEP schools. Among girls enrolled in formal schools, 48.7 percent were estimated by their caregivers to attend less than 90 percent of the school days in a typical two-week period, 26.0 percent less than 80 percent of the school days, and 14.0 percent less than 70 percent of school days. Of the girls enrolled in AEP centres, only 25 percent were estimated to attend less than 90 percent of the school days in two weeks, 16.7 percent less than 80 percent, and 16.7 percent less than 70 percent.

Figure 9: Attendance rates of cohort girls, according to caregivers



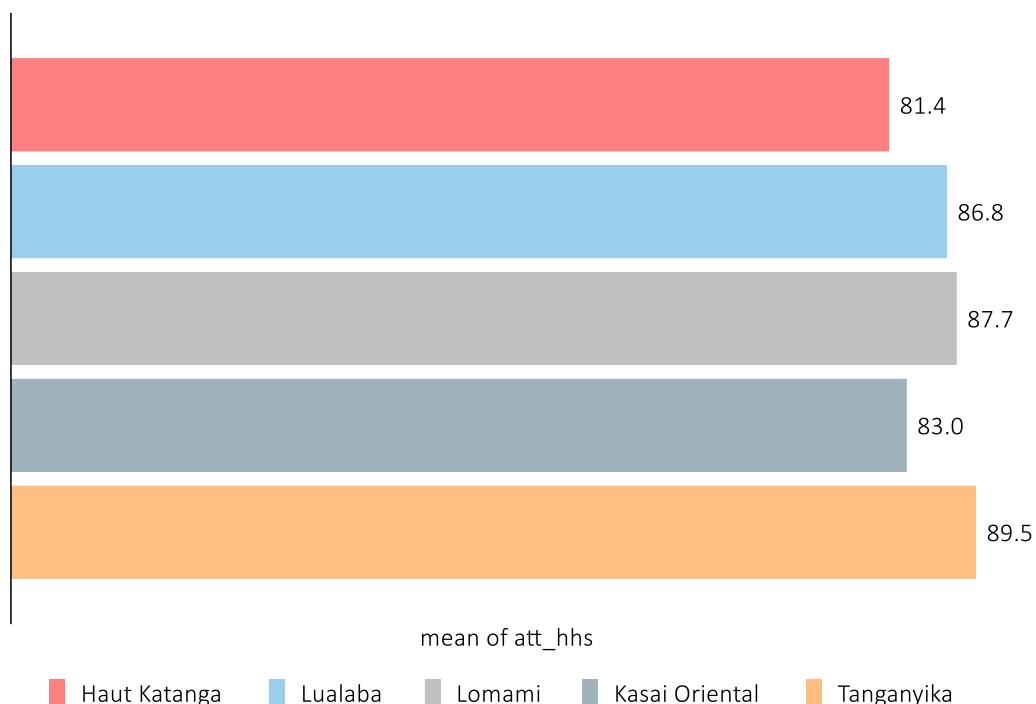
Significant differences in school attendance of girls enrolled in formal schools are observed across zones, as shown in the figure below: girls in Tangyika are estimated by their caregivers to attend school at

¹⁴³ Most girls in the DRC go to school six days a week, Monday through Saturday. Given that there are 14 days in a two-week period, the maximum number of days a girl could have attended school is 12. As such, to calculate the caregiver-estimated attendance rate, the number of days missed was subtracted from 12 and then divided by 12.

significantly higher rates than their counterparts in other provinces (89.5 percent), while girls in in Kasai Oriental (83 percent) and in Haut Katanga are estimated to attend school at significantly lower rates.

Due to only 12 primary caregivers of AEP girls being asked to estimate the attendance of their girls, further disaggregation by these 12 schools cannot lead to meaningful findings about AEP girls. Therefore, subsequent analysis undertaken that disaggregates the data by province, grade, subgroups, and barriers will exclude these 12 AEP girls.

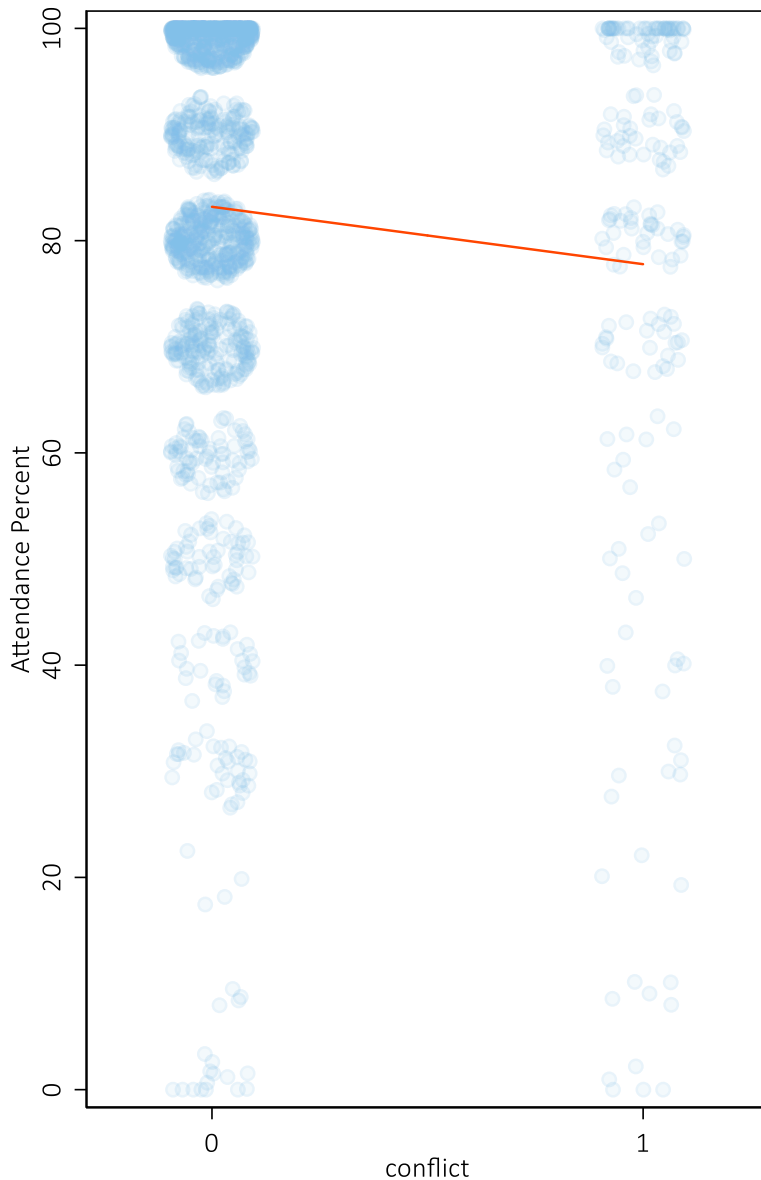
Figure 10: Caregiver-reported attendance rates of formal students, by province



The theory of change proposes that conflict plays a significant role in degrading the ability for girls to access schools, and girls whose head of household indicated that there was conflict or open fighting in the area attended school at a significantly lower rate than girls whose head of household did not indicate there was conflict in the area. The influence of conflict on attendance rate is illustrated in the figure below. The mean attendance rate of girls in non-conflict areas is 86 percent while the mean attendance rate of girls in conflict areas is 81.5 percent. Additionally, conflict was mentioned in the qualitative interviews as having an impact on girls’ school attendance: “Other children lost their parents in ethnic conflicts, so they are vulnerable to missing school.”¹⁴⁴

Figure 11: Caregiver-reported attendance rates of formal students, by conflict area

¹⁴⁴ Focus Group, Girls, Tanganyika, Katanga.



Attendance rates estimated by caregivers were also disaggregated by age, grade, and intervention/comparison schools, but no statistically significant differences were observed.

5.1.3 Triangulation of Attendance Rate Findings

From the above analysis, two baseline attendance rates are collected which reflect findings for two time frames. The attendance rate gathered from the headcount conducted by the enumerator in the headcount survey reflects the most accurate attendance rate since it was collected by a third party in the classroom, but it is the most limited in terms of generalizability, because it only offers a snapshot of attendance on the day the survey team visited a school. The attendance rate from the household is gathered over the past month, but it is reported in terms of the number of days the girls were absent in the past month and relies on the memory of the primary caregiver being interviewed.

The table below presents the various measures of attendance rates gathered in this round of data collection. As discussed in the analysis of attendance data from the headcount survey, attendance rates obtained from records yesterday, from records today, and from the headcount do not differ significantly.

Table 38: Comparison of Attendance Rates¹⁴⁵

Time frame	Survey	Attendance (%)	95% Confidence Interval
Record Yesterday	Headcount	91.4	89.0 - 93.8
Record Today	Headcount	88.3	85.8 - 90.8
Headcount Today	Headcount	88.3	86.1 - 90.5
Past two weeks	Household	85.5	84.7 - 86.3

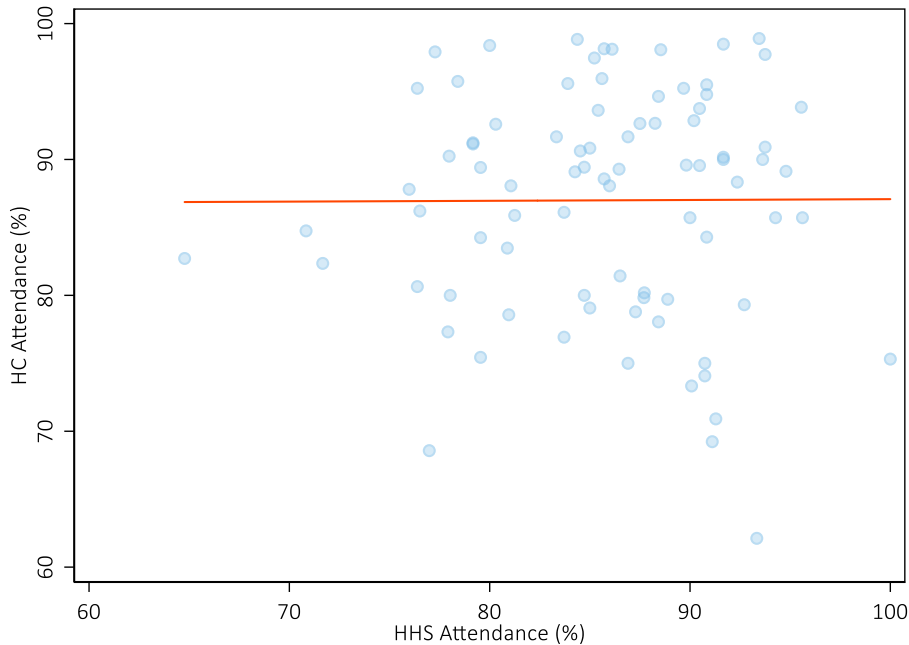
The confidence intervals do not overlap with one another and suggest that the attendance rates measured are not significantly different from each other. Nor do the attendance rates from the headcount data do not significantly differ from the caregiver-estimated attendance rates. The convergence in attendance rates provides evidence that overall record-keeping of attendance in schools is reliable.

Despite the relative similarity in the rates of attendance calculated from the headcount survey and primary caregivers' assessment, the two attendance rates are not significantly related when aggregated to the school level. The figure below presents the average attendance rate of the headcount survey for a given school against the average attendance rate of the household survey of the same school. The fitted line in red is flat, and the positive relationship between the two attendance rates one would expect is non-existent.

This difference between the two rates of attendance may in part be due to the time frames of each. The headcount data provides data on girls' attendance on the day the classroom in the school was visited. The survey with the primary caregivers asks about no particular time, but asks about girls' attendance in a hypothetical "typical two-week period." The difference between these two time frames may account for the lack of correlation between the two.

Figure 12: Caregiver-reported attendance rates by headcount attendance rate

¹⁴⁵ Attendance rates from the headcount survey here will differ slightly from those discussed earlier because those attendance rates are weighted by the number of girls in the classroom. More precisely, the number of girls who were recorded yesterday, today, or counted today were divided by all girls enrolled. In contrast, in the calculation for the attendance rates of this table, each classroom observation has equal weight regardless of the number of girls enrolled.



It may be advisable in future evaluations to collect attendance data from the school's records to provide a measure of attendance over a longer timeframe and another data point to determine an accurate measure of attendance. Doing so would take advantage of the surveyed schools' relatively good record-keeping. Of all classrooms observed in the evaluation, 78.5 percent had attendance records that were classified as "mostly complete" or "extremely complete" and had on average 4.2 days of attendance data recorded in the past 5 school days.

5.1.4 Girls' Characteristics and Attendance

This section provides analysis on the determinants of attendance rates by subgroups of girls who have key characteristics that may be expected to be related to educational marginalisation. The key subgroups of girls presented here includes those of the subgroup analysis of learning outcomes which are strongly associated with attendance rates of in-school girls. As with subgroup analysis of learning outcomes, there are few critical subgroupings that identify girls who are likely to attend school significantly less frequently than their peers.

The table below summarizes the attendance rates for each of the major subgroups and shows that very few subgroups of head of household or caregiver characteristics are significant determinants of attendance. Significant differences in attendance rates between those within the subgroup and those without are noted with an asterisk, characteristics that correlate negatively with attendance rates are highlighted in light red, and characteristics that correlate positively with attendance rates are indicated in light blue.

Several indicators of poverty and migration/regional characteristic correlated significantly negatively with attendance rates. Proxies for poverty such as household members going to sleep hungry many days, without enough clean water many days, going without medicines or medical treatment many days, and

going without cash income many days were significant predictors of lower attendance rates. In addition, girls with households that migrated in the past 12 months, live in an area where there is conflict, or live in a remote area were observed to have significantly lower attendance rates.

A link between poverty and attendance was also found in focus group discussion with girls. Girls most commonly mentioned financial barriers, such as a lack of money for school fees or supplies, in their explanations for why girls miss school. Girls also alluded to another financial consideration that families face: the need for children to either directly help with income-generating activities or take care of the home to free up their parents for work. Girls mentioned that they are sometimes required to stay home to work in the fields, take care of siblings, and help with household chores.

While many of the disability indicators did not predict attendance rate, cognitive impairment was a significant indicator of lower attendance rates. The mean attendance rate of girls identified as having a cognitive impairment based on answers given by her primary caregiver had a mean attendance rate of 80.6 percent compared with 85.7 percent of all girls.

Table 39: Attendance rates of girls with key characteristics¹⁴⁶

	Attendance Rate (%)	Number of observations for subgroup
Characteristics:		
All in-school girls	85.7	1855
Haut Katanga	81.7* (-)	285
Lualaba	87.2	341
Lomami	87.7	245
Kasai Oriental	83.2* (-)	567
Tanganyika	89.4* (+)	417
Living without both parents	87.6	75
Girl does not speak LOI	85.3	569
Disability		
Vision impairment	88.5	12
Hearing impairment	90.4	8
Mobility impairment	87.7	16
Cognitive impairment	80.6* (-)	144
Self-care impairment	89.0	34
Communication impairment	87.2	52
Mental health impairment	85.1	510
Any disability	84.6	633

¹⁴⁶ Statistically significant results are marked with an asterisk* ($p < 0.05$ in a bivariate regression with cluster-robust standard errors).

HOH and Carer Characteristics		
HOH no education	86.0	106
HOH female	85.9	236
Carer no education	85.3	324
Household Assets		
Owns mobile phone	86.3	1294
Owns land	85.5	1302
Poverty		
House is informal/temporary structure	72.1	10
Gone to sleep hungry many days	82.8* (-)	431
Gone without enough clean water many days	83.3* (-)	365
Gone without medicines or medical treatment many days	83.8* (-)	804
Gone without cash income many days	84.1* (-)	1015
Migration and Regional Characteristics		
Migrated in past 12 months	88.2* (-)	286
Displaced	89.4	31
Conflict area	81.6* (-)	203
Urban area	86.6	616
Remote area	84.9* (-)	1178
Other		
High chore burden (whole day spent on chores)	83.8	51
Married	96.1* (+)	6
Mother, under 16	94.1* (+)	5

5.1.5 Girls' Barriers and Attendance

The table below summarizes the subgroup analysis by barriers of school infrastructure, school resources, teaching quality, and other barriers. As in the subgroup analysis of girls' characteristics above, significant determinants of attendance rates are noted with an asterisk, light red indicates a barrier that is negatively correlated with attendance rates, and light blue indicates a barrier that is positively correlated with attendance rates.

A number of teaching quality indicators predict lower attendance rates among girls. Girls who report feeling uncomfortable asking their teacher questions, who report feeling afraid of their teachers, or who say that their teacher is often absent from class attend school at significantly lower rates than those who did not face these barriers. These findings are corroborated in focus group discussions with girls: "If I did not do my homework, I do not go to school [for fear of punishment]."¹⁴⁷

¹⁴⁷ Focus Group, Girls, Lomami, Tutante.

Table 40: Attendance rates of girls with key barriers¹⁴⁸

	Attendance Rate (%)	Number of observations for barrier
Barriers:		
All girls	85.7	1855
School Infrastructure		
Doesn't use drinking water facilities	85.1	61
Doesn't use toilet at school	84.2	261
School Resources		
No computers at school	85.9* (+)	1788
School does not have learning materials	85.3	473
Not enough seats for children at school	82.5* (-)	539
Teaching Quality		
Uncomfortable asking teacher questions	82.9* (-)	193
Disagrees teachers make them feel welcome	80.9	81
Agrees that they are afraid of teacher	83.8* (-)	801
Agrees teachers treat boys and girls differently in the classroom	85.9	1083
Agrees teacher is often absent from class	83.5* (-)	698
Teacher punishes students who get things wrong	85.3	1198
Teacher uses corporal punishment	85.4	1203
Caregiver says teaching at school is poor	84.1	146
Other Barriers		
Agrees she has no choice in schooling decisions	85.9	937
Over 30-minute travel time to school	85.1	95
Feels unsafe on way to school	85.8	1804
Feels unsafe at school	84.5	57
Caretaker has never visited school (disengaged)	82.6* (-)	290
Difficult to afford to go to school	84.6* (-)	1349
Does not get support from family to stay in school	89.5* (+)	126

Among the school resources indicators, reports from cohort girls that their classroom did not have enough seats for all students attending the school were significant predictors of lower attendance. In addition, other barriers at the household level such as caregivers indicating that they have never visited the school and difficulty in affording to send the girl to school, proxies of disengagement and poverty, respectively, were negatively correlated with attendance rates.

¹⁴⁸ Statistically significant results are marked with an asterisk* ($p < 0.05$ in a bivariate regression with cluster-robust standard errors).

Parental disengagement or lack of oversight was also mentioned by multiple FGD respondents. One respondent explains that parents are not always at home to ensure their children regularly attend school: “Other children do not want to study and take advantage of a lack of parental oversight – parents are often absent, sometimes they are in the fields and sometimes in the mines.”¹⁴⁹

¹⁴⁹ Focus Group, Girls, Tanganyika, Katanga.

5.2 Quality of teaching

Indicator	Description
Indicator 2.1	Proportion of teachers who demonstrate improvement against four or more competencies within the national teacher competency framework
Indicator 2.2	Number of teachers demonstrating skills in teaching children with specific needs
Indicator 2.3	Girls' perception towards their teacher's teaching methods and ability focused on punishments by teachers and how comfortable the girls are to ask questions

Indicator 2.1

Indicator 2.1 involves tracking the proportion of teachers who demonstrate improvement against four or more competencies within the national teacher competency framework. The framework created by DRC's Ministry of Primary, Secondary and Vocational Education (EPSP) provides a guide to defining these competencies. There are a total of 14 competencies identified, but not all of these can be measured through the methods used in this study. There are ultimately nine competencies that we can propose to measure and track over time, and each competency can be operationalised and measured using multiple questions or proxies, as well as drawing on multiple data sources. We thus take a scorecard approach to measuring the competencies and tracking their change over time. The scorecard approach allows us to present a score (or in some cases, multiple scores) for each of the nine competencies measured, allowing for an assessment of which competencies offer the greatest room for improvement through targeted programming.

The table on the following page organises the analysis below by summarising teaching competencies from the framework provided by the DRC's Ministry of Primary, Secondary and Vocational Education (EPSP), and mapping these competencies onto items from the Classroom Observation, Teacher Survey, and Head Teacher Survey questionnaires. The final column of the table notes the relevant data source.

Category	Competency	Measures from Questionnaires	Source Questionnaire
Cognitive Skills (Knowledge)	1. Master the language (s) in which classes are taught and communicate in a correct and suitable way, both orally and in writing.	<p>G16. There were times when I could not understand the teacher when he/she spoke</p> <p>G17. There were times when I could not understand the teacher when he/she wrote on the board</p> <p>G19. The teacher's speaking ability in language of instruction.</p> <p>G20. The teacher's writing ability in language of instruction.</p>	Classroom Observation
	2. Master the subjects to be taught in accordance with the national curriculum	Not measured	
	3. Master the strategies and didactic actions facilitating learning	<p>C4. Did the teacher clearly communicate the objective of the lesson at the beginning of class?</p> <p>E1. Students spent more than half of the observation time copying from the board</p> <p>E2. Students spent more than half of the observation time repeating teacher's words aloud.</p> <p>E12. The teacher summarized and clearly stated a key concept or takeaway point from the lesson</p> <p>G11. Students were given positive rewards or praised for good behavior</p> <p>G13. Students were disciplined physically for bad behavior</p> <p>E5. Teacher asked open-ended questions (that require more than a simple answer) that encourages thinking</p> <p>E10. Did students work together in groups?</p>	Classroom Observation

		G8. How enthusiastic was the teacher about the material and about teaching?	
	4. Master information/ communication technologies	Not measured	
Organizational Skills (Know-How)	5. Plan, organize and effectively manage class work before and during learning	C2. Does the teacher appear to have a lesson plan or outline of material to be covered?	Classroom Observation
		E13. The teacher referred back to previous lessons, relating this lesson to previous lessons	
		G1. Did the teacher use the full time allotted, or did the lesson end early?	
		G24. The lesson was organized in a logical way, with new topics building on previous topics	
		G25. Did the lesson move too fast, too slow, or at an appropriate speed?	
	G26. Was the lesson too easy or too difficult for the students?		
	6. Evaluate the progression of learning and the degree of skill acquisition among students in a continuous and objective manner	Not measured	
7. Engage in professional development through self-assessment, training and innovation	B7. Have you received any additional teacher training in the last three years?	Teacher Survey	
8. Work in a team with colleagues for mutual support	Not measured	Not measured	
9. Meet professional requirements	C1. Did lesson start on time or was the teacher delayed in beginning the lesson? G0. Did the teacher take the register (mark attendance, take roll) at the start of class?	Classroom Observation	
9. Meet professional requirements	Teacher attendance (school-days missed in a two week period)	Head Teacher Survey	

	<p>10. Collaborate with the hierarchy and cooperate with the parents of students and other partners of the school</p>	<p>E2. Imagine that a girl is doing poorly in your class. Would you contact her parents?</p> <p>E3. Would you arrange a meeting with the girl's parents?</p> <p>E4. Now imagine that a girl has missed the last two weeks of school and you are concerned that she may have dropped out. Would you contact her parents?</p> <p>E5. Would you arrange a meeting with the girl's parents?</p>	<p>Teacher Survey</p>
<p>Behavioral or Socio-Emotional Skills (How to Act)</p>	<p>11. Act ethically and responsibly in the profession</p>	<p>E8. If a student gives an incorrect answer, are they reprimanded (verbally or physically)?</p> <p>G5. How respectful was the teacher's language toward the students?</p>	<p>Classroom Observation</p>
	<p>12. Take into account the diversity and emotional need of students</p>	<p>Diverse Needs of Students</p> <p>E6. After a student gave an incorrect answer, did the teacher explain the concept in a new way?</p> <p>E7. After correcting a student who gave an incorrect answer, did the teacher verify the student understood the question now?</p> <p>E9. Teacher called on or actively tried to involve a student who was not participating.</p> <p>Emotional Needs of Students and Knowledge of Students</p> <p>G 4. How welcoming was the teacher, and how welcoming to students did their classroom seem?</p> <p>G6. Teacher knew and used students' names consistently</p> <p>G 7. The teacher conveys genuine concern for students (understanding, warm, concerned)</p>	<p>Classroom Observation</p>

		<p>Equitable Treatment of Students and Practice of Inclusion</p> <p>F2. Please rate the level of classroom participation among GIRLS during this block, on a scale of 1 to 10</p> <p>F3. Please rate the level of classroom participation among BOYS during this block, on a scale of 1 to 10</p>	
	13. Adapt interventions to the specific needs of pupils with particular learning difficulties	<p>E15. The teacher employs a variety of explanations that differ in difficulty for the diverse learners in the classroom?</p> <p>E16. The teacher used a different language to help students understand a concept or explanation</p>	Classroom Observation
	13. Adapt interventions to the specific needs of pupils with particular learning difficulties	<p>F1. In a typical class in this school, children who have difficulty seeing sit near the front of the class</p> <p>F2. In a typical class in this school, children who have difficulty hearing sit near the front of the class</p> <p>F3. In this school, children who have been affected by conflict are given special support</p>	Teacher Survey
Reading/Writing Competencies	14. Master the techniques of teaching students to read and write	Not Measured	Not Measured

A methodological note on teaching quality scores:

Each competency listed in the table above is associated with multiple questions or measures. In order to create a competency-level teaching quality score, the measures for a given competency (within a given source questionnaire) were scaled to range from 0 to 100 and were then averaged together to create a single competency score ranging between 0 and 100, where 0 indicates the complete absence of evidence of that competency being practiced or held, and 100 indicates that a competency is uniformly an unanimously practiced or held. ‘Negative’ behaviours such as the use of corporal punishment are scaled such that a score of 100 would indicate the complete absence of such a negative behaviour, whereas a score of 0 would indicate the ubiquitous presence of such a behaviour across all teachers or all observations. Other items, such as ordinal scales or counts, were scaled as necessary to obtain a score ranging from 0 to 100.

The table below summarises teaching quality scores by competency field. Many of these competency scores are already at or above a score of 75, which permits very little room for additional improvement over and above the baseline levels. The most practical strategy in terms of determining where to focus the project's teaching-quality-related interventions (as well as the best measurement strategy for being able to register progress over time) will be to focus on the competencies where teachers have lowest scores within each major category.

The absolute lowest teaching quality score is in the category of organizational skills, and specifically in terms of teachers' professional development (with a score of 32.6 out of 100). This item on the scorecard is derived from a single indicator, and the score of 32.6 is derived directly from the fact that only 32.6 per cent of non-AEP teachers reported having had the opportunity to receive additional teacher training within the past three years. This finding affirms the relevance of REALISE programming by underlining the very limited extent to which teachers have been able to access professional development opportunities in the past.

The qualitative data also emphasises the importance of teacher training (and the need for more of it). Parents in a focus group in Tanganyika suggested that teachers in their community did not have sufficient training and that children's' quality of education was lower as a result.¹⁵⁰ Teachers who had the benefit of being able to attend trainings made it clear that they had benefitted significantly from those trainings and had changed some of their pedagogical approaches as a result. For example, a teacher from Haut Katanga suggested that they had taken the following lessons away from their training: "You have to make sure that the children can understand the lesson and remember it, and to do this you should not just recite but also use didactic material. If the child learns something today, you can stick a picture of it on the wall at the end of the day; every day when the child comes in he can refer to the didactic material and he even remembers what you had taught."¹⁵¹ The lessons that the teacher learned involve taking a more student-centered approach to learning, which (as will be noted below) is another important skillset that teachers in the sample had significant room to improve.

Category	Competency	Average Scores for Teachers at non-AEP Schools	Average Scores for Teachers at AEP Schools
Cognitive Skills (Knowledge)	1. Master the language(s) in which classes are taught and communicate in a correct and suitable way, both orally and in writing. (Class Obs)	82.1	76.3
	3. Master the strategies and didactic actions facilitating learning (Class Obs)	64.3	69.0
	5. Plan, organize and effectively manage class work before and during learning (Class Obs)	77.2	78.5
Organizational Skills	7. Engage in professional development through self-assessment, training and innovation (Teacher Survey)	32.6	75.0
	9. Meet professional requirements (Class Obs)	71.4	75.0

¹⁵⁰ Focus Group, Parents, Tanganyika.

¹⁵¹ Key Informant Interview, Teacher, Haut-Katanga, Kitabataba.

	9. Meet professional requirements (HT Survey)	96.1	100.0
	10. Collaborate with the hierarchy and cooperate with the parents of students and other partners of the school (Teacher Survey)	95.8	84.4
Behavioural or Socio-Emotional Skills (How to Act)	11. Act ethically and responsibly in the profession (Class Obs)	82.9	93.8
	12. Take into account the diversity and emotional need of students (Class Obs)	61.6	66.1
	13. Adapt interventions to the specific needs of pupils with particular learning difficulties (Class Obs)	63.4	75.0
	13. Adapt interventions to the specific needs of pupils with particular learning difficulties (Teacher Survey)	74.6	79.2

Looking beyond the limited opportunities for teachers to receive training and develop their skills, the lowest cognitive skill score was in terms of teachers demonstrating mastery of the didactic actions that facilitate learning in the classroom (i.e. competency number 3, with an aggregate score of 64.3 out of 100). The score for competency 3 comes from a large combination of measures, but they all generally relate to teaching techniques that could be potentially be improved through additional teacher training, including making use of group work, and designing well organized and engaging lessons.

Teachers' linguistic skills are generally well-developed, based on the available data. Enumerators observing classroom lessons were asked to rate teachers' speaking and writing facility with the language of instruction – almost always French – on a scale from 1 to 10, and asked to indicate whether they had difficulty understanding the teacher when they were speaking or writing. The typical teacher in the sample scored 7 out of 10 for both written and spoken French, with no appreciable differences between intervention and comparison schools. In a minority of observations, 11.3 percent in the case of assessing spoken French, enumerators reported that they occasionally had difficulty understanding the teacher.¹⁵² The evidence does not suggest that teachers' facility with French is closely related to students' literacy scores, but this is an area that may require more targeted research.

Finally, the behavioural or socio-emotional skill scores that are the lowest both relate to student-centred teaching approaches, namely the ability of teachers to take into account the diversity and emotional needs of students and the ability of teachers to adapt their interventions to the specific needs of pupils with learning difficulties (with scores of 61.6 and 63.4, respectively). Teachers' levels of sensitivity and their ability to address special needs of students will be covered in more detail in the section on Indicator 2.2 below. For now, it will suffice to observe that there is significant room for improvement in these elements of teaching quality and that improving these elements through teacher training and that such improvements will help to address the needs of some of the most at-risk girls identified in the analysis of learning outcomes above.

¹⁵² It is important to note that different enumerators may employ different standards for measuring speaking and writing ability, making the scaled question useful only for approximate relative comparisons. In addition, enumerators who cited difficulty understanding a teacher's spoken French may have struggled with local accents. To the extent that teachers' facility with French is an issue, the midline may benefit from a more objective measure of teachers' skills.

Across the competencies measured, the teachers from AEP schools exhibit higher average teaching quality scores than teachers from non-AEP schools. This finding reinforces our strategy of accounting for outcomes in AEP schools separately from those of non-AEP schools.

There are no significant differences in teaching quality by intervention versus comparison schools, and there are no systematic differences in teaching quality scores by province. Thus, teaching-quality-related interventions do not necessarily need to be specially targeted by region or by school, but rather the key focus for programming should be on improving those competencies with the lowest baseline scores (as noted above).

Indicator 2.2

Indicator 2.2 involves tracking the proportion of teachers in the sample who have developed the specific skills to teach students who have special needs, including children with disabilities, and also children who do not speak the primary language of instruction. Indicator 2.2 is of particular importance in light of the findings on learning outcomes which suggest that girls with special needs tend to score much lower on average than their peers.

Our analysis of this indicator triangulates evidence from classroom observations and the teacher survey. The table below summarises the questions from each of the two surveys that provide evidence on the degree to which teachers are applying skills needed to address children with special needs. The final two columns of the table show the proportion of teachers who were observed or reported using such a technique at the baseline (disaggregated by the gender of the teacher and based on a sample of two teachers per school). These results are summarised separately by non-AEP and AEP schools because it is anticipated that teaching quality (like many of the key outcomes analysed above) will be significantly different between non-AEP and AEP schools.

	Questions	Proportion of Teachers at Baseline, non-AEP schools (N = 224 teachers)	Proportion of Teachers at Baseline, AEP Schools (N = 8 teachers)
Classroom Observation	The teacher employs a variety of explanations that differ in difficulty for the diverse learners in the classroom (proportion represents teachers who exhibited this behaviour in at least two out of three observational periods)	79% Male: 77.5% Female: 86.5%	87.50%
	The teacher used a different language to help students understand a concept or explanation (proportion represents teachers who exhibited this behaviour in at least two out of three observational periods)	54% Male: 56.2% Female: 43.2%	75.00%
Teacher Survey	In a typical class in this school, children who have difficulty seeing sit near the front of the class (proportion represents teachers who agreed or strongly agreed with this statement)	86.2% Male: 85.1% Female: 91.7%	100%

In a typical class in this school, children who have difficulty hearing sit near the front of the class (proportion represents teachers who agreed or strongly agreed with this statement)	87.4% Male: 86.6% Female: 91.7%	100%
In this school, children who have been affected by conflict are given special support (proportion represents teachers who agreed or strongly agreed with this statement)	47.1% Male: 48.3% Female: 41.2%	16.70%

The table above suggests that most teachers are already performing well in terms of providing multiple and tailored explanations to account for diverse learning needs, as well as providing basic accommodations to aid students who have difficulty seeing or hearing. In the classroom observations, the majority of teachers (79.0 per cent) were observed using a variety of explanations in order to account for the diverse learners in their classrooms. In the teacher survey, 86.2 per cent of teachers reported that children with difficulty seeing sit near the front of the class, and 87.4% of teachers reported that the same accommodation is made for children who have difficulty hearing.

The greatest room for improvement in terms of teaching quality related to students with special needs is in the treatment of students who do not speak the language of instruction and treatment of students who may be coping with conflict-related trauma. Only about half of teachers (54.0 per cent) were observed using a different language when necessary to accommodate students who did not speak the language of instruction, and similarly only 47.1 per cent of teachers reported that students who had been affected by conflict were given special support.

There are no significant differences in these measures by gender, but it is worth noting that teachers in intervention schools reported giving special support to conflict-affected children in a much higher rate than teachers in comparison schools (56.4 per cent in intervention schools versus 37.0 per cent in comparison schools).¹⁵³ This significant difference between intervention and comparison groups suggests a potentially important way in which the schools in the two groups are not perfectly matched (in terms of comparability). This imbalance in teaching quality related to treatment of conflict-affected children should be borne in mind, and potentially controlled for, when analysing midline data.

Readers will recall from the analysis of learning outcomes above that two of the most at-risk subgroups are girls who do not speak the language of instruction and girls who had a mental health impairment (potentially arising from conflict-related trauma and anxiety). And it is precisely these two subgroups that teachers are the least likely to accommodate, based on the analysis here. Improving teacher's abilities to identify these types of at-risk students, and then understand and accommodate their needs, will potentially lead to significant improvements in the learning outcomes of learners in these subgroups.

Indicator 2.3

Indicator 2.3 involves girls' perceptions of their teacher's teaching methods and ability, focusing on the kinds of punishments that teachers dole out as well as how comfortable the girls are interacting with, and

¹⁵³ Belonging to an intervention school is a statistically significant predictor of reporting special treatment of conflict-affected children, with $p = 0.03$ in a logistic regression with cluster-robust standard errors.

asking questions of, their teachers. The analysis below uses responses from in-school, cohort girls to analyse their impressions of their teachers.

The table below presents the proportion of in-school, cohort girls who gave an affirmative response to questions about their teacher posed during the household survey. The vast majority of girls stated that they found their teachers to be welcoming (at 94.3 per cent). Similarly, 89.1 per cent of girls stated they felt comfortable asking their teachers questions when they did not understand something. These responses generally suggest that girls are comfortable with their teachers. However, when girls were asked more directly about whether or not they feared their teachers, a much smaller proportion of girls (52.7 per cent) suggested that they did not fear their teachers, and an even smaller proportion (40.4 per cent) suggested that they thought their teachers treated students equitably irrespective of their gender.

Question about teacher	Intervention	Comparison	Overall
Comfortable Asking Questions	89.5%	88.8%	89.1%
Teacher Welcoming	93.9%	94.6%	94.3%
Do Not Fear Their Teacher	52.6%	52.8%	52.7%
Equal Treatment of Genders	35.5%	45.0%	40.4%

The table below, disaggregates girls by whether they reported having a majority of male or a majority of female teachers, in order to determine if teacher gender had an effect on the girls' perceptions that their teachers were being equitable in their treatment of students irrespective of student gender. Ultimately, there is no appreciable difference between girls who have a majority of male teachers versus those who have a majority of female teachers, as shown below. Thus, increasing the number of female teachers (while it might address other issues related to comfort of girls in the classroom) will not necessarily help to address the problem of unequal treatment of boys and girls in the classroom.

My teachers treat boys and girls differently	Majority Male Teachers	Majority Female Teachers	Total
Agree	60.1%	58.4%	59.7%
Disagree	39.9%	41.7%	40.3%

In addition to assessing girls' reported levels of comfort with their teachers, indicator 2.3 also involves an assessment of the types of punishment commonly used by teachers. Nearly two-thirds of surveyed girls, or 64.5%, stated their teachers punish students for giving incorrect answers during class, while 64.6% of girls in the sample answered that they had witnessed their teachers use physical punishments on misbehaving students in the past week. These results are summarised in the table below.

	Intervention	Comparison	Total
Punished for wrong answers	63.2%	65.8%	64.5%
Witnessed physical punishment	65.6%	63.7%	64.6%

There are no significant differences in teachers' reported punishment behaviours when results are disaggregated by intervention versus comparison schools (as in the table above) or when results are disaggregated by province.

The most important and actionable finding related to Indicator 2.3 is the fact that students' reported comfort levels with their teachers and the teachers' reported discipline strategies are linked. There is significant room for improvement in terms of the degree to which girls fear their teachers and feel that they are treated equally with boys, and one of the most direct ways of addressing these issues is by focusing training on when and how teachers discipline their students. Girls who reported having teachers who punish students for wrong answers or teachers who use corporal punishment were also significantly more likely to report that they were fearful of their teachers. Thus, it is likely that girls' fears of their teachers are, at least in part, due to the punishment practices of their teachers. Thus, interventions that sensitise teachers to the counterproductive nature of corporal punishment and punishment for wrong answers will have the potential to reduce the degree to which students fear their teachers and thereby increase their participation and facilitate their learning.

5.3 Community-based attitudes and behaviour change

Girls' Education

An in-depth analysis of qualitative data has made it clear that attitudes and behaviors in local communities contribute in part to the difficulties girls have in getting an education and staying in school. While many respondents expressed that girls' education was just as important as that of boys, others held more discriminatory views. A representative of MINAS in Kasai-Oriental explained that "Some [parents] ask where would [girls] go with their studies, they are like insects and can go anywhere. Some mothers say that girls are things and should have nothing to do with studying."¹⁵⁴ Another community leader was more direct in his outlook: "Studies for boys are important. The boy or the man is naturally superior to the woman, thus his studies make him able to direct [others]."¹⁵⁵ Some members of the community, therefore, do not believe girls should be educated to the same degree as boys because the latter are supposedly more important to the development of society. Therefore, boys are more deserving of an education. Indeed, many interviewees reasoned that boys, rather than girls, should benefit from higher education. A community leader shared that "Parents only want the boys to continue studying until they go get their doctorate."¹⁵⁶ For girls, however, higher education is rare and its benefits are seen as dubious. The same community leader in Kasai-Oriental continued, saying, "Often when we discuss with parents, some prefer that [their] girl obtain only the [secondary school] diploma, that's enough, because going to university, they think that girls who go there are prostitutes, things like that."¹⁵⁷ During a focus group, parents in this same community were more even-handed, saying, "If [the girl] gets along with her husband and the parents, she can go to university."¹⁵⁸ As exemplified here, even when family members are accepting in theory of the idea of girls going to university, the reality is that it will rarely be the girl's decision alone – those around her must acquiesce to her pursuit of higher education. There are even cases where parents firmly want their daughter to go to university, whether the girl herself wants to or not. One parent exclaimed that "For my child, my daughter, without having finished university she tells me she's getting married, I cannot accept it. She has to finish university because I am a dictator [on this subject]. It's only

¹⁵⁴ Key Informant Interview, MINAS, Kasai-Oriental.

¹⁵⁵ Key Informant Interview, Community Leader, Kasai-Oriental, Kalenda Mudishi.

¹⁵⁶ Key Informant Interview, Community Leader, Kasai-Oriental, Kalenda Mudishi.

¹⁵⁷ Key Informant Interview, Community Leader, Kasai-Oriental, Kalenda Mudishi.

¹⁵⁸ Focus Group, Parents, Kasai-Oriental, Kalenda Mudishi.

when she finishes university that she can go get married.”¹⁵⁹ In either case, whether the idea of girls’ higher education is supported or not by the surrounding community and the girls’ family, it is apparent that the girl is rarely left to make her own decision on this important life matter.

In most cases, girls have less access to education than boys due to a combination of these attitudes and the harsh context in which their families live. Limited financial means often force families to choose which of their children they can send to school and pay the associated fees. In these instances, many prefer sending their boys to school rather than their girls, because they believe this will be more profitable for the family. A member of a Credit and Savings Group explained that “When the child begins to study, you need money, you need notebooks, you need uniforms, you need shoes, you need bags. So, these things, a lot of parents think, instead of buying a lot of things like that for the girl, then we start with the boys because the boys are good.”¹⁶⁰ If the schools were free, families would most likely send girls to school as well, but they are put in the position of having to prioritize one child over another. In this difficult situation, families reason that boys will have an easier time finding employment – and therefore a source of additional income for the family – when they graduate, while girls are expected to get married and stay at home to raise a family, a role that many do not believe would justify giving her a costly education. Indeed, one respondent shared that “Some [parents] care a lot about boys, thinking that the girl will go get married soon, so [sending her to school] would be wasting money.”¹⁶¹ In addition, for many communities, girls do not need an education because they will be supported by their husband’s revenue anyway. Boys, on the other hand, according to this reasoning, must be educated in order to support their future wives and families – if they do not receive an education, they risk being destitute because they will not be able to find employment, whereas girls can marry a man with means that will enable her to live a comfortable life whether she has received an education or not. A religious leader explained this way of thinking by saying, “[Parents] prefer to keep girls at home and send the boys to school. Why? Because according to tradition, our tradition for us in Kasai, we think that a girl is made for marriage. If she does not study, at least she has the chance to get married, she can make a living through marriage but for the boy, it is absolutely necessary that he studies, that is why we privilege the education of boys compared to that of the girls.”¹⁶² Girls’ education is therefore deemed to be less important than that of boys, so families when faced with limited financial means, prefer to send their boys to school.

Financial difficulties can also push families to marry their daughter in order to collect the bride price that the husband’s family must provide to them. A community leader stated that “The challenge is marriage. The parents want the dowry. These are the challenges that girls face now [in trying to obtain an education].”¹⁶³

For many parents, their daughter’s marriage can ease tensions that arise during difficult times when the family’s revenue is limited. The same community leader said, “Well, in our community there is the problem of girls’ marriage, especially when there is an elder daughter there, the family is waiting for their dowry, it causes a few complications in the family. We even blame this on the girl’s mother, ‘oh you do not want to marry your daughter, you just let her go for a walk, go to school, what’s that?’ I see that most parents love it when their daughters only obtain [secondary school] diplomas.”¹⁶⁴ In other words, the parents may want the girl to continue her education but face a lot of internal pressure from other family members who view

¹⁵⁹ Focus Group, Parents, Kasai-Oriental, Kalenda Mudishi.

¹⁶⁰ Focus Group, Credit and Loan Group, Kasai-Oriental, Kalenda Mudishi.

¹⁶¹ Focus Group, Credit and Loan Group, Kasai-Oriental, Kalenda Mudishi.

¹⁶² Key Informant Interview, Religious Leader, Kasai-Oriental, Kalenda Mudishi.

¹⁶³ Key Informant Interview, Community Leader, Kasai-Oriental, Saint Léonard.

¹⁶⁴ Key Informant Interview, Community Leader, Kasai-Oriental, Kalenda Mudishi.

the girl as a potential source of immediate financial relief if her parents would just marry her off. This is especially the case when the girl has already missed significant time at school due, perhaps, to her parents having insufficient funds to pay the fees: she is already behind on her schooling, with little time left to catch up all of it by the time she is of marrying age. Many parents, therefore, reason in this situation to marry off their daughter as it is “too late” for her to receive a proper education at this point. A teacher remarked that girls themselves can prefer opting for marriage in this situation, feeling that they have missed their opportunity to get an education: “We can find girls at home [for a long time] due to their family’s lack of means [to go to school]. [The girl] really sees herself as already being old, she will not accept when I want her to continue with her studies [when her family later finds the means to pay].”¹⁶⁵

Many parents also worry that their daughter will behave badly in one way or another, which will decrease the chances of marrying her off and even lower the price of the bride price they can ask for. One respondent said: “Think about the problem I told you about, the dowry there, all because often other girls behave very badly, wearing mini-pants, things like that, which does not honor other parents.”¹⁶⁶ In other words, parents are in a hurry to marry off their daughter before she starts going out with boys and “brings shame” to the family, and this pushes them to marry her off even if she has not finished her schooling.

Even for many of the respondents who indicated that girls’ education was paramount, the reasons for which they believe in its importance do not defy, but rather reinforce, more general attitudes about women’s traditional role in society. To them, boys’ education is important because they are the future leaders of society, while girls’ education should be encouraged because they ensure the stability of the family unit. Whereas “all boys have the right to education to find a job and become useful to serve his country,”¹⁶⁷ a girl “who knows how to read and write makes herself useful, and later, she will provide for the needs of her family.”¹⁶⁸ Indeed, as one respondent said, “There is a saying that says ‘educating a woman is educating an entire nation.’ It is better to educate girls because they are the ones who deal with the administration of the house. If she is well-educated, you will see that everything will meet the needs of the house.”¹⁶⁹ Whereas a boy can perhaps lead a nation, a girl is limited to leading her family. Indeed, in another focus group, a parent detailed that girls’ education is important: “to educate [her own] children, there will always be difficulty, because this process will be affected by her weakness.”¹⁷⁰ That is to say that her children’s prospects for education will be hurt if she herself is not educated. This view of girls’ education was pervasive across most interviews. During a focus group, one parent said that “[The girl’s] education is important in two stages, the first step in advancing the home, her children and her husband, the second step to help [her parents and siblings].”¹⁷¹ In other words, her education can help her manage her current family as well as her future one, but very rarely is it linked to an employment or leadership of any kind, as was almost always the case when respondents talked about boys’ education. Still, other respondents stressed the need to educate girls for the simple reason that it makes her a more attractive potential wife: “First the girl must study if she finishes [her studies] she will have value in the eyes of her husband and in the eyes of society.”¹⁷² Another respondent was more direct: “From her studies, we will find a good marriage [for her].”¹⁷³ Even when girls’ education is deemed to be important, therefore,

¹⁶⁵ Key Informant Interview, Teacher, Kasai-Oriental, Kalenda Mudishi.

¹⁶⁶ Key Informant Interview, Community Leader, Kasai-Oriental, Kalenda Mudishi.

¹⁶⁷ Focus Group, Parents, Tanganyika, Katanga.

¹⁶⁸ Focus Group, Parents, Tanganyika, Katanga.

¹⁶⁹ Key Informant Interview, Religious Leader, Haut-Katanga, Kitabataba.

¹⁷⁰ Focus Group, Parents, Kasai-Oriental, Saint Léonard.

¹⁷¹ Focus Group, Parents, Kasai-Oriental, Kalenda Mudishi.

¹⁷² Key Informant Interview, Community Leader, Kasai-Oriental, Kalenda Mudishi.

¹⁷³ Focus Group, Parents, Kasai-Oriental, Saint Léonard.

attitudes in the community see her potential contribution to society as being limited to within the family home.

Sex education

Attitudes and behaviors with regards to sex education also have a significant impact on girls' education. Girls may abandon school because of pregnancy, get sick from Sexually-Transmitted Diseases, or miss time from school during their menses.

Sex and puberty are taboo subjects in many communities in the DRC. One parent explained, "First of all, your child cannot talk to you about things like sexuality. He [must give] you respect. Second is his teacher. The child cannot talk to him about sexuality, he [must be] respected as well."¹⁷⁴ Indeed, it is seen as disrespectful to even broach the topic of sex. Many community leaders are simply against teaching children about sex and puberty in any manner. As one religious leader put it, "Religion brings children to know a little better the Word of God. [Sex education would lead them to] immorality or debauchery."¹⁷⁵ Parents too can frown about such teachings: "I've already had parents, who come to say, 'why are you teaching our kids things like that?'"¹⁷⁶ Even when some members of the community have no objections to teaching such subjects to children, the possibilities for such an education are limited: "The local chief could bring people together and [talk about it], but it has become difficult. It is impossible to call a child of another and start talking to him about that. They fear problems because today, if you call a child of another and something happens, you will be accused of being a sorcerer. Because formerly the chief had only one family but now the village is composed of several groups of people and ethnicities."¹⁷⁷ Indeed, there are no objections if a parent wants to educate his own daughter about sex and puberty, but teaching other people's children can become contentious as some families may distrust others, especially in certain parts of the country where there are many outsiders who have recently moved in, displaced from conflicts elsewhere.

Even for those who favor sex education, it is deemed unacceptable for a man to talk about such matters to a girl: "It's only the mother who educates the child [on sex and puberty], but the dad, like me, I cannot call my daughter and start talking to her about these things, no. This is incestuous."¹⁷⁸ As most educators in school are men, this renders sex education in school difficult to implement. Indeed, as one parent put it, "When you get a female teacher for sex education, you are very happy, even boys rejoice, but when you have a male teacher, girls feel bad."¹⁷⁹

Although most public schools have "Education à la vie" classes that touch on these subjects, they are not adequate enough. When sex education is taught in schools, it is often done so in a limited and incomplete manner. In most schools, the administration adopts an abstinence-only outlook. A teacher in Haut-Katanga explained that "On sexual health, they have not been told to use condoms, they are told that to avoid HIV/AIDS you should not have sex before marriage. That's where we stop because if we tell them that they must have responsible sex, it's as if we're telling them to go practice."¹⁸⁰ Indeed, several respondents stated that teaching safe sex instead of abstinence would only encourage children to go have sex, which, according to these respondents, is immoral and dangerous. Indeed, for many parents,

¹⁷⁴ Focus Group, Parents, Kasai-Oriental, Kalenda Mudishi.

¹⁷⁵ Key Informant Interview, Teacher, Kasai-Oriental, Kalenda Mudishi.

¹⁷⁶ Key Informant Interview, Community Leader, Kasai-Oriental, Kalenda Mudishi.

¹⁷⁷ Key Informant Interview, Community Leader, Haut-Katanga, Kitabataba.

¹⁷⁸ Focus Group, Parents, Kasai-Oriental, Kalenda Mudishi.

¹⁷⁹ Focus Group, Parents, Kasai-Oriental, Saint Léonard.

¹⁸⁰ Key Informant Interview, Teacher, Haut-Katanga, Kitabataba.

sex education should be limited to “telling [children] to ‘behave correctly,’”¹⁸¹ or, in other words, not to have sex at all. Most parents use fear tactics to disincentivize their children from having sex: “We put some roadblocks [to them having sex] to say that if you do that there will be this or that [negative consequence] ... we scare them.”¹⁸² This has a profound effect on children’s psychology surrounding the subject: “[A boy can think] ‘what I can say about [sex and puberty] can take me to prison.”¹⁸³ Still, other parents are against teaching family planning, which could limit teenage pregnancies and therefore girls feeling like they must abandon their studies: “As believers, we regret [abstinence education], because God when He created man, He said ‘be fertile.’ As soon as you take human science by forbidding someone to give birth, that is a sin in the eyes of God. We regret when someone [defies] the law where God tells people to procreate. When he is dead, God will ask him where are the children for whom I sent you to earth?”¹⁸⁴

Finally, the communities in the target provinces tend to view girls as the primary protagonist when it comes to sex and pregnancy. A religious leader in Kasai stated that “We can give this ... give this sexual education to children...especially for girls, to avoid finding themselves unintentionally pregnant for example.”¹⁸⁵ According to this logic, because girls are the ones who get pregnant, it is they that most need to be educated about sex. In Haut-Katanga, a respondent expanded on this idea: “Here girls are disappointing us. As an example, the girl I have here at home, she arrived in the fourth grade and she was pregnant and she disappointed me.”¹⁸⁶ For this individual, if a girl in 4th grade gets pregnant, it is her fault and due to her bad behavior. These attitudes are either uninformed or discriminatory in nature as illustrated in a focus group in Lomami in which a boy said, “The problems girls face are problems related to their nature as women, there is the problem of early links to sexually transmitted diseases and there are also other problems related to the living conditions of the parents. There is no money and no possibilities. When there are no possibilities girls let themselves go.”¹⁸⁷ In other words, girls instigate sexual relations, even going so far as to prostitute themselves, and little responsibility or blame is placed on boys.

Handicapped children

Finally, little is done in these communities with respect to supporting handicapped children. One parent stated that “I have never seen in our community anyone caring for these children. Like the mute, the deaf, I do not see people taking care of them.”¹⁸⁸ For many, handicapped children can only be taken care of by those who have an expertise in the matter, not by them: “Psychologically [a handicapped child] is not a child that we should supervise, he has to go to a specialist.”¹⁸⁹ This can depend on the disability, however, as those that are not physically disabled can be assisted by the local community according to some respondents. As a teacher in Haut-Katanga related, “We had a [handicapped] child but luckily [the family] left. If the child’s handicap is not physical, we receive him but here he had other disabilities that required a specialist.”¹⁹⁰

¹⁸¹ Key Informant Interview, Community Leader, Haut-Katanga, Kitabataba.

¹⁸² Key Informant Interview, Teacher, Haut-Katanga, Kitabataba.

¹⁸³ Key Informant Interview, MINAS, Kasai-Oriental.

¹⁸⁴ Focus Group, Parents, Kasai-Oriental, Kalenda Mudishi.

¹⁸⁵ Key Informant Interview, Religious Leader, Kasai-Oriental, Kalenda Mudishi.

¹⁸⁶ Focus Group, Credit and Savings Group, Haut-Katanga, Kitabataba.

¹⁸⁷ Focus Group, Boys, Lomami, Tutante.

¹⁸⁸ Focus Group, Parents, Kasai-Oriental, Kalenda Mudishi.

¹⁸⁹ Key Informant Interview, Teacher, Haut-Katanga, Kitabataba.

¹⁹⁰ Key Informant Interview, Teacher, Haut-Katanga, Kitabataba.

5.4 School-related, gender-based violence

Measuring sexual and gender-based violence is notoriously difficult because of the extremely sensitive and often stigmatized nature of the subject. Underreporting of sexual violence is common in most cultural settings. Indeed, in qualitative interviews, very little was shared with regards to school-related gender-based violence. A girl in Lomami recounted that “There are some [boys] who present girls to their friends, saying ‘here is my wife,’ touching me and kissing me.”¹⁹¹ Another girl in Kasai-Oriental mentioned that “When [boys] ask you something and you refuse, they force you, otherwise, they will beat you.”¹⁹² Although there is some evidence of conflict in schools, the data does not provide a clear picture of the nature of these conflicts or whether girls are specifically targeted.

What was made apparent, however, is that there is little will within the community to intervene and stop gender-based violence where it occurs. A parent explained that “In our communities, there is no one who can intervene in the problem of others, we can kill you [for that].”¹⁹³ Indeed, others’ private affairs are not to be discussed or meddled with, even when violence is being committed against girls and women.

5.5 Economic empowerment

Indicator	Description
Indicator 4.1	Change in school attendance rates of targeted girls
Indicator 4.2	Girls’ views on how financial support received through REALISE has impacted their ability to further their education
Indicator 4.3	Parents’ views on how access to financial support has impacted their family income level and use (e.g. spend on education costs, investment in daughter overall, saving for further education, etc.)

As part of REALISE’S efforts to encourage girls’ education, one of the key domains of change that REALISE aims to target is the economic burden of schooling and the poor economic conditions found in REALISE communities. REALISE will help girls and their families achieve economic empowerment through the sponsorship and promotion of savings and loans groups and the provision of bursaries for girls to pay school fees. The indicators of Economic Empowerment are designed to measure improvements in the sample regarding girls’ school attendance rates, girls’ views on how financial support from REALISE has impacted their education, and how their parents view the future financial support impacting their household income. Since financial support from REALISE has not yet begun, this report is unable to describe the impact of said financial support. However, the analysis in this section will describe the baseline levels of girls’ attendance as well as the current economic conditions of the cohort girls’ household. REALISE’s stakeholders will be able to view areas of improvement and diminishment from baseline to the midline.

The midline targets of economic empowerment Intermediate Outcome are 1) a 10% increase in the attendance rate of targeted girls, 2) girls reporting that the financial support offered has had a positive effect on their enrolment, attendance, and learning capacity, and 3) beneficiary mothers and fathers report that the project’s financial support has had a positive effect on their family’s income, allowing them to invest some of their extra earnings in their children and in particular, their daughter.

¹⁹¹ Focus Group, Girls, Lomami, Tutante.

¹⁹² Focus Group, Girls, Kasai-Oriental, Saint Léonard.

¹⁹³ Focus Group, Parents, Kasai-Oriental, Saint Léonard.

Attendance data will be collected in greater detail in Phase 2 of the report, however in surveys with the primary caregivers, estimates of girls' attendance have already been collected based on a question that asks whether the cohort girl attended school more than half the time in the previous year. Out of all cohort girls, 95% of primary caregivers with girls in school said that their girl attended school more than half the time. There was no observed difference between the reported attendance of girls in intervention and comparison areas (95.2% vs 94.8%).

In contrast to several of its neighbours – e.g., Tanzania, Kenya and Uganda – the DRC has not adopted a policy of free primary education. For most households, school fees represent a significant economic burden, as described in the discussion surrounding transition rates in Section 4. Unlike countries where school fees have been abolished but informal fees often persist, school fees are more widespread in the DRC; among households in our sample with a girl enrolled in school, 86.5 percent report paying school fees during the previous year. The economic burden of schooling is not limited to school fees and materials required for their children, as 30.7 percent of the same households report paying incentives to teachers (i.e. direct support, often provided by communities in lieu of, or to supplement, salary from the Ministry of Education). A further 33.9 percent of respondents report contributing money to school maintenance, while smaller shares also note costs associated with school meals, transportation, and other ancillary expenses.

In order to measure the impact of REALISE's efforts, the report first establishes baseline levels of economic conditions for girls and their households. The household survey included a number of measures of household economic conditions, including indicators typically found in household surveys conducted in sub-Saharan Africa. Specifically, the evaluation collected data on:

- Floor and roof material of the household's home
- Mobile phone ownership
- Land ownership
- Self-assessment of a household's ability to meet its basic needs
- Frequency of economic deprivation over a 12-month period
 - Going to bed hungry
 - Going without clean water
 - Going without medicine or medical treatment
 - Going without cash income
- Food security - a classification scale adapted from the Food Insecurity Experience Scale¹⁹⁴

For the purposes of establishing baseline outcomes, we focus on the construction quality of respondents' homes, as well as their experiences of relative deprivation over the previous 12 months. However, we also report findings based on the other indicators listed above; moreover, data on food security at baseline was collected to facilitate comparisons in future evaluation waves, given that the project aims to impact food security via its economic empowerment programming. In addition to establishing baseline outcomes, we describe baseline findings regarding a key project output with respect to economic empowerment – the presence of and participation in savings and loan groups – and its relationship with household economic conditions.

Household Economic Conditions (level 3 heading)

¹⁹⁴ <http://www.fao.org/in-action/voices-of-the-hungry/fies/en/>

Households in REALISE intervention and comparison communities are, broadly, economically disadvantaged. The typical household frequently goes without a cash income, and a significant plurality frequently go without clean drinking water for household use and go to bed hungry. Overall, 65.3 percent of households own a mobile phone, though very few – just 4.0 percent – own a smartphone.

The materials used in the creation of a house are widely used as an indicator of the economic status of the household, as more durable and lasting materials for roofs and floors cost more to purchase. As the home is one of the largest and most permanent investments a family will make, the quality of the home is a good indicator of a household’s economic status. At each household visited, enumerators recorded the material used for the roof and floor; for the purpose of analysis, we have consolidated the various materials into a binary variable indicating whether the floor and roof, respectively, are built of poor or better-quality materials. We define better-quality roofs as consisting of cement, concrete, roofing tiles, or adobe bricks, while common lower-quality materials include tin or corrugated iron sheets, thatch, and mud, among others. Our classification of floors is similar: cement, concrete, brick, stone, or wood floors are considered higher-quality, while earthen floors are lower-quality.

Overall, 87.3 percent of households live in homes with a poor-quality roof, and 65.2 percent live in homes with a poor-quality floor. We also assessed baseline differences between intervention and comparison communities, as well as across provinces; the results of this analysis are reported in the table below. According to both metrics, households in intervention communities are better off than those in comparison areas – just 60.1 percent of households in the former have poor-quality floors, compared to 70.3 percent of households in the latter. Likewise, households in intervention areas are more likely to have a higher-quality roof. Both gaps between intervention and comparison communities are statistically significant, at the 5 percent (floors) and 10 percent (roofs) level, respectively.

Table 41: Quality of home construction materials

Subgroup	Poor-Quality Roof	Poor-Quality Floor
Intervention	84.5%	60.1%
Comparison	89.6%	70.3%
Haut Katanga	83.3%	80.4%
Lualaba	86.7%	56.2%
Lomami	71.8%	55.6%
Kasai Oriental	93.7%	44.0%
Tanganyika	90.5%	84.8%
Total	87.3%	65.2%

Beyond intervention status, there is a correlation between roof quality and province, as shown in the table. Households in Lomami have homes consisting of higher-quality construction materials, on average. However, the nature of this relationship across provinces is complicated, as households in Kasai Oriental

are the most likely to have households made of poor-quality roofs, but the least likely to have poor-quality floors.¹⁹⁵

As an additional metric of household economic conditions, the household survey collected data on the relative levels and types of deprivation experienced by household members during the previous 12 months. These questions covered experiences of a lack of food, water, medicine, and cash income. To generate an overall picture of respondents' economic conditions, we constructed an index of deprivation experiences. Our index is simply a count of the areas in which a household has experienced deprivation frequently (many days or most days) over the previous 12 months. For instance, a household that reports that household members have gone to bed hungry many days and have been without a cash income most days in the last year would receive a score of 2, where higher numbers indicate a greater frequency and variety of deprivation.

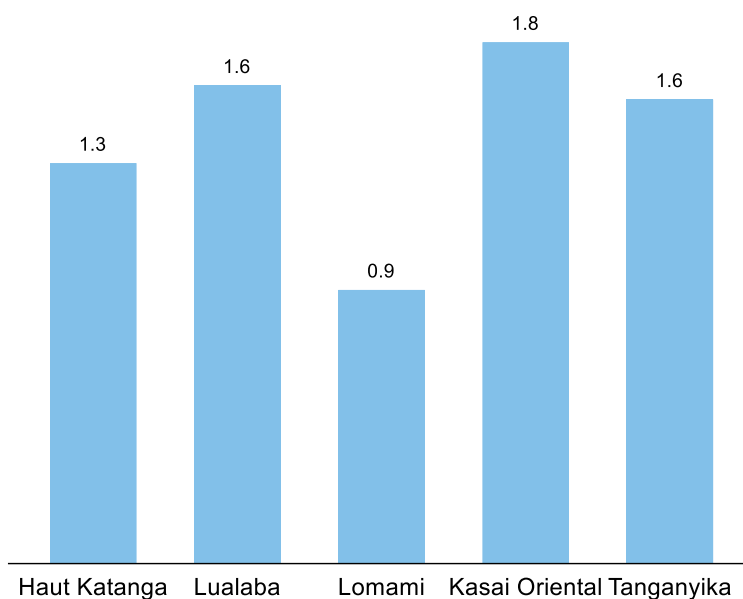
The vast majority of households have experienced deprivation on at least one of the four axes studied during this time – just 30.5 percent of households escaped any such experience at the level of intensity (many or most days) we utilize to define moderate-to-severe deprivation. Households are relatively uniformly spread across the range of the scale, from 0 to 4, with the mean household experiencing 1.5 types of deprivation during the previous year.

In intervention areas, households are slightly less likely to experience deprivation, with a mean score of 1.45, compared to comparison areas' score of 1.58. While this difference is not statistically distinguishable from zero, it is consistent with other findings regarding the mild but noticeable economic gap between intervention and comparison communities: as noted previously, intervention households live in higher-quality homes, on average. Intervention households are also slightly more likely to own a mobile phone and slightly less likely to self-assess as unable to meet their basic needs, though neither difference is statistically significant.

More dramatic is the gap in deprivation experiences across provinces, reported in the figure below. Similar to the results regarding the construction quality of the home, where a respondent lives was significant in determining how many of the different experiences an individual has endured many or most days during the past year. Respondents in Lomami were the least likely to experience deprivation of this kind, while respondents in Kasai Oriental were most likely. To illustrate the extent of the difference between these two provinces specifically, consider the frequency of self-reported hunger: in Kasai Oriental, 16.8 percent of households report going to sleep hungry on most days, while just 1.6 percent of households in Lomami report the same. In Lomami, just 11.3 percent of households report going without cash income on most days, compared to an average, across the remaining four provinces, of 36.5 percent. When asked whether they had gone an entire day without eating in the past month, respondents in Lomami were least likely (48.4 percent) to indicate that they had, while 72.0 percent of households in Kasai Oriental had gone an entire day without eating in the recent past. In short, households in Lomami appear to have better access to either formal employment or cash-based businesses, and are less likely to go hungry.

¹⁹⁵ In practice, this is because households in Kasai Oriental are the most likely to use tin or iron sheets for their roofs. While we define corrugated iron sheets as a poor-quality roof material, it may be preferable to the thatch or grass construction that is the most common type of roof in the sample.

Figure 13: Household economic deprivation index, by province



Savings and Loans Groups (level 3 heading)

As described previously, a key output of the REALISE project is the sponsorship and promotion of savings and loans groups. These groups are intended to spur households to save, allowing them to both invest in new economic opportunities and save money to handle the costs of schooling for their children. Additionally, participants are able to discuss with others from their community about personal projects, goals, and income-generating activities they hope to achieve. These interactions act as a sounding board for individuals to refine and improve their own strategies moving forward. To the extent that economic conditions influence enrolment rates and learning outcomes, participation in local savings and loans groups is expected to encourage saving behavior, promote economic empowerment of households, and increase the likelihood of girls staying in school.

The table below reports the extent of VSLA participation and savings behavior across intervention and comparison communities, and provinces, respectively. As the results demonstrate, VSLAs are more active in intervention areas, where 27.9 percent of caregivers, compared to just 18.7 percent in comparison areas. Likely as a function of more active savings groups, individual-level saving activity is also higher in intervention communities: 30.4 percent of caregivers in intervention communities report that they have savings at the time of the survey, while this rate is 22.6 percent among comparison communities. In terms of both VSLA participation and personal savings behavior, intervention communities have significantly more positive baseline outcomes. The results in the table also suggest that there are significant gaps in the activity level of VSLAs across provinces; these gaps are not clearly correlated with the household economic conditions analyzed above, which appears to indicate that there is substantial room for increasing saving rates in relatively more prosperous provinces, such as Lomami, where savings rates and VSLA participation are especially low.

Table 42: Savings and participation in savings and loan groups

Subgroup	Household has Savings	Participates in a Savings Group
Intervention	30.4%	27.9%
Comparison	22.6%	18.7%
Haut Katanga	16.9%	16.7%
Lualaba	30.7%	19.5%
Lomami	19.8%	21.0%
Kasai Oriental	33.3%	33.6%
Tanganyika	26.6%	22.5%
Total	26.5%	23.3%

In previous sections of this report, we have documented the relationship between household economic conditions and the primary outcomes targeted by REALISE programming, learning and transition. Indeed, as we have shown, girls in economically-disadvantaged households achieve lower literacy and numeracy scores, and are dramatically less likely to remain enrolled in school. Both qualitative and quantitative data emphasized the role of economic distress in prompting dropout and preventing girls from enrolling in the first place. Moreover, economic distress is related to poor educational outcomes via additional pathways, such as the tendency for girls in economically-distressed households to pursue early marriage, and the complex relationship between conflict and poverty.

Given these findings, improving household economic conditions is a worthwhile goal of REALISE programming. However, it is important to assess whether the project’s selected intervention – the promotion of savings groups – is associated with improved economic conditions and, subsequently, better educational outcomes. To analyse the relationship between savings activity and household economic conditions, we report the extent of relative deprivation – in the form of frequent hunger – as a function of both savings behaviour and participation in savings groups in the table below. Unsurprisingly, there is a strong correlation between households that participate in savings groups and households that save money. The results below show that households with savings are less likely to experience frequent deprivation in the form of hunger or a lack of cash income, and are less likely to live in a home with a poor-quality floor. While we selected these three indicators because they represent typical measures of household economic status, these findings are robust to the use of alternative indicators, including mobile phone ownership – households with savings and who participate in a VSLA are more likely to own one – and self-assessment of their ability to meet their basic needs. As with savings behaviour itself, households that participate in VSLAs live under better economic conditions.

Table 43: Household savings behaviour and economic conditions

Subgroup	Frequent Experience of Hunger	Frequently without Cash Income	Household has Poor-Quality Floor
Household has savings	19.2%	51.7%	60.2%

Does not have savings	27.9%	60.1%	67.0%
Participates in VSLA	21.8%	52.3%	59.7%
Does not participate in VSLA	26.8%	59.6%	66.9%

Of course, it is not entirely surprising that savings behaviour is associated with better household economic conditions. Based on traditional economic models, household savings are a key driver of economic improvement, as saving allows households to accumulate productive assets. Even more directly, households that enjoy better economic conditions to begin with are more likely to have available “spare money” with which to begin saving. Nonetheless, the results confirm an association between savings behaviour and improved household economic conditions, even if our analysis cannot determine the nature or direction of causality in this relationship.

Taking this analysis further, we also assessed whether savings behaviour is associated with improved learning and transition outcomes. In both cases, the answer was yes: girls whose caregiver reports having savings score 1.9 points higher in terms of literacy and 6.2 points higher in terms of numeracy than other girls, on average, differences that are statistically significant at the 1 percent level. These findings remain, though they are of slightly smaller magnitude, when we study the relationship in a linear regression that controls for province and age as well.¹⁹⁶ Again, these results hold when considering VSLA participation instead of outright savings behaviour as well: girls in households where the caregiver participates in a VSLA demonstrate better learning outcomes than their counterparts.

This same pattern holds true for transition outcomes. Girls whose caregivers have savings have a 12 percent higher likelihood of successful transition, even when controlling for province and age. Girls whose caregivers participate in a VSLA are 9.3 percentage points more likely to transition successfully. Again, these findings do not necessarily imply that saving behaviour produces better learning outcomes. Indeed, a more straightforward hypothesis would link better learning and transition outcomes to households with superior economic conditions, who are able to afford school fees and may have adults who are more educated or who value education more highly. These households are simultaneously more likely to have residual income that they can save. Despite this caveat, it is clear that savings behaviour is associated with better economic outcomes at the household level, and with improved educational outcomes. As such, the project’s focus on promoting savings behaviour is tenuously justified based on the data, though additional research may be necessary to study the causal relationship between participation in VSLAs, on one hand, and household economic conditions and educational outcomes, on the other.¹⁹⁷

¹⁹⁶ In a linear regression of literacy on a set of province and age dummy variables and an indicator of caregiver saving behaviour, saving behaviour is associated with a 1.3 point increase in literacy scores. An equivalent regression focused on numeracy produced a positive effect of saving behaviour of 4.6 points.

¹⁹⁷ Few rigorous studies of VSLAs exist. Impact evaluations of microfinance, on the other hand, are more frequent, and focus on many of the same themes, such as the ability of households to invest in productive assets or businesses. See, e.g.: Abhijit Banerjee, Esther Duflo, Rachel Glennerster, and Cynthia Kinnan. 2015. “The Miracle of Microfinance? Evidence from a Randomized Evaluation.” *American Economic Journal: Applied Economics* 7 (1): 22-53. For a review of the evidence on microfinance, see: Carina van Rooyen, Ruth Stewart, and Thea de Wet. 2012. “The Impact of Microfinance in Sub-Saharan Africa: A Systematic Review of the Evidence.” *World Development* 40 (11): 2249-2262. These studies focus on the impact of microfinance on household economic status. However, no

5.6 Life skills

Indicator	Description
Indicator 3.1	Number of children actively participating (i.e. regularly taking part in activities or initiatives) in SRH clubs
Indicator 3.2	Mean index score of girls' confidence in claiming their rights at school, in the community, and at home

The purpose of this section is to assess girls' leadership abilities, as well as their self-esteem and sense of agency which will be used later to evaluate the impact of girls' participation in SRH clubs on their education outcomes. The full set of questions currently pertaining to the index is presented here for reference:

	Questions	Respondents
Learning to Learn	I cannot choose whether to attend or stay in school. I just have to accept what happens.	All cohort girls
	I am able to do things as well as my friends	
	I want to use the skills I've learned during my education	
	I want to do well in school	In-school girls
	I get nervous when I have to read in front of others	All cohort girls
I get nervous when I have to do maths in front of others		
Learning for Life	I feel confident answering questions when I'm in a group of people	All cohort girls
	I can describe my thoughts to others when I speak	
	I can work well in a group with other people	
	When I have the opportunity, I can organize my peers or friends to do an activity.	
	I ask an adult if I don't understand something (PROMPT, e.g. a teacher, a community leader, parents)	
	When I succeed at school, it is because I worked hard	In-school girls
	When I succeed at a task, it is because I worked hard	Out-of-school

rigorous studies appear to study the relationship between VSLA participation, or savings behaviour more generally, and downstream household impacts, such as investment in girls' education.

		girls
	If I do well in a test it is because I am lucky	In-school girls
	If I succeed at a task it is because I am lucky	Out-of-school girls
	I get support I need from my family to stay in school and perform well	In-school girls
Agency	Whether or not you will go back to school or vocational training	Out-of-school girls
	Whether or not you will continue in school past this year	In-school girls
	When/at what age you will get married	All cohort girls
	If you will work after you finish your studies	
	How often you spend time with your friends	

To have a more comprehensive approach in addressing girls’ barriers to education, and the REALISE project will implement Sexual and Reproductive Health (SRH) education to support child protection and child wellbeing. It is expected that girls’ participation in SRH clubs will improve their life skills which are critical to their ability in positively adapting to and dealing with the demands and challenges of life including making well-informed decisions about their bodies. As a result, school dropout is anticipated to decrease and girls’ educational success to improve. The target for the midline is to have girls report feeling more confident to speak up and act to fulfil their needs among family and peer and to have 900 children participating in SRH clubs.

Girls who participated in this survey are 9 to 11 years of age and are divided into two groups depending on their school status: in or out of school. The in-school and out-of-school groups received 18 and 16 questions, respectively, to examine their self-confidence, decision making, organizational and communication skills. Most of the variables are ordinal with five-point Likert-type scale responses, and girls chose between 1 indicating “strongly agree” to 5 indicating “strongly disagree” to show their level of agreement to, for example, the statement, “I get nervous when I have to speak in front of others or class.” Table 44 and Table 45 indicate percentages of the girls stating, “strongly agree” and “agree” to questions on life skills related to learning and transition, while Table 46 illustrates the percentages of girls stating, “I decide” and “I decide jointly with my family” to questions on agency.

Most girls indicate that they have a high level of confidence across learning to learn indicators including the ability to do things as well as their friends, doing well at school, reading and doing math in front of others, as well as feeling confident answering questions in a group of people (Table 44).

Table 44: Reported as percentage stating ‘strongly agree’ & ‘agree’

Summary Table	Learning to learn
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	I am able to do things as well as my friends	I want to do well in school	I get nervous when I have to read in front of others	I get nervous when I have to do maths in front of others	I feel confident answering questions when I'm in a group of people
Intervention	89%	95%	39%	37%	65%
Comparison	87%	96%	33%	32%	64%
In school girls	88%	96%	36%	35%	64%
Out of school girls	88%	96%	36%	35%	64%
CRS	95%	90%	57%	51%	84%
Non-CRS	88%	96%	36%	34%	64%
With disability	86%	95%	41%	39%	66%
Wo/disability	89%	96%	34%	32%	64%
Sample size (valid responses)	2501	1892	2501	2501	2501

Turning now to the learning for life indicators, most of the cohort girls do not think that they can decide whether they attend or stay in school. However, the majority of the girls show confidence in their organizational and communication skills including expressing thoughts to others, working in groups, organizing peers, asking an adult if they do not understand something. In addition, the preponderance of in-school cohort girls think that they get the support they need from their family to stay in school and perform well. Moreover, when succeeding at school/a task, the in-school girls demonstrated higher levels of self-esteem than those who were out of school, as shown in Table 45.

Table 45: Reported as percentage stating “strongly agree” & “agree”

Summary Table	Learning for life										
	I cannot choose whether to attend or stay in school. I just have to accept what happens.	I want to use the skills I've learned during my education	I can describe my thoughts to others when I speak	I can work well in a group with other people	When I have the opportunity, I can organize my peers or friends to do an activity.	I ask an adult if I don't understand something	When I succeed at school, it is because I worked hard	When I succeed at a task, it is because I worked hard	If I do well in a test it is because I am lucky	If I succeed at a task it is because I am lucky	I get support I need from my family to stay in school and perform well
Treatment	85%	88%	64%	73%	59%	79%	84%	61%	55%	49%	91%
Comparison	78%	86%	64%	75%	56%	82%	87%	64%	53%	46%	92%
In school girls	82%	87%	64%	74%	58%	80%	85%	NA	54%	NA	91%
Out of school girls	82%	87%	64%	74%	58%	80%	NA	63%	NA	48%	NA
CRS	87%	94%	83%	83%	78%	86%	95%	81%	50%	72%	90%
Non-CRS	82%	87%	64%	74%	57%	80%	85%	62%	54%	46%	91%
With disability	83%	85%	64%	75%	60%	80%	85%	63%	59%	55%	90%
Wo/disability	81%	88%	64%	73%	56%	81%	85%	63%	52%	42%	92%
Sample size (valid responses)	2501	2501	2501	2501	2501	2501	1892	609	1892	609	1892

For indicators relating to agency, namely deciding whether to go back to school or vocational training, continuing in school past this year, and when and at what age they may get married, a minority of girls feel that they decide, or they can decide jointly with their family. This means that most of these decisions are made by the girls' families. Girls seem to have the most decision-making power on issues relating to how often to spend time with their friends and working after finishing their studies (Table 46).

Table 46. Reported as percentage stating “I decide” or “I decide jointly with my family”

Summary table		Agency				
		Whether or not you will go back to school or vocational training	Whether or not you will continue in school past this year	When/at what age you will get married	If you will work after you finish your studies	How often you spend time with your friends
Treatment	I decide	10.90%	15.90%	19.30%	39.10%	45.90%
	Decide jointly	25.10%	34.00%	31.70%	27.50%	28.80%
Comparison	I decide	15.70%	17.30%	25.10%	44.10%	53.50%
	Decide jointly	22.20%	34.00%	28.90%	23.70%	23.00%
In school girls	I decide	NA	16.60%	22.20%	41.60%	49.70%
	Decide jointly	NA	34.00%	30.30%	25.60%	25.90%
Out of school girls	I decide	13.30%	NA	22.20%	41.60%	49.70%
	Decide jointly	23.60%	NA	30.30%	25.60%	25.90%
CRS	I decide	20.90%	10.00%	25.40%	47.60%	50.80%
	Decide jointly	34.90%	25.00%	28.60%	23.80%	30.20%
Non-CRS	I decide	12.70%	16.70%	22.10%	41.40%	49.70%
	Decide jointly	22.80%	34.10%	30.40%	25.70%	25.80%
With disability	I decide	15.40%	17.80%	23.70%	40.20%	53.10%
	Decide jointly	19.80%	30.80%	27.10%	25.40%	21.80%
Wo/disability	I decide	11.90%	16.00%	21.30%	42.40%	47.80%
	Decide jointly	26.20%	35.70%	32.10%	25.80%	28.20%
Sample size (valid responses)		609	1892	2501	2501	2501

These questions are analysed through the construction of a life skills index score, using a standardization method, from the questions asked of each of the subset of girls. The girls' life skills index scores are calculated for each group of girls separately, and then bivariate regression is employed to examine whether girls' life skills scores differ across intervention/comparison groups, location (Haut Katanga, Lualaba, Lomami, Kasai Oriental, and Tanganyika), age, grade, CRS, and disability. In sum, the girls who are in school and in Lomami province tend to get higher life skills scores compared to their counterparts who are out of school and live elsewhere. Age and grade appear to be strong predictors of life skill scores among the out-of-school and in-school girls, respectively. Also, the comparison group of Lualaba cohorts as well as those in grade 5 and those with 11 years of age have significantly higher scores than their counterparts in intervention group. Differences in girls' life skills scores were not statistically significant between CRS/non-CRS and disability/non-disability groups.

Table 47 below only shows the statistically significant results of regression: in sum, the girls who are in school and in Lomami province tend to get higher life skills scores compared to their counterparts who are out of school and live elsewhere. Age and grade appear to be strong predictors of life skill scores among the out-of-school and in-school girls, respectively. Also, the comparison group of Lualaba cohorts as well as those in grade 5 and those with 11 years of age have significantly higher scores than their counterparts in intervention group. Differences in girls' life skills scores were not statistically significant between CRS/non-CRS and disability/non-disability groups.

Table 47. Index Scores Age, Grade, and CRS for In and Out-of-School Girls

Group of Girls	Age	Grade	Province				
			Haut Katanga	Lualaba	Lomami	Tanganyika	Kasai Oriental
	β^{198}						
In-school (n=1875)		0.02** ¹⁹⁹ 0.04*** ²⁰⁰	-0.05***	0.02***	0.04***		
Out-of-school (n=2501)	0.03*** ²⁰¹ 0.04*** ²⁰²		-0.06***		0.02**	0.02***	0.017**

All the indicators are normalized by standardizing the responses of indicators to make the indicators comparable.²⁰³ As shown in Figure 14, the in-school girls' scores range between 0 and 1, with the most

¹⁹⁸ * Significant at the 0.05 probability level.

** Significant at the 0.01 probability level.

*** Significant at the 0.001 probability level.

¹⁹⁹ P-value belongs to grades 4 and 5

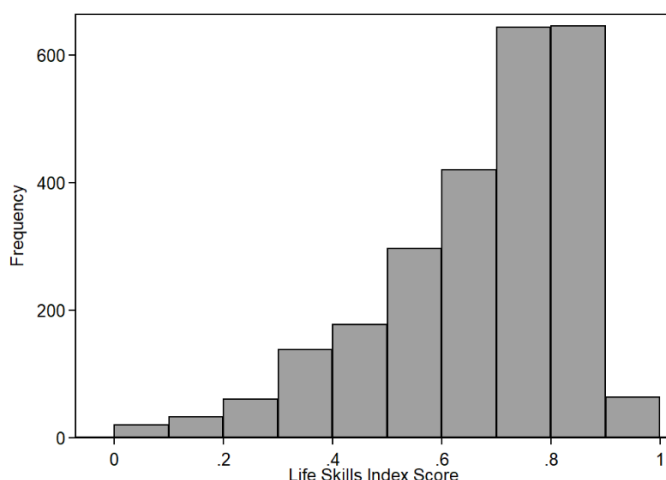
²⁰⁰ P-value belongs to grade 4 and 6

²⁰¹ P-value belongs to age 9 and 10

²⁰² P-value belongs to age 9 and 11

common scores between 0.7 and 0.9. The average score of in-school girls is 0.67 with an interquartile range (IQR) of 0.72 meaning 50 percent of the girls' score fall between 0.57 (first quartile) and 0.8 (third quartile).²⁰⁴

Figure 14: Index Scores of In-School Girls



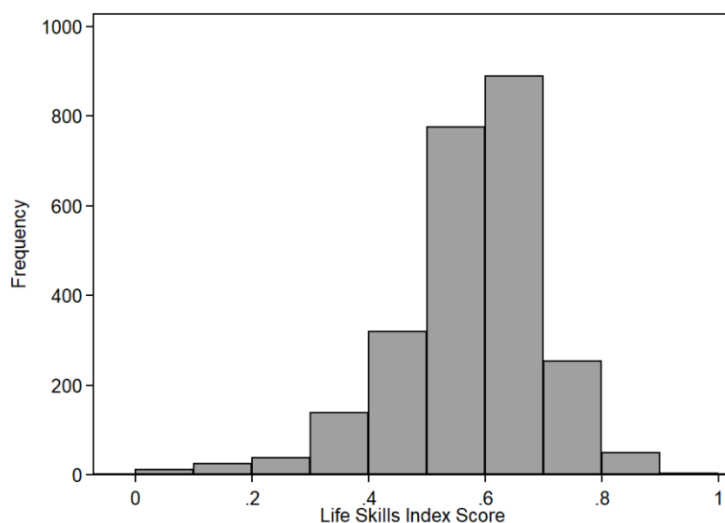
When the girls' score is regressed against enrolment, significant differences were found between the in-school and out-of-school girls.²⁰⁵ The out-of-school girls seem to have received less score than their counterpart, with the most common scores populated around 0.6 and 0.7. The out-of-school girls received an average score of 0.57 and an IQR of 0.59 meaning half of the scores fall between 0.51 (first quartile) and 0.65 (third quartile), as illustrated in Figure 15. This difference suggests that girls who are in school have significantly higher levels of self-confidence, decision making, organizational and communication skills compared to the out-of-school girls. While there could be different reasons affecting in-school girls' better score, the SRH education clubs may play an important role in filling this gap among the out-of-school girls.

²⁰³ Using STATA, the indicators are converted to a common scale with a standard deviation of one and mean of zero.

²⁰⁴ The skewness and kurtosis are -0.87 and 4.8, respectively.

²⁰⁵ $\beta=0.32$, p-value <0.001

Figure 15. Index Scores of Out-of-School Girls



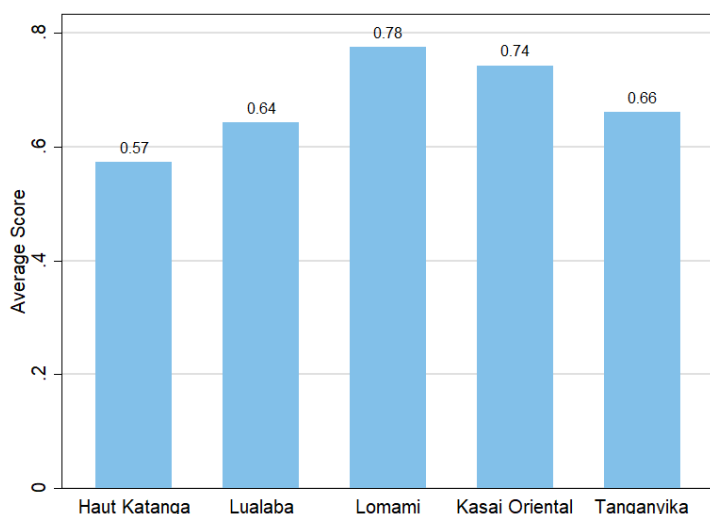
Significant differences were found when girls' life skills scores were disaggregated by province. The in-school girls residing in Lomami²⁰⁶ and Lualaba²⁰⁷ have received the highest life skills scores while the in-school girls in Haut Katanga²⁰⁸ scored the lowest. The median life score of Lomami's in-school girls happens to be slightly less than 0.8 and half of the scores fall between 0.74 (1st interquartile) and 0.83 (3rd quartile) which is the highest score range among other provinces. Figure 16 illustrates these differences by province.

²⁰⁶ $\beta = 0.04$, p-value < 0.001

²⁰⁷ $\beta = 0.02$, p-value < 0.001

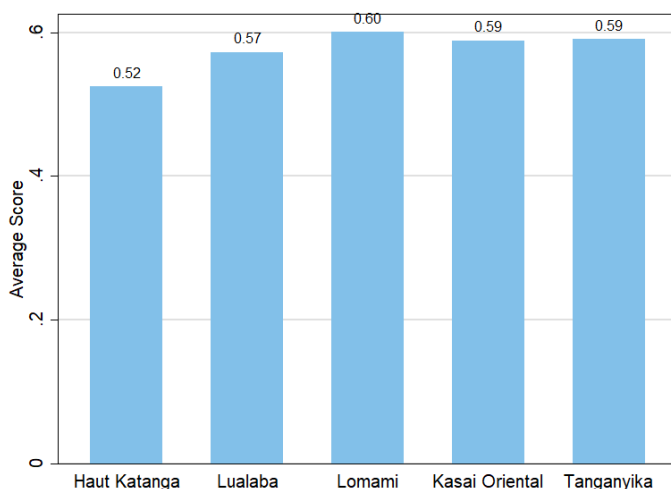
²⁰⁸ $\beta = -0.05$, p-value < 0.001

Figure 16. Average Index Scores of In-School Girls by Province



Among the out-of-school cohort girls, the scores tend to be higher among the girls in Tanganyika and Lomami, followed by Kasai Oriental, and lower among the girls staying in Haut Katanga. Among these cohorts, the median life score of Tanganyika, Lomami and Kasai Oriental cohort girls is around 0.6 while Haut Katanga received the least median score among provinces. Not surprisingly, the cohort girls living in Tanganyika have received the highest interquartile range (IQR) while Haut Katanga the lowest IQR, with 50 percent of them scoring between 0.52-0.67 and 0.43-0.62, respectively. Figure 17 show these differences in scores in more details.

Figure 17. Average Index Scores of Out-of-School Girls by Province



Although there might be various factors driving higher life skill scores in Lomami and lower life skill score in Haut Katanga, qualitative data reveals some of the causes of these differences. A religious leader from Haut Katanga affirmed the existence of biases against girls and their detrimental impact on girls' self-

esteem, stating, “[when] there are biases, girls are left marginalized, and they will be confused and desperate.”²⁰⁹ While there are different types of biases against girls and their education, the ones exerted from their families, teachers, and communities can have lasting damage on girls’ self-esteem and confidence.

The qualitative data also indicates that there is a different perception between the community members of Lomami and Haut Katanga when it comes to educating girls on sex. For example, the community leader of Lomami disclosed that the parents warn their children against having sex while they are still young, and educate them on the consequences of early pregnancy and health risks.²¹⁰ But the religious leader of Haut Katanga cautioned against this approach, because he believed that “they do not have the right formulas for this and they have not been trained to do so.”²¹¹

Similarly, age appears to be a significant predictor of scores among the out-of-school girls. As expected, the girls at younger ages feel less equipped with life skills than older girls (Table 48). Among the age groups, the scores above 0.6 is more frequent among the girls at age 11 (50%), followed by girls at age 10 (47%) and 9 (40%). No significant differences were found among the in-school girls’ age groups.

Similarly, girls are more likely to score higher as they move to higher grades. As shown in Figure 18, in total, the percentage of in-school girls in grade 6 (80 percent) who have scored more than 0.7, is higher than the percentage of girls in grade 5 (74.9 percent) and grade 4 (68.2 percent).

No significant differences were found between girls’ score in terms of intervention/comparison.²¹² However, when it was further disaggregated by grade,²¹³ age,²¹⁴ and location,²¹⁵ the comparison group in grade 5 as well as those with 11 years of age and residing in Lualaba feel more confident in their life skills than their counterparts, as shown in the graphs below. Table 48 presents girls’ average life skills score broken down by intervention/comparison and age groups. Girls’ scores were also not statistically different by CRS/non-CRS and disability/non-disability groups.

²⁰⁹ Key Informant Interview, Religious Leader, Haut-Katanga, Kitabataba.

²¹⁰ Key Informant Interview, Community Leader, Lomami, Tutante.

²¹¹ Key Informant Interview, Religious Leader, Haut-Katanga, Kitabataba.

²¹² When girls’ scores were regressed against intervention/comparison, a spurious correlation was found only among the out-of-school girls’ score which could be due to small sample size.

²¹³ $\beta = -0.02$, p-value < 0.05

²¹⁴ $\beta = -0.02$, p-value < 0.05

²¹⁵ $\beta = -0.03$, p-value < 0.05

Figure 18. Girls' Life Skills Scores by Intervention and Grade

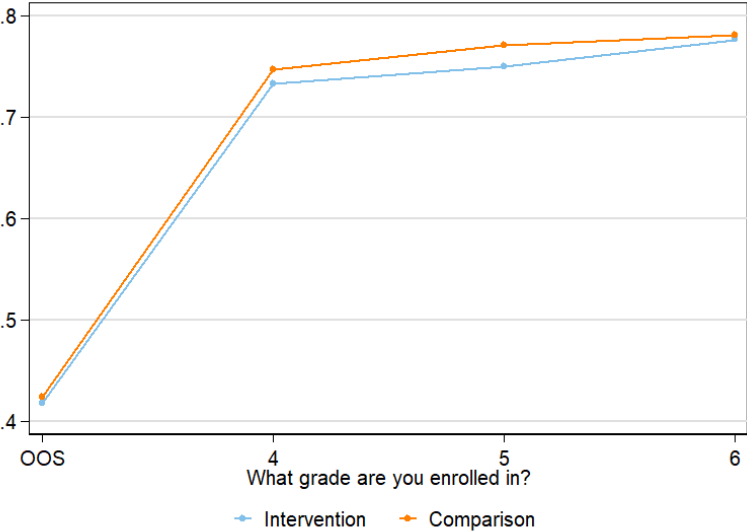
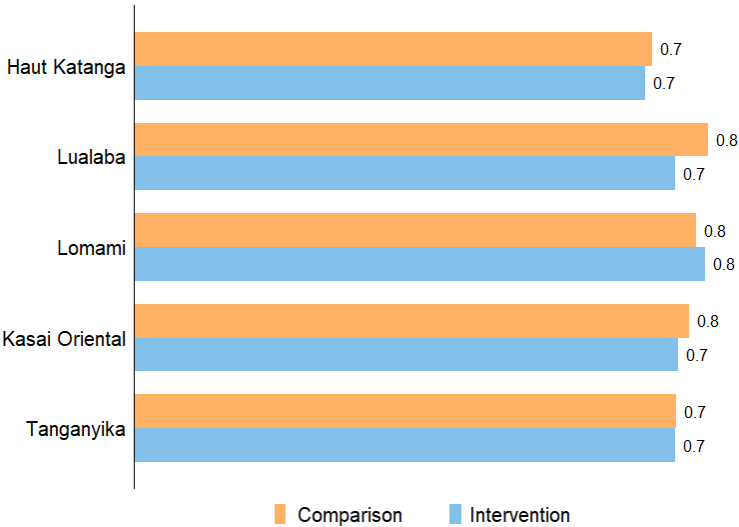


Table 48. Girls' Average Scores by Intervention and Age

	<i>Intervention</i>		<i>Comparison</i>	
<i>Age</i>	<i>In-school</i>	<i>Out-of-School</i>	<i>In-school</i>	<i>Out-of-School</i>
9	0.74	0.33	0.74	0.39
10	0.74	0.43	0.74	0.42
11	0.74	0.46	0.76	0.46

Figure 19. Girls' Life Skills Scores by Intervention and Province



Overall, the in-school girls as well as those residing in Lomami tend to score higher in life skills compared to out-of-school girls and those who live in other provinces surveyed, respectively. Life skills scores tend to vary significantly among the out-of-school girls' age groups and in-school girls' grades. Also, the comparison group of Lualaba residents as well as those in grade 5 and those with 11 years of age have significantly higher scores than their counterparts in intervention group.

5.7 Girls' self-esteem

Girls' self-esteem is an important construct related to life-skills, and is potentially one of the mechanisms that can help us understand why higher life-skills scores are correlated with better learning outcomes. Three life-skills and behavioural questions can be used to make a quantitative assessment of the self-esteem of in-school and out-of-school girls for the purpose of establishing baseline values. Additionally, to

support the specific proxy of “success from hard work” for self-esteem, this report also chose to include the variable that counters hard work, which is the role of luck in success. The four questions used as quantitative proxies for self-esteem are listed below for reference.

Life-skills module questions

- I am able to do things as well as my friends
- When I succeed at school/a task it is because I worked hard
- If I succeed at a task/do well in a test it is because I am lucky

Behavioral question

- I ask an adult if I don't understand something.

These questions are all potential proxies for self-esteem, and they have in common their focus on girls placing inherent value on themselves and their contributions in relation to others. In addition, a question was selected specifically because it relates to a more behavioral proxy of self-esteem– namely whether or not girls are too shy/lack confidence to ask questions of adults when they do not understand something.

Both life-skills and behaviors are important in understanding how girls build their self-esteem which could potentially lead to better learning outcomes. As found farther down in this section’s analysis, the variables do appear to be positively correlated with perceived ability to learn, suggesting that girls with higher self-esteem may perform better in the classroom or a learning environment, partly because they participate more actively.

The table below summarizes the mean score for each of these questions by intervention versus comparison groups and whether or not the girl is currently enrolled in school. The questions are on a five-point Likert scale. Ultimately, there are no significant differences in terms of proxies for self-esteem between intervention and comparison girls. However, girls who are enrolled in school do tend to agree more often with the statements representing their own abilities and confidence.²¹⁶ This divide highlights the potential self-esteem building benefits of girls being enrolled. Young females who spend time in the classroom, not only learn standard subject areas (e.g. math and language), but also social skills and how to learn better, all of which can be used outside of school. It may very well be that enrollment builds self-esteem and that self-esteem drives girls to stay enrolled.

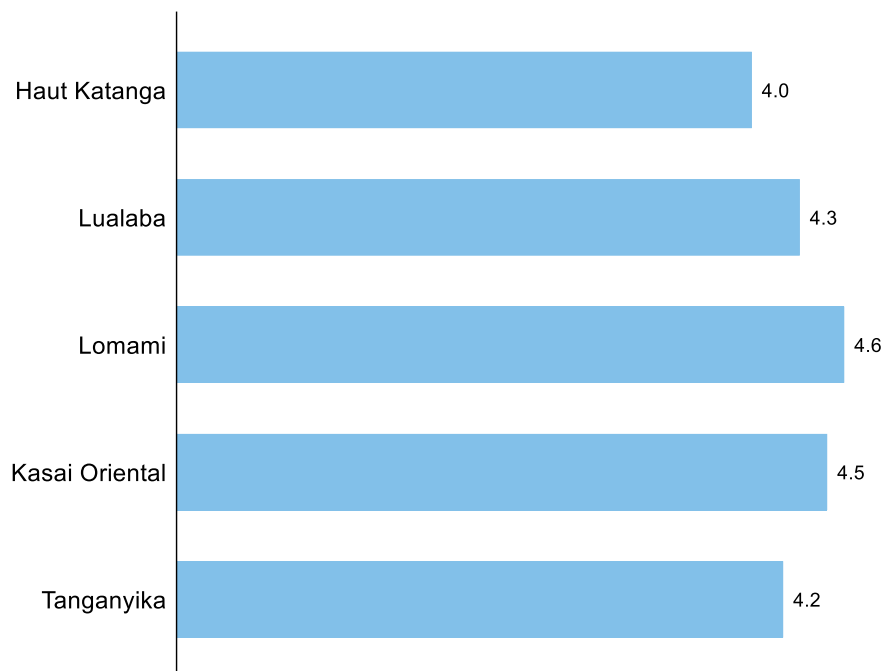
Life Skills:	Mean for Intervention	Mean for Comparison
I am able to do things as well as my friends.	4.5	4.5
When I succeed at school/a task it is because I worked hard.	4.4	4.4
If I succeed at a task/do well in a test it is because I am lucky.	3.4	3.2
I ask an adult if I don't understand something.	4.3	4.3
Life Skills:	Mean for Enrolled Girls	Mean for Not Enrolled Girls
I am able to do things as well as my friends.	4.5	4.3

²¹⁶ P-values were less than .001 when the individual variables were regressed on enrolment. When accounting for the other proxy variables, enrolment’s relationship with girl’s success from hard work and ability to ask questions maintained this level of significance.

When I succeed at school/a task it is because I worked hard.	4.4	3.9
If I succeed at a task/do well in a test it is because I am lucky.	3.3	3.3
I ask an adult if I don't understand something.	4.3	3.9

The graphs by province and age below show that, except for luck, there is a significant relationship between self-esteem's proxies and age.²¹⁷ With the disaggregation by province, "ask an adult" was chosen to highlight the variations, with there being significant relationships between the provinces and the proxies.²¹⁸ The graphing of age contains all of the proxies.

Figure 20: Girls Ask Questions by Province



²¹⁷ P-values were all less than .05.

²¹⁸ P-values less than .001.

Figure 21: All Self-Esteem Proxies by Age



Older girls tend to have higher scores on the above proxies of self-esteem. This relationship between age and self-esteem is understandable as older girls spend more time in social, and possibly academic, situations gaining experience and education. Older girls will have more background and foundational knowledge and will have potentially gained more communication skills. If girls have this increased experience, it may grant them more confidence through more agency to participate and succeed.

The potential significance of self-esteem was emphasized in the above analysis on correlations of girls' perceptions and behaviours with learning outcomes because increased participation in the classroom is hypothesized to be the mechanism by which life-skills and self-esteem might affect learning outcomes. The qualitative data provides further evidence to corroborate this point. Boys in a focus group in Lomami observed that, when a girl who lacks confidence wants to ask a question in class, "the girl is embarrassed to ask the question, so she asks the boys in class to ask the question in her place."²¹⁹ Because important classroom participation behaviours are potentially a result of variations in girls' self-esteem, it will be important to continue tracking these questions as an overall proxy for girls' confidence and self-esteem.

²¹⁹ Focus Group, Boys, Lomami

6. Conclusion & Recommendations

6.1 Conclusions

Beneficiary profile and barriers

The families of cohort girls most commonly met the criteria for indicators of poverty. Over two-thirds of households (67.2%) reported that their home uses poor roofing material such as mud, thatch/grass, wood, tin/iron sheets, asbestos, cardboard, tarp/plastic, banana leaves, or papyrus. Over one-third of households (33.2%) said that they are unable to meet basic needs. Teaching quality barriers were among the most prevalent: among in-school, cohort girls, 64.5% said that the teacher punishes/disciplines when students get lessons wrong, and 64.6% of girls said that they witnessed physical punishment last week. In addition to poverty, language difficulties were cited by the majority of households: 84.3% of households indicated that the language of instruction at their girls' schools were different from the girls' mother tongue, and 30.6% of girls do not speak the language of instruction.

Learning Outcome findings

Aggregate learning assessment scores for in-school cohort girls are: literacy = 12.3; and numeracy = 52.9.²²⁰ These do not vary significantly by intervention versus comparison girls. Scores for out-of-school girls are significantly lower: literacy = 3.3; and numeracy = 24.4.²²¹ Literacy levels among cohort girls are exceedingly low. None of the girls in the sample were able to read at their grade level (based on established achievement standards) and the majority of girls had trouble identifying letters and the sounds that letters make. Thus, the most highly consequential skill gap in literacy is at the level of letter-sound identification. In contrast, numeracy scores were much higher than literacy scores, although no girls were able to perform math at an achievement level that was the same as their grade level. The primary learning gap is in subtraction, where the proportion of girls who are non-learners increases by 10.9 percentage points (as compared with the number of non-learners for addition).

The most disadvantaged girls in terms of learning are those who do not speak the language of instruction at their school, those who are disabled, those who come from remote, agrarian communities, and those belonging to households of limited means. The most important barriers that girls face in terms of learning are schools with insufficient learning materials, teacher absenteeism, poorly trained teachers who tend to intimidate their students, and unsupportive families.

Transition Outcome findings

Across all communities in the sample, benchmark transition rates for girls 9-16 years old were 73.8 percent, with comparatively higher rates of 75.9 percent -- compared to 71.6 percent -- found in intervention communities. Unusually, transition rates were lowest among the two youngest age cohorts (9 and 10-year olds), before rising among 11- to 14-year old girls, especially.

²²⁰ These scores are unweighted averages, including both intervention and comparison schools, and excluding four AEP schools.

²²¹ These scores are unweighted averages, including both intervention and comparison schools, and excluding four AEP schools.

Geographic differences were especially pronounced in the context of transition outcomes, with large gaps observed between provinces. Haut Katanga and Lualaba experienced baseline transition rates among cohort girls of just 56.8 and 61.0 percent, respectively. In marked contrast, Lomami and Kasai Oriental both had transition rates over 90 percent, suggesting that transition outcomes are determined -- largely or in part -- by one's geographic circumstance. Even when accounting for differences in household economic conditions and age, province-to-province differences in transition rates remained statistically significant and substantively large.

While a number of individual- and household-level characteristics are correlated with transition outcomes, the most important is household poverty. A range of measures indicating household poverty all predict lower transition rates. For instance, girls in households that do not own a mobile phone have transition rates 15.9 percentage points lower than girls in households that do. Similarly stark differences obtain in the context of household hunger, self-reported economic conditions, and measures of the quality of a household's home. Even non-economic barriers to transition often manifest via economic mechanisms: conflict was associated with a drop in transition rates in regression models predicting transition, but the vast majority of qualitative interviewees described the impact of conflict on schooling in terms of economic consequences -- the loss of parents who can raise money for school fees, and the inability of households to earn a viable living. Early marriage, also cited by interviewees, also appears to be driven by economic considerations, highlighting the complex, but critical, relationship between economic hardship and enrollment.

Intermediate Outcomes findings

Attendance

The school attendance rate for cohort girls established through a headcount conducted during a single day of data collection is 86.8 percent of the total girls enrolled—a relatively high proportion at the baseline. The calculation of attendance based on the primary caregivers' assessment resulted in an estimated attendance rate of 85.3 percent. Both measures of attendance found that attendance differed significantly by province, in the headcount (84.0 percent) and the primary caregivers' assessment data (83 percent), we found that girls in Kasai Oriental attended school at significantly lower rates. In addition, in the primary caregivers' assessment data, girls from Haut Katanga are observed to attend school at the lowest rates among all provinces, averaging 81.4 percent attendance.

Teaching Quality

Teaching quality is primarily measured against key competencies set by DRC's Ministry of Primary, Secondary and Vocational Education (EPSP). The absolute lowest teaching quality score is in the category of organizational skills, and specifically in the category of teachers' professional development (with a score of 32.6 out of 100). This measure indicates that approximately one third of teachers in the sample have received training within the past year. Teachers interviewed see the value of training, as do parents. Extending more and better training opportunities to teachers is likely to address many of the other deficiencies identified in terms of teaching competencies.

The lowest teaching competency score related to cognitive skill was in terms of teachers demonstrating mastery of the didactic actions that facilitate learning in the classroom (with an aggregate score of 64.3 out of 100). The behavioural or socio-emotional skill scores that are the lowest both relate to student-centred teaching approaches, namely the ability of teachers to take into account the diversity and emotional needs of students and the ability of teachers to adapt their interventions to the specific needs of pupils with learning difficulties (with scores of 61.6 and 63.4, respectively). When examining teachers'

skills in teaching children with special needs, teachers' greatest limitations were in terms of their abilities to use different languages when needed to accommodate children who did not speak the language of instruction, as well as teachers' abilities to make special accommodations for conflict-affected children, when necessary. Finally, analysis of girls' impressions of their teachers and comfort levels when interacting with their teachers suggest that the punishment strategies that teachers use are extremely influential and that corporal punishment and punishments given for incorrect answers in class can undermine student trust and lead girls to be fearful of their teachers in ways that may undermine participation in class and thereby impede learning.

Economic empowerment

The economic conditions faced by the typical household in REALISE communities are relatively poor. A majority of households frequently go without cash income of any kind, and just one over-quarter have experienced significant hunger many or most days over the last year. By most metrics, intervention communities are better-off economically -- for instance, more intervention households own a mobile phone and fewer have experienced frequent hunger -- but the differences between intervention and comparison communities are substantively small and do not reflect systematic differences.

Savings and loan groups, which REALISE plans to sponsor and promote in an effort to empower households economically, are already active in some form in most project communities. Overall, 23.3 percent of households report currently participating in a savings and loan association; households that are members of such an association are considerably more likely to report having savings at the time of the baseline.

Household saving behaviour is strongly correlated with both improved household economic conditions and positive educational outcomes among girls. In households where caregivers currently have savings, girls perform significantly better in both literacy and numeracy, and are more likely to remain in school. These same households are also less likely to experience hunger, more likely to own a mobile phone, and more likely to have a house that uses higher-quality construction materials. The relationship between saving behaviour, economic conditions and educational outcomes is unlikely to be one-directional, but the strong association between the three outcomes -- and the consensus among respondents regarding the primary of economic barriers to school enrolment -- suggests that the project's focus on economic empowerment is well-justified.

Life skills

Although girls exhibited high levels of self-confidence in themselves and their abilities, girls' families appear to play an important role in decision-making around schooling and marriage. Schooling and marriage have serious financial implications on families, which may explain why these decisions are still made jointly within a family. Girls' levels of agency were highest in decisions related to working after finishing their studies, which would presumably have positive short-term financial implications for the family, and spending time with their friends.

The survey found that a number of factors influence girls' life skills index scores, which were calculated based on girls' responses to questions on leadership, self-confidence, and agency in making life decisions. In-school girls scored higher on the life skills index than out-of-school girls, suggesting that schooling has a significant effect on girls' leadership abilities, levels of confidence, and agency. For in-school girls, grade was a significant predictor of higher scores, whereas for out-of-school girls, age was a significant predictor of higher scores. In other words, girls appear to acquire more skills, confidence, and agency as they progress in school if they are in school and as they age if they are out of school.

Socio-cultural factors may be driving disparities by location. Both in- and out-of-school girls from Haut Katanga had the lowest life skills index scores among their sub-groups. In Haut Katanga, qualitative interviews suggest that community attitudes toward girls' education and educating girls on sexual and reproductive health may be a significant barrier to girls accessing and staying in school.

Self-esteem

Self-esteem is an important determinant of girls' learning outcomes. Girls who are more confident will be more willing to ask questions and participate in the classroom, and will tend to learn more from their studies. This connection between self-esteem and learning outcomes has been demonstrated in the quantitative analysis and corroborated using qualitative data. Girls with higher levels of self-esteem based on the proxy measures used have significantly higher literacy and numeracy scores.

Project approach to gender inequality

The project's approach to the measurement of gender inequalities and the understanding of vulnerable subgroups is strong and planned interventions range from gender neutral to gender sensitive in terms of GESI standards. A major strength of the project's approach is the fact that its evaluation strategy involves the collection of qualitative data from boys and girls, allowing for an important comparison of their attitudes and experiences, as well as tracking of how these aspects change over time.

Through the analysis of baseline data, girls with mental health disabilities have been identified as being among the most vulnerable, having consistently lower learning outcomes than average. The project has taken a gender-neutral approach in addressing issues of mental health and trauma by focusing teacher training on issues of conflict sensitivity, especially in relation to trauma and child protection.

The project's approach is gender sensitive inasmuch as SRH training is likely to have important effects in terms of educating and empowering girls, and child-protection training and activities are likely to disproportionately benefit girls (who are the most affected by these issues). SRH and protection issues are relevant to boys as well, but girls are far more severely affected by issues of sexual health as well as gender-based violence, and thus the focus on these issues helps to redress existing gender inequalities.

Finally, it is worth noting that the evaluation strategy could be made more gender sensitive if it were to measure boys' learning outcomes. Without measuring boys' learning outcomes, the project cannot account for changes over time in girls' learning outcomes vis-à-vis boys, and thus cannot determine the degree to which project activities may be reducing fundamental gender inequalities in learning.

6.2 Recommendations

Monitoring, Evaluation and Learning of the Project

- Findings from the analysis of learning outcomes suggest that there may be significant gaps in teachers' knowledge and teaching skills, especially that there are major limitations to teacher's skills in teaching phonemes. These limitations would help to explain the low levels of literacy overall in the sample of cohort girls as well as the profound skill gap that occurs at the level of letter-sound identification in the literacy assessment. The hypothesis about limitations in teachers' abilities to competently teach phonemes could bear further testing. One of the more direct tests of this hypothesis would involve having teachers take a numeracy and literacy examination that would directly test their own skill-levels. Then, teacher's skill-gaps could be analysed alongside the skill-gaps of their students.

- The project's subsequent evaluation would benefit from gathering attendance data of cohort girls from school records for the current school year up to and including the day of data collection. While attendance rates in the headcount and attendance rates from the primary caregivers' assessment of girls' attendance are similar, they do not correlate substantially when aggregated at the school level or even at the province level. A third source of attendance data would not only help arbitrate between these two rates of attendance, but it would provide a longer time-scale than is currently possible with only the headcount survey and primary caregivers' assessment. Collecting data from school records would also take advantage of the schools' relatively good record-keeping. Of all classrooms observed in the evaluation, 78.5 percent had attendance records that were classified as "mostly complete" or "extremely complete" and had on average 4.2 days of attendance data recorded in the past 5 school days.
- Linking girls and their teachers (across evaluation datasets) is critical in order to allow more direct analysis of the linkages between teacher quality (measured through classroom observation and teacher surveys) with data on girls' learning. While this level of direct linkage was not possible in the baseline study, it will be possible and advisable to achieve this linkage in the midline and endline studies. The best way of achieving this linkage will involve the creation (prior to the midline) of a dataset of all teachers by school (for sampled schools). Teachers can then be assigned unique teacher-codes that can be programmed into both the teacher surveys and observations, as well as the girls' learning assessments. Girls will thus be able to supply the names of their teacher or teachers during the course of the learning assessment, and the names supplied by girls will be used (through the unique teacher-codes) to link girls' data with teachers' data. To ensure the confidentiality of teachers' information, teachers' names can be removed from the household survey and learning assessment datasets. The linked dataset can be structured to include only girls' and teachers' information, but not the school or community where the girls live (with randomly-generated unique IDs), to prevent the possibility of using school information to identify individual teachers. This approach would mirror that taken at the baseline, in which data collected from teachers did not include school-specific information (school name or community), to avoid identifying individual teachers.

Project Design and Relevance

- Fundamental learning skill gaps exist in literacy at the level of letter-sound identification and in numeracy at the level of subtraction. These skill gaps are sufficiently severe and fundamental that girls who miss the acquisition of these skills will require significant attention and remedial work in order to catch up with their peers and acquire new skills. The elimination of these skill gaps will probably require focused tutoring, which may require an after-school program or other special engagement with learners who have fallen behind.
- The project should consider mapping existing teacher training programs provided by project schools, the Ministry of Education, as well as other NGOs, to gain a firm understanding of the current training landscape. A number of training programs exist, and creating another such program may provide fewer dividends -- especially in terms of sustainability after the project's end -- than working within an existing program, even if it is not very active or effective. For instance, where schools have teacher training programs in place, Save the Children should seek to work with head teachers and other stakeholders to ensure they meet their standards for content and delivery, and commit resources to enhancing those programs and ensuring they are active, rather than developing a parallel program. Similar partnerships with provincial educational officials may also be worth pursuing, given widespread reports that the ministry provides teacher training programs currently.

- Teacher professional development should include coverage of classroom management skills. The project's current plans to invest in TPD approaches that will provide trainings on literacy and numeracy teaching methodologies, and accelerated learning methodologies should improve teachers' knowledge, skills, and their lesson content. These interventions however do not directly address findings in the data which indicate that girls are uncomfortable with speaking up in class when they have a question and that both corporal punishment and linguistic barriers are commonplace. In addition, girls who said that they were uncomfortable asking teacher questions and afraid of the teacher were less likely to attend class. Folding in lessons on classroom management techniques and teaching in a multilingual context into professional development may help to address these issues.
- Improved teaching methods require significant planning on the part of teachers. It is not sufficient for teachers to understand the value of participatory methods – they must be trained on their implementation in practical terms. Teacher trainings could illustrate how to develop a lesson outline and recognize areas that would be conducive to group work, games, and other student-centred activities.
- Teacher training opportunities overall are fairly limited, and their scope is similarly limited. Of the 34.1 percent of teachers who have received additional training in the last three years, none report training on disability-inclusive pedagogy. Most training is focused on gender-sensitivity and subject-specific pedagogy. Although a majority of teachers report that children in their school with vision and hearing impairments sit near the front of the class, fewer report support for conflict-affected children. Given that cognitive and mental health disabilities were the most commonly identified in the sample – and the difficulty untrained individuals have identifying these impairments – additional training for teachers in identifying disabilities and adjusting teaching styles to accommodate disability are needed.

Scalability and Sustainability

- Principals and teachers can be taught to proactively identify girls who have missed a significant amount of class and who are at-risk of dropping out of school. The project can potentially share its analysis back to the targeted schools in a way that allows teachers to better identify at-risk girls. It might also be possible for principals to be trained by the project to better understand and interpret their own school records in terms of attendance and student grades in order to identify girls who are likely to drop out and potentially provide them with additional tutoring.
- As noted in the findings and conclusions above, attendance and teaching quality permit significant room for improvement, including through the mechanism of increased teacher training and professionalisation. In light of the key linkages demonstrated above, teacher training is thus central to efforts to sustainably improve key intermediate outcomes that then feed into learning and transition outcomes. A major reason why current sustainability scores are low is because teachers are ill-equipped to deal with the needs of some of the most at-risk girls identified in this study. Teacher training should focus on the development of these skills, including better skills and strategies for addressing the needs of children who do not speak the language of instruction, as well as children who suffer from trauma or anxiety.

Annexes

Annex 1: Logframe

The latest version of the project logframe is provided separately.

Annex 2: Outcomes Spreadsheet

The latest version of the project's Outcomes Spreadsheet is provided separately.

Annex 3: Key findings on Output Indicators

This annex should be completed by the project.

Table 49: Output indicators

Logframe Output Indicator	Means of verification/sources	Collection frequency
Number and Indicator wording	List all sources used.	E.g. monthly, quarterly, annually. NB: For indicators without data collection to date, please indicate when data collection will take place.
Output 1: Literacy & numeracy curriculum and assessment programmes implemented		
Output 1.1: Proportion of teachers who demonstrate the use of multiple methods for teaching literacy and numeracy in the classroom	Classroom observation tools	Quarterly
Output 1.2: # of children actively participating in Literacy & Numeracy boost community activities	- LB/NB session Attendance register - LB/NB activity report	Monthly

Output 1.3: Perception of girls on the effectiveness of student kits to help them learn better	Survey tools : - FGD - KII	Annually
Output 2: Teacher Professional Development programme implemented		
Output 2.1: Proportion of teachers per annum who have completed four or more cycles of professional development (to include functional literacy & numeracy, and gender-sensitive teaching)	- Completed TPD Tools - training attendance list	Quarterly
Output 2.2: Proportion of school leaders and/or coaches who provide one observation feedback on the performance of teachers per cycle	- Classroom observation tools - Classroom observation Report	Quarterly
output 2.3: # of children completing standardized end of year AEP exams	- list of students completing standardized end of year exams - End of exams report	Annually
Output 3: Improved quality of learning environment (as defined in SCI's Quality Learning Framework), especially for conflict-sensitive education		
Output 3.1: # of teachers trained in psychosocial support to detect cases of abuse or trauma among their students and provide support	- training attendance list	Quarterly
Output 3.2: % of trained community members who can recall at least 60% of the key messages about the protection of schools in conflict situation	- Pre and post test tools - training attendance list	Quarterly
Output 4: Activities outside class or school support girls' wellbeing		

Output 4.1: Level of confidence among teachers and mentors in discussing and teaching good practices in SRH	- Classroom observation tools - Survey tools : FGD; KII	twice a year
Output 4.2: Proportion of Child Protection cases reported in the last term being responded to within the timeframe set by hotline guidelines	- hotline - CP record	Quarterly
Output 4.3: % of parents and community influential stakeholders trained by the project who report improved knowledge in SRH and gender equality	- after training survey with participants	-twice a year
Output 5: Community structures address economic and institutional barriers to girls' and boys' education		
Output 5.1: % of girls receiving bursaries attending school regularly (80% of days)	- bursaries attendance tracking tools - attendance register	Monthly
Output 5.2: # of target girls' caregivers trained on household financial management	- members attendance register during VSLA activities - training attendance list	Quarterly
Output 5.3: Level of confidence among community members who participate in CVA activities in monitoring and advocating for better education services	- Survey tools : - FGD - KII - survey	Annually

Report on the Baseline values/Baseline status of each Output Indicator in the table below. Reflect on the relevancy of the Output Indicator for your Intermediate Outcomes and Outcomes and the wider Theory of Change based on the data collected so far. Are the indicators measuring the right things? What do the Baseline values/Baseline status mean for the implementation of your activities?

Table 50: Baseline status of output indicators

Logframe Output Indicator	Baseline status/Baseline values Relevance of the indicator for the project ToC	Baseline status/Baseline values
Number and Indicator wording	What is the contribution of this indicator for the project ToC, IOs, and Outcomes? What does the Baseline value/status mean for your activities? Is the indicator measuring the right things? Should a revision be considered? Provide short narrative.	What is the Baseline value/status of this indicator? Provide short narrative.
Output 1: Literacy & numeracy curriculum and assessment programmes implemented		
Output 1.1: Proportion of teachers who demonstrate the use of multiple methods for teaching literacy and numeracy in the classroom	Literacy Boost (LB) and Numeracy Boost (NB) approach provides training to teachers to build their skills in assessing the girls' needs in literacy/numeracy and adapt their curriculum accordingly. This indicator calculates the percentage of trained teachers who practice the multiple methods for teaching Literacy and Numeracy Boost in the classroom.	Not yet collected.
Output 1.2: # of children actively participating in Literacy & Numeracy boost community activities	The aim of LB/NB at community level is to generate reading culture in children. This indicator will count the number of children participating in LB/NB community activities	Not yet collected.
Output 1.3: Perception of girls on the effectiveness of student kits to help them learn better	In Vas Y Fille, school supplies were distributed to girls; however, as a key lesson learned, REALISE will distribute classroom kits to ensure that <u>all</u> children in a class are equipped to learn, and that teachers have some resources to teach. This activity addresses financial barriers and contributes to quality of learning. We want to know how this approach is relevant for girls; this indicator will assess girls' perception of these kits.	Not yet collected.
Output 2: Teacher Professional Development Programme Implemented		

<p>Output 2.1: Proportion of teachers per annum who have completed four or more cycles of professional development (to include functional literacy & numeracy, and gender-sensitive teaching)</p>	<p>TPD is all about strengthening teachers' skills and competencies through a series of trainings focusing on domains most useful and helpful for the teachers, based on an initial assessment, and then through continuous assessments. This approach will have an impact on quality of teaching, attendance and student learning. This indicator measures the teachers who have completed four or more cycles of TPD to ensure that they developed enough competencies to impact the project.</p>	<p>Not yet collected.</p>
<p>Output 2.2: Proportion of school leaders and/or coaches who provide one observation feedback on the performance of teachers per cycle</p>	<p>In TPD approach, the project assumes that the best way to follow teachers' progression after training is through classroom observations providing feedback on their performance. This to enhance their teaching approach and develop their skills. This indicator measures the ability of school leaders and coaches to provide feedback after classroom observations.</p>	<p>Not yet collected.</p>
<p>Output 2.3: # of children completing standardized end of year AEP exams</p>	<p>AEPs aim to create an informal alternative to primary education that is adapted to student needs. Since none of the costs of this education are paid by the family, children who have been left behind by the formal system can register and attend. But AEP should remain an alternative way that is why the project will work to create a gate between AEPs and formal education. That will be one of our sustainability actions and this indicator will measure this.</p>	<p>Not yet collected.</p>
<p>Output 3: Improved quality of learning environment (as defined in SCI's Quality Learning Framework), especially for conflict-sensitive education</p>		

<p>Output 3.1: # of teachers trained in psychosocial support to detect cases of abuse or trauma among their students and provide support</p>	<p>This activity is aimed at ensuring that teachers are equipped to work with children affected by conflict in their classrooms. They will be trained on various topics like psychological first aid, working with traumatized children, protecting schools in conflict. And this indicator counts the number of teachers trained in this thematic.</p>	<p>Not yet collected.</p>
<p>Output 3.2: % of trained community members who can recall at least 60% of the key messages about the protection of schools in conflict situation</p>	<p>In the same way the project assume that the change should be at the community level too. Key Community members will be trained on protection of schools in conflict situation and this indicators will measure their ability to retain 60% the key messages provided during the training.</p>	<p>Not yet collected.</p>
<p>Output 4: Activities outside class or school support girls' wellbeing</p>		
<p>Output 4.1: Level of confidence among teachers and mentors in discussing and teaching good practices in SRH</p>	<p>To enhance girls well-being at schools, the project will provide training to clubs, caregivers and schools on education to family life curriculum on various useful topics, such as sexual & reproductive health, gender equity, puberty etc.; develop strategies with clubs to prevent and mitigate risks and violations of their rights and training on puberty and menstrual hygiene management, etc. And this indicator will assess how teachers and mentors are confident in discussing and teaching good practices in SRH.</p>	<p>Not yet collected.</p>

<p>Output 4.2: Proportion of Child Protection cases reported in the last term being responded to within the timeframe set by hotline guidelines</p>	<p>The project will provide training of teachers on positive discipline, ensure proper referral protocols are in place in schools, conduct trainings for children's club in schools focusing on child rights and trainings for community child protection networks. (RECOPE). This will permit to build or strengthen Child protection cases reporting mechanisms. This indicator will measure the cases responded in the timeframe set by the hotline guidelines.</p>	
<p>Output 4.3: % of parents and community influential stakeholders trained by the project who report improved knowledge in SRH and gender equality</p>	<p>The project will not focus SRH interventions only in teachers and mentors; the parents and community influential stakeholders have an important role to play, so the project will contribute to improve their knowledge in SRH and gender equality. This will facilitate the acceptance of these concepts in the community. This indicator will measure the improvement of their knowledge.</p>	<p>Not yet collected.</p>
<p>Output 5: Community structures address economic and institutional barriers to girls' and boys' education</p>		
<p>Output 5.1: % of girls receiving bursaries attending school regularly (80% of days)</p>	<p>REALISE will continue providing bursaries to girls to support them to stay in primary in the final year, and transition to secondary school. But since attendance affects learning, this indicator will measure the regularity of our bursary girls at school.</p>	<p>Not yet collected.</p>
<p>Output 5.2: # of target girls' caregivers trained on household financial management</p>	<p>As the burden of fees is one of the barriers that impacts girl's education, VSLA groups are meant to build parent financial capacity to pay for schools and increase their revenue. This indicator will count the number of target girls' caregivers receiving training on household financial management.</p>	<p>Not yet collected.</p>

<p>Output 5.3: Level of confidence among community members who participate in CVA activities in monitoring and advocating for better education services</p>	<p>CVAs create and support local advocacy groups to advocate for rights based improvements in education. These groups will engage with multiple actors (governments, NGO, Private sector etc.) to improve quality of education. This indicators will assess the level of confidence among community members who participate in CVA activities in monitoring and advocating for better education services</p>	<p>Not yet collected.</p>
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List all issues with the means of verification/sources or the frequency of data collection which require changes or additions.

Table 51: Output indicator issues

Logframe Output Indicator	Issues with the means of verification/sources and the collection frequency, or the indicator in general?	Changes/additions
<p>Number and Indicator wording</p>	<p>E.g. inappropriate wording, irrelevant sources, or wrong assumptions etc. Was data collection too frequent or too far between? Or no issues?</p>	<p>E.g. change wording, add or remove sources, increase/decrease frequency of data collection; or leave as is.</p>
<p>Output 1: Literacy & numeracy curriculum and assessment programmes implemented</p>		
<p>1.1: Proportion of teachers who demonstrate the use of multiple methods for teaching literacy and numeracy in the classroom</p>	<p>Quarterly verification using classroom observation – the stated verification frequency – is ideal but may be impractical, given the time required to complete classroom observations. Verification could be shifted to twice-annually if necessary.</p> <p>Verification would also benefit from a brief survey of students focused on assessing whether their teachers</p>	<p>No change needed to frequency, unless desired by project. Development of a very short, anonymous, paper-based survey for students, if desired.</p>

	use multiple methods. Teachers have a tendency to perform better when being observed, so triangulation of teaching methods through data collected from students may be useful.	
1.2: # of children actively participating in Literacy & Numeracy boost community activities	No issues	
1.3: Perception of girls on the effectiveness of student kits to help them learn better	Current verification method is slightly unclear – will there be a quantitative survey complemented by FGDs and KIIs, or will all data collection be qualitative? We recommend utilizing a short quantitative questionnaire, if possible, even if this means reducing the number of FGDs or KIIs used for verification.	Clarification needed regarding verification source
Output 2: Teacher Professional Development programme implemented		
2.1: Proportion of teachers per annum who have completed four or more cycles of professional development (to include functional literacy & numeracy, and gender-sensitive teaching)	No issues	
2.2: Proportion of school leaders and/or coaches who provide one observation feedback on the performance of teachers per cycle	Is the target one instance of feedback per quarter? And is there a quality metric involved, i.e. a method to assess the quality or depth of feedback provided?	Further detail on the verification method needed, but no changes are necessarily needed.
2.3: # of children completing standardized end of year AEP exams	Should likely be measured as a share of all students, necessitating enrolment data as well to serve as the denominator in any calculations.	Ensure that enrolment data for relevant student populations are accurately captured.
Output 3: Improved quality of learning environment (as defined in SCI's Quality Learning Framework), especially for conflict-sensitive education		

3.1: # of teachers trained in psychosocial support to detect cases of abuse or trauma among their students and provide support	The timing of the pre- and post-training tests is not clear, and may influence the relative ease or difficult of these tests.	The timing, relative to the training, and delivery mechanism of the pre- and post-training tests should be specified clearly.
3.2: % of trained community members who can recall at least 60% of the key messages about the protection of schools in conflict situation	No issues	
Output 4: Activities outside class or school support girls' wellbeing		
4.1: Level of confidence among teachers and mentors in discussing and teaching good practices in SRH	Classroom observation will only effectively measure this output if teachers are observed during lessons focused on SRH topics.	Consider implementing a brief survey of teachers in lieu of classroom observation. Teachers could be asked to self-assess their confidence in this area; they could also be asked questions regarding how they would handle hypothetical classroom scenarios while teaching SRH topics, and questions assessing their own SRH knowledge.
4.2: Proportion of Child Protection cases reported in the last term being responded to within the timeframe set by hotline guidelines	No issues	
4.3: % of parents and community influential stakeholders trained by the project who report improved knowledge in SRH and gender equality	As with the pre- and post-training test for community members regarding child protection, the timing of after-training surveys will influence the results and should be specified clearly.	Clarify the timing of post-training surveys for measurement of SRH and gender equality knowledge.
Output 5: Community structures address economic and institutional barriers to girls' and boys' education		
5.1: % of girls receiving bursaries attending school regularly (80% of days)	No issues	
5.2: # of target girls' caregivers trained on household financial management	It is important that VSLA attendance records can be accurately linked to the project's list of targeted girls' caregivers.	Consider issuing ID cards to the caregivers of targeted girls, and ask financial management training facilitator to scan or photograph ID cards of those in attendance at training. Alternatively,

		consider less formal methods for linking caregiver attendance records to the project's list of targeted girls.
5.3: Level of confidence among community members who participate in CVA activities in monitoring and advocating for better education services	No issues	

Annex 4: Beneficiary tables

Please fill in the tables below. Individuals included in the project's target group should be direct beneficiaries of the project.

Table 52: Direct beneficiaries

Beneficiary type	Total project number	Total number of girls targeted for learning outcomes that the project has reached by Endline	Comments
Direct learning beneficiaries (girls) – girls in the intervention group who are specifically expected to achieve learning outcomes in line with targets. If relevant, please disaggregate girls with disabilities in this overall number.	[This should align with the total beneficiary numbers reported in the outcomes spreadsheet]	[This may equal the total project number in the outcomes spreadsheet and in the column to the left, or may be less if you have a staggered approach]	[Projects should provide additional information on who they are and the methodology used. If the numbers have changed since Baseline, an explanation should be provided]
Total girls in VYF cohort	53,149 (cohort tracking exercise)		
Girls in primary school grade 6 receiving bursaries	- 2018/2019: 8,259 - 2019/2020: 8,639 - 2020/2021: 8,866		
Girls in AEP centres receiving school kits	- 2018/2019: 1,457 - 2019/2020: 1,552 - 2020/2021: 322		

Table 53: Other beneficiaries

Beneficiary type	Number	Comments
Learning beneficiaries (boys) – as above, but specifically counting boys who will get the same exposure and therefore be expected to also achieve learning gains, if applicable.	N/A	REALISE teaching and learning interventions will benefit all students in the class, but girls are the direct target.
Broader student beneficiaries (boys) – boys who will benefit from the interventions in a less direct way, and therefore may benefit	79,776	This is all boys in all primary schools, AEPs and secondary schools where we will intervene.

from aspects such as attitudinal change, etc. but not necessarily achieve improvements in learning outcomes.		We expect that the REALISE project package will contribute to an attitudinal change
Broader student beneficiaries (girls) – girls who will benefit from the interventions in a less direct way, and therefore may benefit from aspects such as attitudinal change, etc. but not necessarily achieve improvements in learning outcomes.	73,593	This is all girls in the schools, AEPs and secondary schools where we will intervene. We expect that the REALISE project package will contribute to have attitudinal change
Teacher beneficiaries – number of teachers who benefit from training or related interventions. If possible /applicable, please disaggregate by gender and type of training, with the comments box used to describe the type of training provided.	1000 teachers and 12 inspectors for TPD	to ensure better quality of education in our interventions, REALISE will use Teacher Professional Development approach to reinforce the quality of teaching. REALISE will implement TOT training with provincial education inspectors from the 6 provinces at primary and secondary levels. The project targets 1000 teachers and 12 inspectors be trained as Master Trainers. Conflict sensitive education, girls well-being, and child protection will be part of the training package.
Broader community beneficiaries (adults) – adults who benefit from broader interventions, such as community messaging /dialogues, community advocacy, economic empowerment interventions, etc.	<ul style="list-style-type: none"> - 267 community facilitators for LB/NB activities - Caregivers for LB/NB: TBD - 210 SRH mentors - 150 VSLA field agents and school delegation 	

- Tables 3-6 provide different ways of defining and identifying the project's target groups. They each refer to the same total number of girls, but use different definitions and categories. These are girls who can be counted and have regular involvement with project activities.
- The total number of sampled girls in the last row of Tables 3-6 should be the same – these are just different ways of identifying and describing the girls included in the sample.

Table 54: Target groups - by school

	Project definition of target group	Number targeted through project interventions	Sample size of target group at Baseline
School Age	(Tick where appropriate)		
Lower primary	<input checked="" type="checkbox"/> Girls in grade 3 in the primary schools and L2 in AEP	9194	0

Upper primary	<input checked="" type="checkbox"/> Girls in grade 4, 5 and 6 in the primary schools and L3 in AEP	26898	1856
Lower secondary	<input checked="" type="checkbox"/> girls in grade 7, 8 and 9 in the secondary schools	14556	0
Upper secondary		-	
Total:		50648	1856

Table 55: Target groups - by age

Age Groups	Project definition of target group (Tick where appropriate)	Number targeted through project interventions	Sample size of target group at Baseline
Aged 6-8 (% aged 6-8)			
Aged 8 -11 (% aged 8 - 11)	<input checked="" type="checkbox"/> Girls in grade 3 and 4 in the primary schools	16292	1120
Aged 10-13 (% aged 10-13)	<input checked="" type="checkbox"/> Girls in grade 5 and 6 in the primary schools	18648	736
Aged 12 -16 (% aged 12 - 16)	<input checked="" type="checkbox"/> Girls in grade 7, 8 and 9 in secondary schools and L2 and L3 in AEP	15708	0
Aged 16-17 (%aged 16-17)			
Aged 18-19 (%aged 18-19)			
Aged 20+ (% aged 20 and over)			
Total:		50648	1856

Table 56: Target groups - by sub group

Social Groups	Project definition of target group (Tick where appropriate)	Number targeted through project interventions	Sample size of target group at Baseline
Disabled girls (please disaggregate by disability type)			894
Orphaned girls (double orphan)			19
Pastoralist girls			n/a
Child labourers			n/a
Poor girls			n/a
Other (please describe)			
Total:			

Table 57: Target groups - by school status

Educational sub-groups	Project definition of target group (Tick where appropriate)	Number targeted through project interventions	Sample size of target group at Baseline
Out-of-school girls: have never attended school			154
Out-of-school girls: have attended school, but dropped out			472
Girls in-school	<input checked="" type="checkbox"/> Girls in grade 3 to grade 9 in primary and secondary schools and in L2 and L3 in AEP	50648	1875
Total:		50648	2501

Annex 5: MEL Framework

The latest, FM-approved version of the MEL Framework is provided separately.

Annex 6: External Evaluator’s Inception Report (where applicable)

The latest version of the External Evaluator’s Inception Report is provided separately.

Annex 7: Data collection tools used for Baseline

All data collection tools are provided as separate documents.

Annex 9: Learning test pilot and calibration

Forcier performed 100 pilot interviews in the commune of Selembao, in Kinshasa, from July 19 to July 22, 2018. Data was analysed and the following issues, and solutions, were outlined:

1. It is strongly suggested that we have all girls take the exam planned for the 11-year old girls. There are two main reasons for this: first, it will make the analysis easier. For instance, comparisons across grade level will be easier. Second, while older girls did generally perform better on SeGRA/SeGMA tasks than younger girls, it wasn't as strong of a finding as we would expect. Actually, some 10-year olds scored well on SeGMA tasks. And some 11-year olds are in grades 4-5 and did poorly on those same tasks. To ensure our ability to make like-for-like comparisons, we should give the same exam to everyone.

Solution that was implemented: As discussed with SCI, all girls will take EGMA, EGRA, SeGRA subtask 1 and SeGMA subtask 1. Benchmark girls will also take SeGRA subtask 2 and SeGMA subtask 2.

2. About 7% of girls scored 0 and 41% of all girls scored 5% or lower on the exam. That is low, and I expect scores will be lower in rural eastern DRC than in Kinshasa.

Solution that was implemented: As discussed with SCI, we added EGRA subtask 0, on letter identification.

3. Discrimination analysis tests whether a correct answer on a given test item is correlated with higher scores on the exam overall. A good question should have high discrimination: children who get low scores overall should not get it right, but children who get high scores overall should get it right. The test questions below have low negative discrimination values:

- EGMA subtask 2, items 1-3 (egma_quant1 through egma_quant3 in script)
- EGMA subtask 4, item 1 (egma_add1 in script)
- SeGMA subtask 1, q4, 7 and 10 (segma_q4, segma_q7, segma_q10 in script)
- SeGRA subtask 1, q10 (segra_q10 in script)
- SeGRA subtask 2, q18 (segra_q18 in script)

Solutions that were implemented: First, review the translations to make sure they are right. Second, clarify the instructions to the enumerators.

4. Scripting and translation errors were also fixed.
5. We removed the question on ethnic groups as this was very sensitive.

Annex 10: Sampling Framework

The final version of the sampling framework is provided separately.

Annex 11: Control group approach validation

The evaluation uses a mixed-methods, quasi-experimental design, involving a longitudinal panel with a non-randomly assigned control group. In order to compensate for non-random assignment to the comparison group, intervention schools were paired with schools in the same province.

The table below presents the evaluation sample disaggregated by province. In total, enumerators visited 5 provinces of the Democratic Republic of Congo and surveyed 2,438 girls, 1,194 of whom were in intervention areas and 1,244 of whom were in comparison areas. While there are some discrepancies between the total girls interviewed in intervention schools and comparison schools, there were no statistically significant differences observed between intervention and comparison schools in each of the provinces visited.

Table 58: Evaluation sample breakdown (by province)

	Intervention	Comparison
Haut Katanga	243 (20.4%)	241 (19.4%)
Lualaba	258 (21.6%)	260 (20.9%)
Lomami	116 (9.7%)	132 (10.6%)
Kasai Oriental	280 (23.5%)	323 (26%)
Tanganyika	297 (24.9%)	288 (23.2%)
Girls (sample size)	1194 (100%)	1244 (100%)

The table below presents the evaluation sample by grade and enrolment status for cohort and benchmark girls. The sample is balanced with no statistically significant differences between intervention and comparison schools by grade and enrolment status among both cohort and benchmark girls.

Table 59: Evaluation sample breakdown (by grade)

	Intervention	Comparison
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Primary 4	532 (44.6%)	588 (47.3%)
Primary 5	298 (25%)	274 (22%)
Primary 6	95 (8%)	69 (5.5%)
OOS	269 (22.5%)	313 (25.2%)
Girls (sample size)	1194 (100%)	1244 (100%)

The age distribution of the evaluation sample is presented below. As dictated by the evaluation’s sample design, all cohort girls surveyed are between the ages of 9 and 11 and all benchmark girls, who were only sampled in intervention areas, are between 12 and 16 years of age. No statistically significant difference between the ages of intervention and comparison girls is observed.

Table 60: Evaluation sample breakdown (by age)

	Intervention	Comparison
Aged 6-8	0 (0%)	0 (0%)
Aged 9-11	1194 (100%)	1244 (100%)
Aged 12-13	0 (0%)	0 (0%)
Aged 14-15	0 (0%)	0 (0%)
Aged 16-17	0 (0%)	0 (0%)
Aged 18-19	0 (0%)	0 (0%)
Aged 20+	0 (0%)	0 (0%)
Girls (sample size)	1194 (100%)	1244 (100%)

The table below presents the evaluation sample by disability and type of disability of the cohort girls. Primary caregivers said that these girls experienced anxiety or depression daily, weekly, or monthly. Primary caregivers of girls from comparison areas were more likely to indicate that their girls had cognitive²²² and communication impairments²²³ and were more likely to have an impairment at all.²²⁴

Table 61: Evaluation sample breakdown (by disability)

Sample breakdown (Girls)	Intervention (Baseline)	Comparison (Baseline)	Household Survey and Girls School survey – Washington Group and child functioning questions
Girls with disability (% overall)	406 (34%)	461 (37.1%)	
<i>Provide data per impairment</i>			

²²² P-value = 0.001, logistic regression

²²³ P-value = 0.005, logistic regression

²²⁴ P-value = 0.038, logistic regression

Vision impairment	8 (0.7%)	6 (0.5%)	WG_CF2, WG_CF3
Hearing impairment	4 (0.3%)	7 (0.6%)	WG_CF5, WG_CF6
Mobility impairment	8 (0.7%)	14 (1.1%)	WG_CF8, WG_CF9, WG_CF10, WG_CF11, WG_CF12, WG_CF13
Cognitive impairment	92 (7.7%)	130 (10.5%)	WG_CF17, WG_CF18, WG_CF19, WG_CF21
Self-care impairment	25 (2.1%)	41 (3.3%)	WG_CF14
Communication impairment	25 (2.1%)	49 (3.9%)	WG_CF15, WG_CF16, WG_CF22
Mental impairment	332 (27.8%)	342 (27.5%)	WG_CF20, WG_CF23, WG_CF24
Total	1194 (100%)	1244 (100%)	

The proportions of cohort girls who have characteristics that relate to educational marginalisation are shown below in the table below. While the sample was balanced with regard to nearly all of these indicators of education marginalisation, there were significantly more households of intervention girls with households that had no land,²²⁵ and more intervention girls felt that they had no choice in whether they will attend school.²²⁶ Significantly more comparison girls had caregivers who said that travel to school was unsafe.²²⁷

Table 62: Girls' characteristics

	Intervention (Baseline)	Comparison (Baseline)	Source (Household and Girls School survey)
Sample breakdown (Girls)			
Family (%)			
Single orphans	84 (7%)	90 (7.2%)	PCG_11g, PCG_13g
Double orphans	8 (0.7%)	10 (0.8%)	PCG_11g, PCG_13g
Living without both parents (%)	67 (5.6%)	69 (5.5%)	PCG_10g PCG_12g
Living in female headed household (%)	179 (15%)	187 (15%)	hoh2
Married (%)	4 (0.3%)	4 (0.3%)	PCG_22g
Fairly or very unsafe travel to schools in the area	16 (1.3%)	27 (2.2%)	PCG_9
High chore burden (more than 4 hours)	38 (3.2%)	51 (4.1%)	PCG_26g_1
Girl has no choice in whether to attend school	1015 (85%)	974 (78.3%)	H2
Mothers (%)			

²²⁵ P-value = 0.000, logistic regression

²²⁶ P-value = 0.000, logistic regression.

²²⁷ P-value = 0.045, logistic regression

Under 18	4 (0.3%)	3 (0.2%)	PCG_23g
Under 16	4 (0.3%)	3 (0.2%)	PCG_23g
Poor households (%)			
Household doesn't own land for themselves	368 (30.8%)	296 (23.8%)	PCG_11econ
Home uses poor roofing material*	807 (67.6%)	842 (67.7%)	PCG_2econ
Household unable to meet basic needs	373 (31.2%)	426 (34.2%)	PCG_5econb
Gone to sleep hungry for many days in past year	278 (23.3%)	334 (26.8%)	PCG_7econ
Parental education			
HoH has no education (%)	95 (8%)	96 (7.7%)	hoh6
Primary caregiver has no education (%)	258 (21.6%)	258 (20.7%)	PCG_6
Total girls	1194 (100%)	1244 (100%)	

The table below presents the data on in-school girls in the sample who face potential barriers to learning and transition in the domains of safety, parental/caregiver support, attendance, school facilities, and teachers across comparison and intervention areas. There were a number of indicators in which statistically significant differences between intervention and comparison schools were observed. Significantly more comparison girls did not feel safe traveling to school,²²⁸ had a mother tongue different from the language of instruction,²²⁹ did not speak the language of instruction,²³⁰ had parents who never visited the school,²³¹ and attended schools that did not have sufficient seats for all students, while significantly more intervention girls said that their teachers treat boys and girls differently in the classroom.²³²

Table 63: Potential barriers to learning and transition

	Intervention (Baseline)	Comparison (Baseline)	Source
Sample breakdown (Girls)			
Home – community			
Safety:			
Doesn't feel safe travelling to/from school	919 (98.4%)	902 (96.2%)	safetravel_school
Girl travels more than 30 minutes to school	57 (6.1%)	41 (4.4%)	CS_W1s
Parental/caregiver support:			
Difficult to afford for girl to go to school	682 (73%)	680 (72.5%)	PCG_7enr
Doesn't get support to stay in school and do well	63 (6.7%)	65 (6.9%)	H17
Family decides for girl whether she will attend school	554 (59.3%)	597 (63.6%)	H22, H23

²²⁸ P-value = 0.002, logistic regression

²²⁹ P-value = 0.000, logistic regression

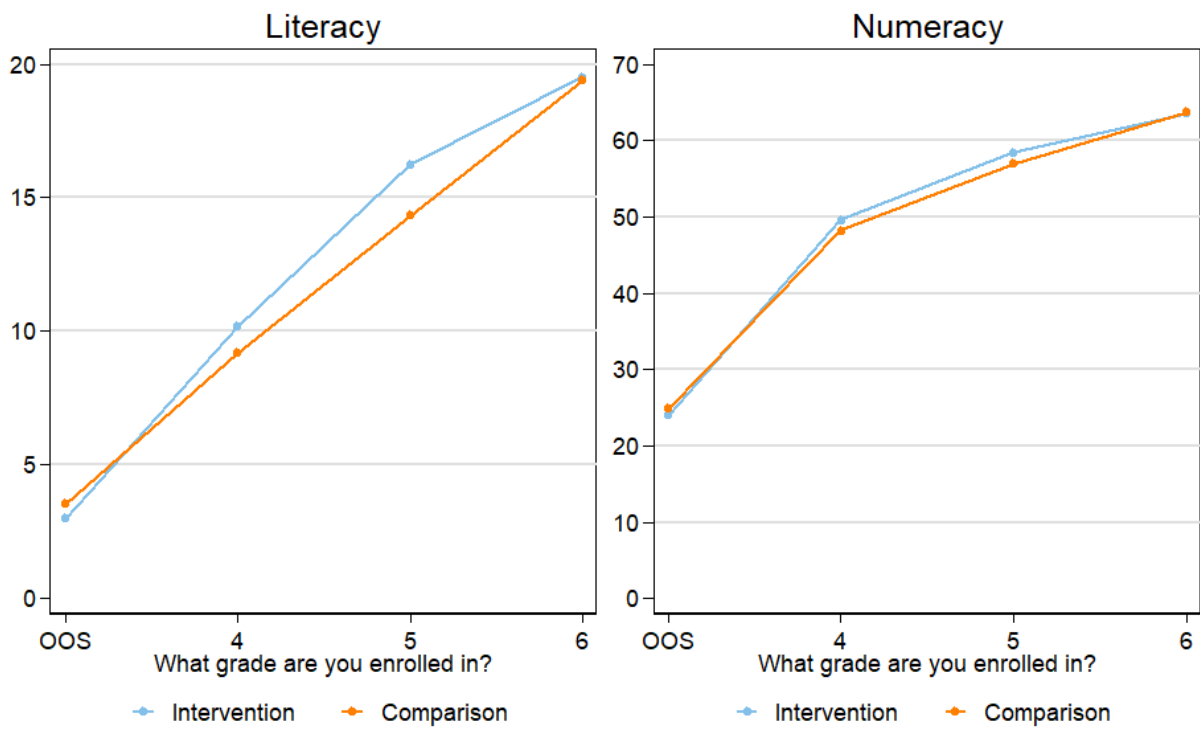
²³⁰ P-value = 0.002, logistic regression

²³¹ P-value = 0.002, logistic regression

²³² P-value = 0.002, logistic regression

Parent has never visited school	126 (13.5%)	172 (18.3%)	PCG_TQC1
School level			
Attendance:			
Attends school half the time	38 (4.1%)	35 (3.7%)	PCG_6enr
Attends school less than half time	6 (0.6%)	13 (1.4%)	PCG_6enr
Doesn't feel safe at school	24 (2.6%)	34 (3.6%)	safe_school
School facilities:			
No seats for all students	253 (27.1%)	289 (30.8%)	CS_W5s
Doesn't use drinking water facilities	37 (4%)	26 (2.8%)	use_water
Doesn't use toilet at school	115 (12.3%)	149 (15.9%)	use_toilet
No computers in class	898 (96.1%)	906 (96.6%)	CSG_2s
Cannot use books or other learning materials at school	239 (25.6%)	242 (25.8%)	CS_W2s
Teachers:			
Disagrees teachers make them feel welcome	44 (4.7%)	37 (3.9%)	tq_1
Agrees teachers treat boys and girls differently in the classroom	586 (62.7%)	512 (54.6%)	tq_2
Agrees teachers often absent from class	355 (38%)	352 (37.5%)	tq_11
Afraid of teacher	414 (44.3%)	398 (42.4%)	tq_9
Uncomfortable asking teachers question	92 (9.9%)	99 (10.6%)	tq_7
Teacher punishes/disciplines when students get lesson wrong	590 (63.2%)	617 (65.8%)	tq_42
Physical punishment witnessed last week	613 (65.6%)	597 (63.6%)	tq_49
Caregiver rates quality of teaching as poor	78 (8.4%)	72 (7.7%)	TQ_3h
Language difficulties:			
Lol different from mother tongue (%)	768 (82.2%)	821 (87.5%)	PCG_2enr, PCG_1enr
Girl doesn't speak Lol (%)	273 (29.2%)	304 (32.4%)	PCG_3enr
Total girls	934 (100%)	938 (100%)	TQ_3h

The figures below presents literacy and numeracy scores by grade for both intervention and comparison schools. As shown in the figures, the scores of the intervention and comparison groups closely align and no statistically significant difference is found between intervention and comparison groups.



Annex 12: External Evaluator declaration

Name of Project: REALISE

Name of External Evaluator: Forcier Consulting

Contact Information for External Evaluator: 301 W Platt Street, Suite 388, Tampa, Florida, 33606, USA; +1 239 297 0771

Names of all members of the evaluation team: Samuel Ha, Jonathan Forney, and Brenton Peterson

Samuel Ha, Jonathan Forney, and Brenton Peterson certify that the independent evaluation has been conducted in line with the Terms of Reference and other requirements received.

Specifically:

- All of the quantitative data was collected independently ((Initials: SH, JF, BP)
- All data analysis was conducted independently and provides a fair and consistent representation of progress (Initials: SH, JF, BP)
- Data quality assurance and verification mechanisms agreed in the terms of reference with the project have been soundly followed (Initials: SH, JF, BP)
- The recipient has not fundamentally altered or misrepresented the nature of the analysis originally provided by Forcier Consulting (Initials: SH, JF, BP)
- All child protection protocols and guidance have been followed ((initials: SH, JF, BP)
- Data has been anonymised, treated confidentially and stored safely, in line with the GEC data protection and ethics protocols (Initials: SH, JF, BP)



Samuel Ha, Jonathan Forney, and Brenton Peterson

(Name)

Forcier Consulting

(Company)

11 September 2018

(Date)

Annex 13: Project Management Response

- This is the preliminary project management response pending the completion of the full baseline (Phase II) with recommendations, when a more complete analysis and response will be prepared.

What is the project's response to the key findings in the report? Make sure to refer to main conclusions (Section 6)

The findings in this Phase I baseline report confirm the relevance of the REALISE Theory of Change and its analysis of key barriers, highlighting the challenges to improved teacher quality and learning outcomes (outputs 1 and 2), while reinforcing the importance of keeping girls safe and improving their well-being (3 and 4), and addressing economic barriers to education (output 5). The findings validate the weight rating of 30% given to output 5, and the importance of bursaries and VSLAs:

- 82% of heads of households surveyed cited high costs of schooling as the primary barrier to enrolment
- Economic distress is the most important and consistent household-level predictor of low transition rates among cohort girls.
- Caregivers with savings and participation in savings groups were more likely to have their girls enrolled in school.

While the EE found few girls with physical disabilities of any kind, it did find that mental impairment and cognitive disabilities related to trauma are a significant barrier to learning, and therefore the project is adding this to its marginalization criteria.

The EE characterization of “at-risk girls” otherwise matches the project’s criteria for marginalization except that it found few cases of married girls/girls with children among its sample, which requires further investigation.

- The average at-risk girl does not speak the language of instruction at her school, has a disability (especially a cognitive or mental health disability), belongs to a household in a remote area, or belongs to a household where the primary occupation of the head of household is farming (or some combination of these traits).

What is the project’s response to the conclusions and recommendations in the report?

The Project will respond to baseline recommendations once they are submitted in the full report on completion of Phase II. However, the EE’s key conclusions provide strong support for REALISE interventions, stating that: project activities largely appear to be well-designed to ensure girls’ access education:

- **High school costs and low family income:** Bursaries, provision of school supplies, and facilitated savings groups should help to lower the cost of schooling and increase family income.

- **Teacher experience:** Investing in TPD approaches providing training on literacy and numeracy teaching methodologies, and accelerated learning methodologies should improve teachers' knowledge, skills, and their lesson content. Though the EE found that TPD does not directly address findings that girls are uncomfortable with speaking up in class when they have a question and that both corporal punishment and linguistic barriers are commonplace, the Foundations of Teaching modules being introduced with the TPD approach this quarter are meant to address these basic pedagogic skills, including classroom management, gender sensitivity and
- **Families and communities not prioritizing girls' education:** The EE finds that by mobilising citizens in the community to advocate for and monitor education services through the Citizen Voice and Action approach, REALISE should be able to mitigate the de-prioritisation of girls' education relative to that of boys' education. The Project believes that SRH activities at the community level will also play a key role in prioritizing girls' education.
- **Conflict as a potential disruptor:** In addition to REALISE's preparation of contingency plans to provide education in emergency interventions, teachers will be trained in psychological first aid and to work with children traumatised by violence and war which should help schools continue to provide access to education if conflict should break out.
- Does the external evaluator's conclusion of the projects' approach to gender correspond to the projects' gender ambitions and objectives?

The baseline's findings provide strong corroboration for the project's approach to gender and the importance of its focus on Girls' Wellbeing, including protection and SRH activities, especially at the community level to address girls' marginalization.

What changes to the Logframe will be proposed to DFID and the Fund Manager?

The project will complete its analysis including any proposed changes once Phase II and the full baseline report is completed with recommendations. The findings to date confirm that the project TOC and log frame are sound. However, further adaptations on the project's approach to implementing most activities everywhere at the same time will be needed. At the first RAM in May, the project highlighted the need for an Education in Emergency (EIE) strategy in conflict areas. At the next RAM at end November—which follows the release of the full baseline report—the project will propose further adaptations to address the key findings impacting Teaching and Learning Outcomes, including:

- the vast majority of primary school girls are currently performing well below their grade level—especially in Literacy.
- the Language of Instruction is a key barrier to learning.
- low teaching quality is the strongest predictor of low learning outcomes.
- geographic disparities require further analysis but indicate adaptations are needed
- inadequate school infrastructure and inadequate school resources are further indications that a one-size fits all approach is not appropriate

Annex 14: Mapping of Grade Level Competencies

In this annex, we provide a full mapping of the competencies students are expected to achieve in French literacy and mathematics at the primary school levels for which information is available. The mapping is based on two documents. The first is a document provided by the Ministry of Primary, Secondary, and Professional Education which outlines French writing objectives by grade level. Information is provided for grades 3 through 6. Expected reading outcomes were inferred based on writing objectives outlined in the document. The second document details expected numeracy outcomes for grades 1 and 2, grades 3 and 4, and grades 5 and 6. Note that, by reviewing the tables provided in the primary report at the end of Section 4.1, one can see how specific skills tested in the baseline literacy and numeracy assessments map to the skills described in this annex.

Table 64: Goal Grade-Level Competencies in French Literacy

Grade	French Literacy Competencies
Grade 3	Write new words by combining logically sounds and letters or a combination of letters.
	Spelling common words. Ex: Dad, pencil, notebook
	Copying words and phrases in the light of the spelling of each letter.
	Write frequent syllables and common words correctly
	End simple sentences with a period or a question mark in context.
	Use comma to separate words in a list.
	Adopt a neat writing and presentation.
	Use of basic grammar rules
	Complete text.
	Write first and last name.
Grade 4	Write new words by associating sounds and letters or combining letters.
	Spell the most common words, familiar or studied
	Writing of letters into words and sentences.
	Write frequent syllables and common words correctly
	Finish simple sentences with a period or a question mark in context.
	Use comma to separate words in a list.
	Use resources available in the literate environment to confirm the spelling of words.
	Adopt a neat writing and presentation.
	Use progressively in its spontaneous productions and reflected the basic grammatical rules studied in class
	Write a few sentences rendered account of an event experienced in the classroom or elsewhere
	Write a few sentences spontaneously to express feelings in response to a text read or heard.
	Complete text.
	Order simple sentence logically.
	Use simple linking and transition words.
	Use pronouns that have been studied.
Use appropriate verb tenses that have been studied.	

Grade	French Literacy Competencies
	<p>Accompany writings with illustrations that have a direct and logical link with the content.</p> <p>Use adjectives and adverbs.</p> <p>Construct simple sentences from an image using synonyms and linking words</p> <p>Identify words to be added or deleted to improve a sentence.</p> <p>Vary the types, forms and structures of sentences.</p> <p>Use varied length of sentences.</p>
Grade 5	<p>Write new words by logically combining sounds and letters.</p> <p>Spell the most common words, familiar or studied</p> <p>Always start the proper name, titles and abbreviations with a capital letter.</p> <p>Write frequent syllables and common words correctly</p> <p>Regularly and properly use all punctuation.</p> <p>Use resources available in the literate environment to confirm the spelling of words.</p> <p>Adopt a writing and presentation neat.</p> <p>Use progressively in its spontaneous productions and reflected the basic grammatical rules studied in class</p> <p>Use resources available in the literate environment to confirm the proper use of grammar rules studied in class or to correct its products or those of (e) classmate.</p> <p>Write a few sentences rendered account of an event experienced in the classroom or elsewhere.</p> <p>Write spontaneously or with the help of the teacher (s) a few sentences to express his feelings about a text read or heard.</p> <p>Complete text.</p> <p>Create artwork related to his writings or his message.</p> <p>Write a simple text with a direct and logical connection with an illustration of a theme</p> <p>Produce original / authentic text.</p> <p>Participate in the creation texts in groups.</p> <p>Produce a variety of texts with a social purpose.</p> <p>Write several sentences to demonstrate understanding of a text or respond personally.</p> <p>Link sentences and ideas together; chain of logical ideas.</p> <p>Organize ideas into paragraphs.</p> <p>Use appropriately pronouns.</p> <p>Use appropriately tenses that have been studied.</p> <p>Accompany his writings illustrations directly related and consistent with the content.</p> <p>Stir interesting details in his texts and illustrations.</p> <p>Identify words to add or delete from its own products or those of (e) classmate to make them more understandable and clearer sentences.</p> <p>Write text with a direct and logical link with a theme illustration.</p> <p>Use adjectives and adverbs qualify for its expression.</p> <p>Use in its spontaneous or guided productions, appropriate and rich vocabulary, pulled taught.</p> <p>Participate in the creation of different kinds of written work in groups.</p>

Grade	French Literacy Competencies
	Identify in vocabulary changes in its own products or those of (e) classmate, to enrich and clarify the expression of ideas
	Identify prefixes, suffixes or words to be added or deleted to improve a sentence.
	Use varied length of sentences.
	Identify amendments to the sentence level in its own production or that of (an) classmate to make the text more interesting.
	Produce an original text and true that meets standards studied.
	Participate in the creation of written work in groups, which meet the standards studied.
Grade 6	Write new words by combining logically sounds and letters.
	Spell the most common words, familiar or studied
	Always start the proper name, titles and abbreviations with a capital letter.
	Write frequent syllables and common words correctly
	Regularly and properly use all punctuation.
	Use resources available in the literate environment to confirm the spelling of words.
	Adopt a writing and presentation neat.
	Use progressively in its spontaneous productions and reflected the basic grammatical rules studied in class
	Use resources available in the literate environment to confirm the proper use of grammar rules studied in class or to correct its products or those of (e) classmate.
	Write a few sentences rendered account of an event experienced in the classroom or elsewhere.
	Write spontaneously or with the help of the teacher (s) a few sentences to express his feelings about a text read or heard.
	Complete text.
	Create artwork related to his writings or his message.
	Write a simple text with a direct and logical connection with an illustration of a theme.
	Produce original / authentic text.
	Participate in the creation texts in groups.
	Produce a variety of texts with a social purpose.
	Write several sentences to demonstrate understanding of a text or respond personally.
	Link sentences and ideas together; chain of logical ideas.
	Organize ideas into paragraphs.
	Use appropriately pronouns
	Use appropriately studied tenses
	Accompany his writings illustrations directly related and consistent with the content.
	Stir interesting details in his texts and illustrations
	Identify words to add or delete from its own products or those of (e) classmate to make them more understandable and clearer sentences.
	Write text with a direct and logical link with a theme illustration.
Use adjectives and adverbs qualify for its expression.	
Use in its spontaneous or guided productions, appropriate and rich	

Grade	French Literacy Competencies
	vocabulary, pulled taught.
	Participate in the creation of different kinds of written work in groups.
	Identify in vocabulary changes in its own products or those of (e) classmate, to enrich and clarify the expression of ideas.
	Identify prefixes, suffixes or words to be added or deleted to improve a sentence.
	Use varied length of sentences
	Identify amendments to the sentence level in its own production or that of (an) classmate to make the text more interesting.
	Produce an original text and true that meets standards studied.
	Participate in the creation of written work in groups, which meet the standards studied.

Table 65: Goal Grade-Level Competencies in Numeracy

Grade	Numeracy Competencies
Grades 1 and 2	<ul style="list-style-type: none"> Recognize, describe, and use numbers 0 - 100 and 100-0 in various ways concrete objects in the daily life of the child (e.g. Fruits, body parts, common class objects) Order numbers from 0-100 and 100-0
	<ul style="list-style-type: none"> Use a variety of methods to demonstrate the process of addition, the subtraction, the multiplication, simple dividing numbers 0-100 and 100-0 (e.g. From a group of objects the student will add, remove, duplicate, triple, share, etc.) Select which operation can be used to solve a simple problem (object manipulation) Identifying the logical result against data maturities
	<ul style="list-style-type: none"> Compare objects (big-short, long-short, heavy-light, etc.) through the signs (<,>, =) or numbers (0 - 100) Recognize measures, estimate a dimension, compare, determine through the process of conventional and non-conventional measures (e.g. Have students measure the dimensions of everyday objects)
	<ul style="list-style-type: none"> Observe common objects, recognize and identify regular shapes of square, rectangle, triangle, circle, lines of all kinds (straight, curved, broken, closed, open), medians, and diagonals Manipulate by folding, cutting, coloring, collage, super posage of regular geometric shapes
	<ul style="list-style-type: none"> Through the fields of operations numeration skills of geometric shapes, the student solves simple problems of everyday life (related to daily life)
Grades 3 and 4	<ul style="list-style-type: none"> Identify the groups of units, the tens, introduce the hundreds Recognize, describe, compose and use the number of 0 - 100,000 and 100,000 - 0 in a variety of concrete objects Order the deadlines of 25, 50, 100 and 100,000 Observe, represent, then identify and classify simple fractions Transform the fractional expression into decimal expression by carrying a domineering of 10, 100 and 1000
	<ul style="list-style-type: none"> Use a variety of methods to demonstrate compensation (addition), imprint (subtraction), restraint (multiplication), and division with the

Grade	Numeracy Competencies
	<ul style="list-style-type: none"> rest • Collect, organize and analyze through the complementary use of the operations of numbers (mean, median, deviation) • Estimate, measure, verify, compare and convert the usual and concrete objects • Observe and recognize angles, sides, heights, medians and diagonals to identify and distinguish regular and irregular shapes (triangles: equilateral, isosceles, scalene) • Recognize, identify and measure the regular and irregular forms studied • Solve application problems on measurements and geometric shapes • Analyze a group of data • Through the fields of competence studied in the 2nd degree, the pupil solves simple problems of the everyday life (related to the daily life)
Grades 5 and 6	<ul style="list-style-type: none"> • Decompose and compare large integers from 0 - 100,000 • Characterize the numbers divisible by 2, 4, 5, 8, 10, 100, etc. and find the prime factors between two numbers • Identify and recognize Roman numerals (to integrate with time) • Simplification and reduction of fractions • Transform the fractional expression into decimal expression • Recognize and compare negative and positive numbers • Compare and decompose large numbers, decimal numbers, and decimals (positive and negative) • Use a variety of methods to demonstrate distributivity, commutativity, associativity, and compound operators • Choose which operation and which operation process to solve problems • Estimate, describe and compare the measurement units of capacity, volume and mass • The implementation of appropriate measures presented in geometric shapes (2D and 3D) • Recognize, distinguish, specify what are solids (volume), surfaces (mass, dimension) of the lines, dots from concrete situations has various handling • Analyze, classify, recognize and draw geometric shapes studied (2D and 3D) • Solving application problems on the measurements, geometric shapes, and studied operations (Calculating an average, median, standard, a percentage) • Through the skills fields studied in the 3rd degree, students solve simple problems of daily life (related to everyday life)

Annex 15: Needs Assessment in Ituri Province

Introduction

During the inception phase of the REALISE baseline study, Save the Children International and Forcier determined that it would be unsafe to attempt to collect quantitative data in the province of Ituri due to the conflict that peaked in February and March 2018. In lieu of including Ituri in the full learning sample, the partners agreed that a limited qualitative evaluation of the conflict's impact on girls' education could be conducted in Ituri via interviews and focus groups with key actors. As a result, in September 2018, a Forcier researcher visited the city of Bunia in order to assess girls' needs and determine how the REALISE program could best respond to the realities on the ground, specifically in the territory of Djugu, where the violence was most pronounced, and where 56 of the 67 schools SCI intervenes in are located.

Forcier conducted interviews with Ituri's "Directrice de province éducationnelle" (PROVED), Femmes Congolaises pour le Développement (FECONDE) – the local organization managing the Accelerated Education Programs SCI supports – and local SCI staff, as well as focus groups with the three Sous-PROVED from the territory of Djugu, displaced teachers, and displaced parents of school-aged girls in the main displacement camp in Bunia. Although a few barriers were encountered – the lack of availability of staff from the Ministry of Gender, the inability to record all conversations, the reticence of some displaced persons to share their personal stories, and the lack of documentation from interviewees regarding exactly which villages and schools in Djugu had been destroyed – Forcier was able to make some important determinations that will help guide the REALISE program and ensure it responds to the difficulties observed in an effective way.

Background on the Conflict

Respondents unanimously related that they did not understand the origins of the conflict, but that in any event its characterization as an "ethnic conflict" between armed Lendu agriculturalists and Hema pastoralists was overly simplistic. They explained that the Lendu and Hema have lived side by side since the end of a brutal war between them that is estimated to have ended anywhere from 2003 to 2007. Although there is a history of enmity between the two groups, there has been more than a decade of peace in Ituri province, leading interviewees to either not understand how this stability had deteriorated or offer theories that high-placed authorities had manipulated this dormant tension so as to clear entire areas rich in natural resources, specifically oil.

Today there is relative stability in Djugu – although there have been a few attacks over the last several months, they are few and far between. All interviewees, including displaced persons in Bunia coming mostly from villages that had been burned down, indicated that they believed that the conflict was over and that it was safe to return home – however, a few shared that they would be wary of returning to their fields, which are sometimes a small distance away from the village, and which were also burned down by militias. Venturing away from the village alone may still pose some risks. Nonetheless, the overall confidence in the future stability of the region is, according to members of the Ministry of Education, a result of the increased presence of Non-Governmental Organizations (NGOs) and the international community in Djugu since the violence broke out.

General Consequences of the Conflict

The conflict in Djugu impacted the community in one of three ways. In some areas, mostly in the subdivision of Djugu 1, militiamen arrived at night and burned and looted entire villages – including schools – attacking the population with machetes and arrows and forcing them to flee their homes. Many of the inhabitants of these villages have not been able to return home even today, nine months later, because basic infrastructure has not been rebuilt. In the best-case scenario for these villages, school has resumed informally, often times outdoors, under a few trees, or under a tarpaulin. In other parts of the territory, in close proximity to those areas that came under direct attack, villages were not assaulted outright but the population fled their homes out of fear that they would be the next target. In these villages, displaced persons have been able to gradually return home and the school year resumed in April 2018, although with a low student population. Finally, for other villages of the territory, mainly in the subdivision of Djugu 3, little direct conflict was observed and the number of displaced persons fleeing their homes was relatively low. In these villages, the school year was either not interrupted at all or also resumed in April 2018. In summary, most displaced persons have returned to their villages by now, with those who have yet to do so mostly coming from villages that were entirely burned down.

The most pernicious consequence of the conflict, generally speaking, is therefore the significant number of villages that have been burned down and that are currently not being rebuilt. This has prevented many displaced persons from returning to their village, as they no longer have a home to go to. After losing their possessions and sources of revenue, these individuals do not have the means to rebuild the village themselves, let alone afford transportation to make the 100km journey home from the displacement camps in Bunia. If their transportation were assured by the government or an NGO, they would still struggle to feed their families as many of the fields around the village that they used to tend to, and that used to be a source of income, were also burned down. Needless to say, even if schools were eventually rebuilt and looted school materials replaced, these financial difficulties would preclude for many the possibility of paying children's school fees so that they can resume their education. This is especially the case as parents may require their children to work to contribute to the family's financial well-being, or are contemplating having their daughter marry to collect the dowry from the groom's family. Interviewees in the displacement camp in Bunia related how some of the boys in the camp joined local militias and some of the girls prostituted themselves, all in an effort to find a source of revenue to support the family. The context simply does not allow for education to remain a top priority for these families coming from villages that have burned down.

As a result, thousands of displaced persons from such villages remain in camps in Bunia to this day even though relative peace has returned to Djugu, for the simple reason that life there, as difficult as it is, is better than it would be in their village. Indeed, in the camps, displaced persons and their families are fed and given tents, and returning home would put their families in an even more difficult situation. These individuals are simply biding their time, waiting for the government or some other entity to rebuild their village, to offer them a way to make a living once they return, and to give them the transportation needed to travel there.

Until then, children in the camp are not receiving an education – although schools in Bunia allowed displaced children to attend classes for free in March and April, this policy was abandoned in May when the administration determined that security had returned to Djugu and that there was no longer any necessity to subsidize these children's education – unable to pay school fees, displaced families removed their children from school or the administration chased them away. Due to a general lack of information on the current state of affairs in Djugu, many authorities in Bunia do not realize the extent to which entire

villages were burned down, and that displaced persons cannot always return home even if stability has been restored there.

This difficult situation not only applies to the families of potential school children, but also to teachers and the administration of schools in Djugu. In order for schools to reopen once they are rebuilt, teachers will need to be present to lead classes – but for them to return to their villages and regain their former jobs, there must be children to teach in the villages. There is therefore a sense of trepidation about being among the first to return to a village, especially as the displaced persons from a same village do not always have the means or capacity to communicate with each other. For still other teachers, the school in their village has resumed but they have lost their job either because the returnee student population is too small for the school to keep on all the teachers or they were away too long and were replaced by people who returned to the village before them. No longer having a job in their home village, these teachers have decided to stay in the displacement camp for the time being.

Consequences Specific to the REALISE Program

As most of the villages in which SCI supports the local school were not burned down, however, the most damaging impact of the conflict on the REALISE program specifically is more nuanced. According to a recent report by the “Association de jeunes pour le développement communautaire” (AJEDEC), of 56 REALISE schools, 8 were partially damaged and 1 was destroyed. The report further relates that 54% of REALISE schools in Djugu closed in February and March 2018, but 54 out of a total of 56 schools are open and functioning today. Only about half of the schools SCI intervenes in experienced an interruption in classes, and today the vast majority are operational. This concurs with what the PROVED and sous-PROVED noted, namely that all schools in Djugu that had closed in February and March 2018 reopened in April 2018, with the exception of those schools that had been burned down, and those that were occupied as a sort of military barracks by the Forces Armées de la République Démocratique du Congo (FARDC). These schools not only resumed, but were able to catch up all missed days of school by holding classes up until July 2018, even remaining open during the holidays. Children in the 6th year of primary school were also able to take the “Test national de fin d’études primaires” (TENAFEP), an exam which they must pass in order to go to secondary school the following year.

The reality, however, is that although many schools reopened in April, many families and children who were displaced did not have the means to pay the school fees at that time or had not yet returned to their village by April 2018. Indeed, as related by the PROVED and Sous-PROVED, the number of students in these schools that reopened in April was quite low. Furthermore, the Ministry of Education adopted a policy that only those students who were present and back in school in April could finish out the school year – that is, if a child returned to the village in May, it would be too late for him or her to reintegrate the school for that school year. Indeed, for fear that these children had already missed too many classes, the Ministry had these children wait until the 2018-2019 school year, at which time he or she would have to repeat the grade. These children, therefore, did not receive an education for six months, and although they will be able to repeat the school year next term, this delay may lead to some abandoning school in favor of finding employment or getting married, especially as their displacement has likely damaged the family’s financial capacities.

Indeed, it is girls who are likely to be marginalized even more than boys in this situation of displacement and impoverishment. In this context, parents may decide to use what little funds they have to prioritize their sons’ education rather than their daughters’, believing that they have a better chance of finding employment later. In addition, both girls and boys who were or still are displaced are dealing with

psychological trauma, which can affect their confidence, motivation and behavior. While the Division des Affaires Sociales (DIVAS) organizes sessions in the camps for displaced persons in Bunia in which children can share their thoughts, there is no care provided at the individual level, either for them or their parents.

The main consequences of the conflict on the REALISE program in Ituri, therefore, is the interruption of classes for a period of two months, the trauma that students and teachers may have suffered, the impoverishment of these communities, and the fact that many students still had not returned to their villages by April 2018 to resume classes, and therefore missed the second half of the 2017-2018 school year and have to repeat a year.

How REALISE Plans to Respond to these Developments

At the time the interviews were conducted, SCI staff was still debating the parameters of its future interventions in the schools located in Djugu, which unlike in the Vas-y-Fille program will likely be implemented by AJEDEC, and not SCI directly. Already, however, the program has led in summer 2018 the training of teachers in 20 of Djugu's 650 schools on "peace consolidation" and the identification and referral of students suffering from psycho-social issues. SCI also plans to organize "Club d'enfants" in its intervention schools, in which students will discuss sexual and reproductive health, although a campaign of raising awareness among parents and local authorities will be necessary first. Through its implementing partner, Femmes Congolaises pour le Développement (FECONDE), SCI will continue to support 7 Accelerated Education Programs (AEP) in Ituri province, 4 of which are located in the territory of Irumu and 3 of which are located in Djugu. These AEP schools bring a positive impact to about 1000 children, and are centered around training teachers on inclusive education, reaching out to vulnerable families to help enroll their children in school, and paying teachers' salaries. FECONDE does not, however, follow-up on these children to make sure they enroll in secondary school, and the program is slated to phase out starting next year, when support to students entering Level 1 will no longer be provided.

Needs of the Population Moving Forward

Given the context in Djugu and the activities already envisioned by SCI, the following needs and recommendations related to the education sector have been identified in order for the REALISE program to most effectively assist these communities.

Recommendations for the 56 communities in which the REALISE program will be implemented:

- Train all teachers in identifying and referring children suffering from psychological trauma and sexual violence
- Train local community coordinators, such as members of the Réseau Communautaire pour la Protection de l'Enfant (RECOPE), to be able to avert cases of sexual violence and provide psycho-social support, not only to children but also to teachers themselves as well as parents; a child whose parents are unable to take care of him or her due to their own trauma is likely to be marginalized
- Train members of local Relais Communautaires to ensure the protection of the school, with the approval of local authorities
- Offer students after-school activities to boost their psychological health

- Train teachers to lead lessons on sexual and reproductive health, especially as children, and girls in particular, are more vulnerable to pregnancies, sexual violence and sexually-transmitted diseases in emergency contexts; raise awareness among local authorities about the importance of such lessons
- Provide income-generating activities for parents to enable them to acquire the means to send their children to school, as their displacement may have led them to lose their job or spend all their savings
- Provide bursaries in an equitable manner; as most families in Djugu have become impoverished, all are in need of financial support, and providing bursaries to one family but not another may create tension
- Ensure that Savings and Loans Groups continue to function in these villages
- Provide opportunities for students to receive tutoring after school, as was done for the Vas-y-Fille program; this will allow them to make up for missed lessons during the previous school year; this can also ensure the employment of more teachers and incite any that are still displaced to return
- Fund school breakfasts or lunches to incite families to send their children to school and to nourish children to ensure they have the energy necessary to learn effectively; given the impoverishment of many families in Djugu, families struggle to feed their children, let alone send them to school; if food is offered at school, education can become a priority once again
- Incorporate mechanisms within AEPs to ensure that they are sustainable and continue to function beyond 2020, when SCI support is scheduled to end; this can be done by planning income-generating activities and giving structural support to FECONDE so that it has the capacity to fully manage AEPs in the future
- Arrange for children from neighboring villages that have burned down to attend the closest REALISE school; transport for students and teachers could be provided by SCI and the REALISE school's infrastructure could be used for morning classes to these visitors and afternoon classes for the locals, averting resources from being strained or teachers being overworked

Recommendations for the communities in which the village was burned down:

- Work with the International Organization on Migration (IOM) to provide transportation home to people still living in displacement camps in Bunia; provide these individuals with “kits de réinsertion,” with basic amenities like soap, water, shoes, and salt
- Work with other NGOs to provide more assistance directly in Djugu, to incite displaced persons to return
- Petition the government to start rebuilding burned down villages, including schools; in the meantime, SCI could provide tarpaulins to these villages so classes can resume informally
- Provide income-generating activities to those persons who have returned; this can take the form of providing tools, seeds and fertilizer for tending fields that were burned down
- Provide lessons and psycho-social assistance to those who remain in displacement camps