Endline Evaluation of the Rwanda Girls' Education Programme (2019–2023)

Final Report

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United Nations Children's Fund
Three United Nations Plaza
New York, New York 10017

June 2023

Attribution: Please cite the work as follows: UNICEF. 2023 Endline Evaluation of the Rwanda Girls' Education Programme (2019-2023) UNICEF Evaluation Office, New York.

For further information, please contact:

Evaluation Office
United Nations Children's Fund
Three United Nations Plaza
New York, New York 10017
evalhelp@unicef.org

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ACKNOWLEDGEMENTS

We would like to extend our gratitude to all the stakeholders who participated in the completion of the Endline Evaluation. Special mention goes to the Evaluation Reference Group for their continued guidance and support in the development of this report. We are grateful to the Ministry of Education, Rwanda Basic Education Board, Ministry of Local Government, Hempel Foundation, Imbuto Foundation and the Rwanda National Ethics Committee for providing the necessary technical guidance, comments and approval for the evaluation.

We are also grateful to the UNICEF Rwanda team for their input and logistical support to ensure a timely evaluation. Special mention goes to Charles Avelino, Marie Therese Uwizeyeyezu, Pascal Karemera and Firmin Dusengumuremyi.

We acknowledge the hard work of the research team consisting of international and national consultants, researcher assistants, enumerator team leaders, enumerators and the finance and logistics teams.

Primson Management Services remains committed to supporting the enhancement of girls' education in Rwanda through evidence generation thereby contributing to programme adaptation and learning towards the attainment of the Sustainable Development Goals.

Nedy Matshalaga

Executive Director

ACRONYMS

CBC	Competence-based curriculum
CEDAW	Convention on the Elimination of All Forms of Discrimination Against Women
CRC	Convention on the Rights of the Child
CRPD	Convention on the Rights of Persons with Disabilities
DEO	District Education Officer
DiD	Difference-in-differences
ECD	Early childhood development
EGMA	Early Grade Mathematics Assessment
EGRA	Early Grade Reading Assessment
ESSP	Education Sector Strategic Plan
FCDO	Foreign, Commonwealth & Development Office
FGD	Focus group discussion
GEP	Girls' Education Programme
HDI	Human Development Index
ICT	Information and communication technology
IP	Implementing partner
KII	Key informant interview
MDGs	Millennium Development Goals
MIGEPROF	Ministry of Gender and Family Promotion
MINALOC	Ministry of Local Government
MINEDUC	Ministry of Education
MYICT	Ministry of Youth and ICT
NGO	Non-governmental organization
NISR	National Institute of Statistics Rwanda
NST1	National Strategy for Transformation 1
PMS	Primson Management Services
REB	Rwanda Basic Education Board
SBM	School-based mentor
SDGs	Sustainable Development Goals
SPSS	Statistical Package for the Social Sciences
STEM	Science, technology, engineering, and mathematics
ToC	Theory of Change
TTC	Teacher training college
UNEG	United Nations Evaluation Group
UNICEF	United Nations Children's Fund

EXECUTIVE SUMMARY

Introduction: UNICEF Rwanda commissioned Primson Management Services (PMS) to conduct this Endline Evaluation of the Rwanda Girls' Education Programme (2019–2023). The evaluation measured the progress and impact made towards the achievement of set outcomes. It generated evidence to support learning and accountability and strengthen the future implementation of learning and gender-inclusive education.

Evaluation objectives: The overall objective was to analyse and document programme impact, lessons learned and best practices. The specific objectives were to:

i. assess whether and to what extent the intended objectives and output results of the programme have been achieved when compared to the baseline and midline status. The impact assessment considered the same indicators while analysing the trends in learning outcomes.

ii. assess the relevance, effectiveness, efficiency, impact and sustainability of the project, especially with regards to improving learning and equity for the target children, particularly girls.

iii. assess the overall quality, inclusion and gender responsiveness of the programme's delivery, especially the remedial education and community engagement interventions.

iv. identify and document good practices and lessons learned and provide recommendations on areas that require attention for successful scale up and sustainability of remedial education and related interventions by the Government and partners.

Methodological approach: The evaluation utilized a results- and theory-based approach that assembled quantitative and qualitative data complemented by desk review. A quasi-experimental, longitudinal panel study design was used, where data was collected for the treatment and control groups at baseline, midline and endline, tracking a cohort of 2,000 learners. Two thousand parents and 200 teachers from the evaluation schools were also consulted. The qualitative approach included the use of focus group discussions (FGDs), key informant interviews (KIIs), case studies and transformative change stories. KIIs were conducted at all levels. The study was carried out in line with United Nations Evaluation Group (UNEG) standard and norms – the evaluation process therefore took great care when involving vulnerable individuals (women and children) in the research activities to act in a manner consistent with widely accepted ethical principles.

KEY FINDINGS

Relevance: Results show that the Girls' Education Programme (GEP, also referred to as the 'remedial education programme') was highly aligned with global and national development policy frameworks. The design of the remedial learning programme had many elements which addressed challenges around children not being able to achieve the required grade-level learning competencies. The five programme districts were appropriately targeted due to their (lowest) composite scores in six education and development indicators. Consultations with key stakeholders at national and district levels confirmed that the programme was highly relevant for enhancing learning outcomes for learners in Rwanda, especially marginalized girls. Consultation with the Ministry of Education (MINEDUC) also confirmed the relevance of the programme, noting it was integral to the MINEDUC priorities. The programme serviced learners who had dropped out of school and those affected by school closures during the Covid-19 pandemic (when such children returned to school, they had fallen behind in literacy and numeracy).

Coherence: The programme was aligned with both global and national education policies and programmes. At the global level, this included policy frameworks for gender and girls' education, including Sustainable Development Goals (SDGs) 4 and 5, the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), the Convention on the Rights of Persons with Disabilities (CRPD), the Convention on the Rights of the Child (CRC) and other regional policy frameworks. At national level, the programme was highly aligned to the provisions of the Constitution, the Education Policy (2003) and the Rwanda Education Sector Strategic Plan (ESSP) 2018–2024. The remedial programme has mainstreamed the rights of children with disabilities by training school-based mentors

(SBMs) on children's rights. The programme also enrols all children without discrimination and, by targeting the lowest-performing quintile of children, it adheres to the ‘leave no-one behind’ approach. The programme contributed to learning and adaptation of the Rwanda Remedial Education Programme Classroom Guidelines for implementation 2021.

Effectiveness

Output 1: Girls have increased and sustained access to structured remedial learning opportunities. Almost all learners (99 per cent) in the treatment group reported that they had an improvement in their learning outcomes. **Literacy:** Overall, all learners in the treatment group had made statistically significant improvements at the endline. The proportion of learners below benchmark had decreased since baseline, with a significant change for treatment schools. **Numeracy:** The numeracy of treatment learners had improved by the endline. The proportion of learners in the treatment group who reported using information and communication technology (ICT) in remedial classes had increased by 60 percentage points from 12 per cent at baseline to 72 per cent. There was upward mobility of learners in the remedial clubs in their class position. Almost 83 per cent of underperforming girls (who had been in the lowest-performing quintile at baseline) had moved up from the lowest quintile within three years.

2: Teachers have strengthened capacity to provide quality learning in gender-sensitive environments: Most teachers in the remedial learning programme had received in-service training. The SBM programme, which aimed at complementing the capacities of teachers, had proved effective.

Output 3: Girls have improved demand for learning through addressing negative social norms: The onset of COVID-19 in March 2020 hindered community awareness initiatives. UNICEF, in partnership with the Imbuto Foundation, employed strategies to raise awareness of the negative social norms surrounding girls’ education. Community outreach efforts through parents’ committees, community education workers and volunteers contributed to educating communities and parents on the importance of supporting girl children and reducing negative social norms. The partnership between UNICEF and Urunana Development Communication used radio broadcasts to raise awareness of girls’ education issues, change attitudes and promote gender equality in education.

Output 4: The enabling environment is enhanced to support girls’ education: The GEP achieved the target of developing a National Strategy on Dropout and Repetition (to improve school retention and completion) by endline. The strategy provided guidance on reducing repetition, where unwarranted, and for systematic application. The GEP worked across sectors to develop a national referral pathway that was functional and running at endline. The referral pathway is a good practice that, it is envisaged, will lead to the sustainability of programme outcomes by creating partnerships with schools, local government at the community level and the various service providers. A model of working with community education workers to support learners at risk of dropping out was a decision influenced by the programme – its functionality can be seen in the reduction of dropout rates.

Efficiency: Overall, the remedial education programme was efficiently delivered through the existing education system, and the results were commendable considering the level of investment. The use of the existing education system to oversee programme implementation contributed to the programme’s efficiency. An analysis of the budget and expenditure suggested a high absorptive rate of 97 per cent across the project period 2019–2023. The implementing partners (the Imbuto Foundation) experienced no delays in the disbursement of project funds. The project current set-up and collaboration contributed to efficiency. The project was implemented by the Imbuto Foundation in collaboration with the District Education Department and the Rwanda Basic Education Board (REB). Procurement for goods and services had been carried out in compliance with the Imbuto Foundation’s policies and guidelines.

Impact: The repetition rate for girls in target schools decreased from the baseline (just over 12 per cent) but it did not meet the target (5 per cent). At endline, the repetition rate for girls in treatment schools was 8.9 per cent, significantly lower than the 11.7 per cent in the comparison schools. A district education officer in one of the programme districts recognised this decrease in repetition rates. Dropout rates for learners in the programme schools also decreased from 6.3 per cent at baseline to 1.4 per

cent at endline against the endline target of 3 per cent. The ultimate outcome of the programme was for “adolescent girls [to] have improved gender-equitable opportunities in education”.

Sustainability: The programme had strong sustainability elements: i) adoption of the remedial education programme by the Government before the end of the programme; ii) incorporation of remedial learning elements in the curriculum for teacher training colleges (TTCs); iii) involvement of headteachers in remedial learning capacities; iv) engagement of communities for programme ownership and addressing negative social norms; and v) channelling development partner funds towards building teacher capacity.

Recommendations:

i. UNICEF should consider documenting the good practices generated by the implementation of the remedial education programme.
ii. As the remedial learning programme is now operating nationwide, the Government and development partners should consider supporting the wider availability of the internet in schools.
iii. REB and UNICEF should develop operational guidelines for the implementation of the policy on children living with disability and national referral guidelines to support the design and implementation of different programmes aimed at the inclusion of these children.
iv. Future remedial education programmes should consider an approach that encompasses a life-cycle approach to cover services for early childhood development (ECD), lower primary grades and reproductive health services for young adolescent girls.
v. Future remedial education programmes should include innovative ways of learning such as the use of tablets, games and edutainment.
vi. Given the national extent of the remedial education programme beyond the five project districts, it is recommended that a sustainable incentive system for remedial education be considered for schools and districts.
vii. Consider investing in teacher capacities to make the national remedial education programme more effective.
viii. Consider the design of community awareness programmes aimed at addressing social norms that negatively affect girls’ participation in education.
ix. Against the backdrop that some learners come from marginalized families, future programmes for improving learning outcomes should consider integrating social protection programmes to support families with learners in the lowest-performing quintile.

1 INTRODUCTION

1.1 Background

Global context: Significant efforts have been made to ensure that girls' access to education is enhanced – more girls are getting access to education than ever before. The primary school completion rate has reached 90 per cent for girls, with gender parity achieved in most countries.[1] Of the 120 million girls out of school globally at all education levels, over 86 million are in developing countries, experiencing the largest gender disparities in education.[2] Evidence suggests that girls' enrolment and completion rates remain highest at the primary level, falling as they progress to higher education levels. An additional year in school can raise a woman's income by 10–20 per cent and each year of secondary education reduces the likelihood of child marriage by 5 per cent.[3] And a child born to a mother who can read is 50 per cent more likely to live past the age of five.

Relevant protocols: Girls' education is underpinned by SDG 4: Ensuring *inclusive and equitable quality education and promoting lifelong opportunities for all* and SDG 5: *Gender equality*. Furthermore, CEDAW is recognized as a cornerstone for the attainment of the 2030 Education Agenda and works as a powerful tool to advance inclusive and equitable quality education for all – the Government of Rwanda ratified CEDAW in 1980. The country is also a signatory to the United Nations Convention on the Rights of the Child (CRC), which was ratified in 1991. To cement issues addressing children's rights, the country developed the National Integrated Child Rights Policy (2011).[4] Of the six strategies contained in this policy, the fourth focuses on education and guarantees that every child in Rwanda shall receive quality education. Rwanda also ratified the CRPD in 2008: the CRPD calls for all nations to address discrimination against persons with disabilities in the educational system and other areas.

Political and social context: At the time of the programme design**,** Rwanda was ranked as one of the poorest countries in the World, at 163 out of 182 countries (Human Development Report, 2015). As much as 90 per cent of its population was still vulnerable to multiple deprivations (HDI, 2015). The prevalence of stunting among under-five children was high (38 per cent) – this decreased slightly to 33 per cent in 2019.[5] Food insecurity and chronic malnutrition are closely linked to poverty.[6]

Progress towards achievement of relevant SDGs: SDG 4: *Quality Education*, remains stagnant according to the Rwanda 2022 Sustainable Development Report. Participation in pre-primary organized learning is on track for maintaining SDG achievement; the indicator on net primary enrolment is declining. As for lower secondary completion rate, the indicator is moderately improving, as is the literacy rate. Rwanda should therefore continue to prioritize the education system, especially around quality primary education to reduce dropout and repetition. Similar programmes such as the remedial learning programme should be scaled up and implemented nationally. SDG 5: *Gender Equality*: Gender disparities are still seen in the Rwanda education system with the gap widening at secondary level due to high dropout rates at primary levels. According to the Rwanda Girls Education Policy only 32 per cent of girls passed the Tronc Commun (lower secondary) exams versus 68 per cent boys.

Problem statement (situation and needs of target group): On a positive note, Rwanda has achieved significant success with a net enrolment rate of almost 99 per cent for both boys and girls (MINEDUC, 2018). However, access to quality education remains an issue. Dropout and repetition rates are too high, resulting in a significant proportion of out-of-school children, especially at the upper primary and secondary school levels. The study *Knowledge, Attitudes and Practices around Gender and Education in Rwanda* (August 2017) found girls to be more at risk of dropping out and that 26 districts recorded a

[1] World Bank (2023). Closing the gap: Tackling the remaining disparities in girls' education and women's labour market participation**.**
[2] Ibid.
[3] Equal Measure 2030, Data Hub, SDG 4: Education, https://data.em2030.org/goals/sdg4/ accessed 10 February 2023.
[4] Ministry of Gender and Family Promotion (2011): National Integrated Child Rights Policy.
[5] Rwanda DHS (2019/2020).
[6] UNICEF Rwanda (2019). Project description for Hempel Foundation Project Document.

lower performance rate for girls than for their male counterparts. Repetition rates were higher for girls (12 per cent) than for boys (11 per cent). National examination results indicate that boys perform better than girls in national examinations at secondary level. Finally, Covid-19 affected access to quality learning for marginalized girls in rural communities. The pandemic disrupted the education system but it is being brought back to normal.

Existing barriers: At the start of the project, the following were noted as existing barriers: **supply**: i) lack of educational services for out-of-school girls; ii) absence of systematic remedial learning support to bring students back into the education system; iii) limited capacity of schools and school leaders to create a gender-sensitive and inclusive school environment; iv) negative gender norms creating an unwelcoming environment for girls. On the **demand side** key barriers were: i) negative attitudes and practices in the home around girls' education; and ii) girls' education remaining a low priority among families.

It is against this background that UNICEF and the Hempel Foundation has partnered with MINEDUC and REB to improve girls' access to education in Rwanda through designing education-focused programmes, interventions and strategies in the form of the remedial education programme.

1.2 Programme description (Object)

The GEP addressed the following educational problems for girls: literacy, numeracy, retention, repetition and challenges around dropping out. It was also designed to address the supply and demand side barriers affecting girls' education (*see section 1.1 above on context*).

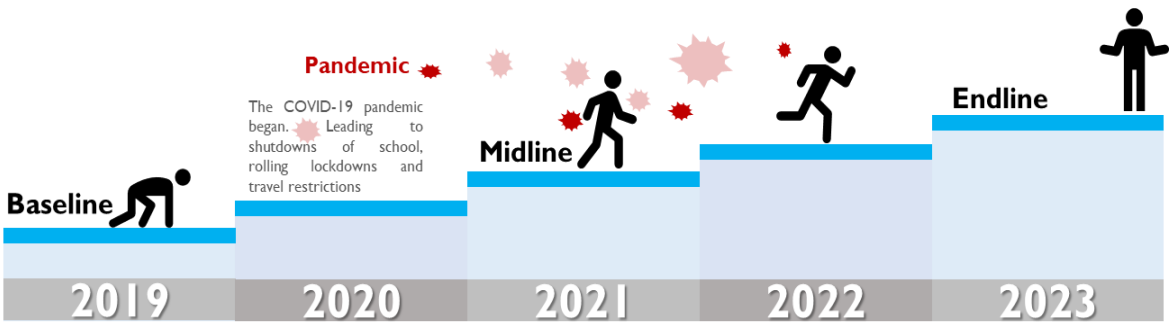
Programme interventions: These had the following components:

i. School-based remedial learning programme to improve the quality of learning outcomes in numeracy and literacy.
ii. Strengthening continuous professional development and management of teachers, targeting remedial learning teachers and TTCs.
iii. An ICT initiative to transform teaching and learning and support the improvement of quality education in target schools.
iv. Youth centre programme supporting out-of-school children, especially girls, to gain livelihood skills.
v. Community mobilization programme to address negative social norms and cultural practices that discourage girts' education.

Planned outputs:

- Output 1: Increased and sustained access to structured remedial learning opportunities.
- Output 2: Teachers have improved pedagogical skills to provide gender-sensitive learning environments.
- Output 3: Improved demand for learning, through addressing negative social norms.
- Output 4: Strengthened enabling environment to support girls' education.

Duration of the intervention: The programme was implemented between January 2020 and June 2023. However, COVID-19 had the effect of slowing implementation.



Budget and source of funds: The programme was funded by the Hempel Foundation from Denmark. The overall absorptive rate was high at 97 per cent. *(See efficiency chapter for more detail).*

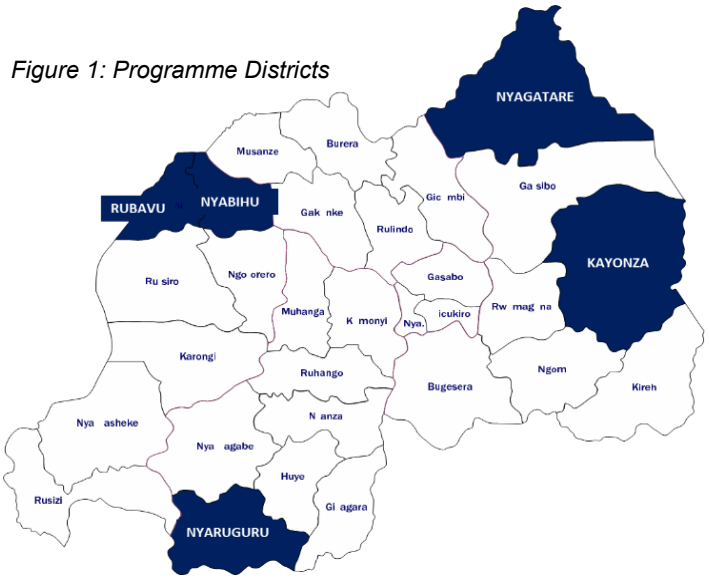
Main stakeholders and beneficiaries: These included **Government:** MINEDUC, REB, District officials, National Institute of Statistics Rwanda (NISR), Ministry of Gender and Family Promotion (MIGEPROF), Ministry of Local Government (MINALOC) and Ministry of Youth and ICT (MYICT)); **implementer** (UNICEF); **funding partner** (the Hemel Foundation); **steering committee** (Hempel Foundation, UNICEF Denmark, UNICEF Rwanda, the Eastern and Southern Africa Regional Office of UNICEF (ESARO)); and **implementing partners** (Imbuto Foundation, Urunana).

Programme beneficiaries: The programme aimed to improve learning outcomes for 10,500 children of which 75 per cent were girls in 150 schools who were at a high risk of dropping out and were lagging in terms of their competencies. **Error! Reference source not found.**1 provides the direct and indirect beneficiaries of the programme.

Table 1: Direct and indirect beneficiaries

Direct beneficiaries	Indirect beneficiaries
Children: 10,500 (75% Girls) in the remedial programme 20,000 girls and 20,000 boys reached by social messaging. **Teachers:** 310 (50 per cent female) **TTC tutors:** 192 (50 per cent female)	**Parents and community members:** 75,000 (50 per cent female) **Student teachers**: 28,800 (50 per cent female)
NOTES Boys and girls were selected from villages surrounding the selected schools with the following criteria: aged 10-18, have completed no more than 5 years of primary education, may have a disability that is impeding their access to quality education, are in primary level 4 (P4), are in the lowest-performing quintile of their class.	

Figure 1: Programme Districts



Programme location: The programme was implemented in five districts: Nyagatare, Kayonza, Nyaruguru, Nyabihu and Rubavu. Districts were chosen based on a composite score calculated using poverty rate, youth literacy, primary six (P6) examination pass rate, primary net attendance and promotion and repetition rates. The programme targeted 150 schools in the five districts. Criteria used to select schools were i) rural or remote location; and ii) school underperformed in national P6 examinations.

Execution/implementation modality: The programme was implemented and executed by UNICEF with the Hempel Foundation in partnership with MINEDUC, REB and the Imbuto Foundation. Implementing partners worked closely with the district education offices in the respective programme districts, selected youth centres, participating communities and TTCs. At national level MINEDUC and REB were also involved in oversight and supervision.

Normative frameworks: Gender equality is enshrined in the Constitution. The Draft Girls' Education Policy (2017) and the Girls' Education Policy (2008) make provisions for the progressive elimination of gender disparities in education and training. The ESSP has a dedicated outcome (7.1) that provides for gender parity in participation and achievement at all levels of education. The Rwandan Education Policy also calls for gender parity in the education system.

1.3 Evaluation purpose and objectives

Purpose of the evaluation: The purpose of the endline evaluation of the GEP in Rwanda was to generate results of the programme interventions. The results will shape the design of similar programmes and their scaling up to other districts. The results will also inform the development of national policy and strategy frameworks to enhance access to quality education in Rwanda. The evaluation will contribute to knowledge of what works and what does not work in implementing comprehensive programmes for remedial learning. The main users of the evaluation findings will include UNICEF, Hempel Foundation, Imbuto, MINEDUC, REB, development partners and other education stakeholders in Rwanda.

Objectives: The key specific evaluation objectives are as follows:

i. Assess whether and to what extent the intended objectives and output results of the project have been achieved compared with the baseline and midline status. The impact assessment will consider the same indicators while analysing the trends in learning outcomes.
ii. Assess the relevance, effectiveness, efficiency, impact and sustainability of the project, especially with regards to improving learning for the target children and equity, and especially with respect to girls.
iii. Assess overall quality, inclusion and gender responsiveness of the programme's delivery, especially the remedial education and community engagement interventions.
iv. Identify and document good practices and lessons learned and provide recommendations on areas that require attention for successful scale up and sustainability of remedial education and related interventions by the Government and partners.

1.4 Theory of Change assessment

The Rwanda GEP had a supportive Theory of Change (ToC). The overarching goal of the programme was that the most marginalized girls in the rural areas of Rwanda would be provided with equitable quality education through the remedial education programme in an improved learning environment. The programme targeted girls in 150 schools in five selected districts – Rubavu, Nyaruguru, Kayonza, Nyabihu and Nyagatare. Fundamental to the ToC was the understanding that gender norms and relations shape institutional processes, which have political, economic, social and cultural dynamics (UNICEF 2020).

The programme's ToC asserted that **IF** girls:

i. Have increased and sustained access to structured remedial learning opportunities.
ii. Have enhanced quality of education in gender-sensitive learning environments.
iii. Have reduced barriers in social norms; and
iv. Have an improved policy framework for girls' education.

THEN the most marginalized girls and girls in rural Rwanda will receive equitable quality education, through a remedial programme, in an improved learning environment. The ultimate outcome of the programme was that "targeted girls and boys have improved learning outcomes, through quality teaching and learning in a remedial programme". (See Annex II, Theory of Change*)*

The assessment of the ToC was done across the various components as highlighted in Table 2 below.

Table 2: Theory of Change Assessment Components and Considerations

ToC components	Considerations for the assessment
Conditions	i. Are the assumptions, risks and other actors' roles clearly stated as conditions to meeting targets? ii. Are the assumptions and risks within or beyond the control of the programme?
Outputs	i. Do all outputs have activities associated with them? ii. Are the outputs quantifiable? Measurable?
Outcome	i. Can the outcome realistically be expected to occur as a result of the listed activities? ii. Is the outcome phrased in terms of **change**? iii. Does the outcome clearly identify who or what will experience the intended change? iv. Is the outcome measurable?
Impact	i. Is the impact framed in terms of **change**? ii. Is the impact realistic? Can we expect it to come about as a result of the intended outcome? iii. Does the impact specify the target population? iv. Does the impact adequately encompass the entire scope of the activities and outcomes included in the theory?

Conditions: *Assumptions, risks, the roles of other actors.*

The ToC explicitly illustrates conditions that will facilitate the achievement of the intended targets across its various components (activities, outputs, outcome and impact). These conditions contribute to the achievement or non-achievement of various targets across the results chain. The assumptions laid out in the ToC could, however, be further refined to include unforeseen health hazards and disasters. Practical examples of unforeseen disasters that affected the programme include Covid-19 and the floods in the northern parts of Rwanda towards the end of programme implementation.

Outputs: The ToC specifies four intended outputs, all of which have associated activities. The assessment shows that all four outputs are quantifiable and measurable – they have objectively verifiable indicators which show the direction of the programme (progress or failure).

Outcome: *Targeted girls and boys have improved learning outcomes, through quality teaching and learning in a remedial programme.*

The programme outcome in the ToC is realistic and can be realised because of the of the listed activities. It is expected that once the outputs have been realised, they will in turn propel the outcome to be realised as they are the relevant preconditions. The outcome is phrased in terms of change. In this case the change is expressed by the adjective 'improved' which also shows the direction of the expected change. The outcome is explicit in terms of who will experience the change because of the interventions – in this case, it is the girls and boys targeted by the programme across the five districts where the programme has been implemented. The ToC has a well laid-out, measurable outcome. During the endline evaluation, the outcome was measured using a combination of Early Grade Reading Assessments (EGRAs), Early Grade Mathematics Assessments (EGMAs) and the end-of-term scores provided by headteachers.

Impact: *Most marginalized girls in the rural areas of Rwanda are provided with equitable quality education through the remedial education programme in an improved learning environment.*

The programme impact is framed in terms of change. The goal is realistic, and it can come as a result of the above intended outcome. In terms of the target group, the goal specifies that the intended impact is expected to be on girls living in Rwanda's rural areas. The goal encompasses the entire scope of the activities, outputs and outcomes within the ToC. This entails that if the intended results are realised along the results chain, it is expected that the overall expected impact will also be realised.

The operationalization and alignment of the ToC with the programme implementation is discussed in detail under the effectiveness findings in section 6.8.

1.5 Structure of the evaluation report

This report contains 9 main chapters. Chapter 1 includes the introduction which covers background context, programme description, evaluation purpose and objectives and the ToC. The second chapter describes the methodological approaches used, the study limitations and mitigation mechanisms put in place. Findings chapters are presented as per the Organisation for Economic Co-operation and Development's Development Assistance Committee (OECD-DAC) criteria.

2 METHODOLOGICAL APPROACH

This chapter covers the methodological processes employed for the evaluation. It elaborates on the evaluation design, processes, stakeholder participation, limitations and ethical considerations. The methodological processes are described below.

2.1 Evaluation design, methodology and processes

This subsection elaborates on the following: evaluation design, quantitative methods, qualitative methods and phases of the evaluation.

2.1.1 Evaluation design

A results and theory-based evaluation approach was employed. It assessed the results of the remedial learning programme against the planned results (results framework and ToC) including programme objectives. The approach provides the basis for assessing programme results against planned outcomes. A **mixed method approach** (quantitative and qualitative) complemented by desk review was used. This allowed for triangulation of data to strengthen the validity of the findings.

Desk review: A literature review was an integral part of the evaluation process and informed the study from inception to the end. Several key documents were reviewed, including programme planning documents, review documents and additional programme review reports. Additional documents shared during interviews at national level provided critical insights into some of the results.

2.1.2 Quantitative design and sampling approach

A quasi-experimental, longitudinal panel study design was used, where data was collected for the treatment and control groups at baseline, midline and endline. Datapoints collected from the same students at baseline and midline were again collected at endline. A treatment school was defined as a school that benefited from GEP interventions; a control school was one that did not participate in the programme. The design allowed both comparison of the exposed (target) group of learners against the unexposed (control) group of learners and a “before” and “after” comparison of outcomes for both target and control groups. This allowed the Difference-in-differences (DiD) statistical technique to be used for impact assessment.

Sampling frame: *Sample size determination*: The sample was determined at baseline to be 85 per cent certain that the statistical analysis would detect a critical-level effect (if it existed). Minimum sample sizes were determined at a 95 per cent level of confidence to detect an effect size of 0.120787. A sample of 2,000 cohort learners had midline data points, and these were targeted for recontacting at the endline. A minimum sample size of 1,000 learners in treatment schools and 1,000 learners in control schools was found to be adequate to detect an effect size of 0.120787 (due the programme on project schools in comparison to non-participating schools). To facilitate effective recontacting of the midline sampled learners, advance communication was done with the school headteachers via an Endline School Data Request Sheet. Apart from making the necessary sampling and mobilization of connected caregivers, the headteachers also helped to provide replacements where necessary. School heads were requested to make sure that replacements matched the profile of the learner being replaced in terms of sex, grade and the general score profile. Propensity Score Matching was used to replace

“dropouts” or learners lost in the target and control groups and the “replacements” for the target learners were selected from the group of beneficiary learners. This involved identifying a match for each “dropout” or lost student with "replacement” with similar characteristics.

Household survey (parents/primary caregivers): The endline evaluation surveyed the parents and caregivers of cohorts of in-school girls from both treatment and control schools. They were identified directly using the names and phone numbers compiled at baseline and midline. The primary respondents were the parents/primary caregiver of the learners. The survey targeted a total of 2,000 parents in the selected districts and reached a total of 1,987 giving a response rate of 99 per cent.

Teacher survey: This was administered to two teachers at every school, targeting a total of 200 teachers (2 teachers x 20 schools x 5 selected districts). The survey enquired about the learning environment and experiences of girls at school with a special focus on; i) girls’ access to structured remedial learning opportunities; ii) teacher capacity to provide quality learning in gender-sensitive environments; iii) addressing negative social norms; and iv) enabling environment to support girls’ education. The study reached 191 of the 200 target teachers, giving a response rate of approximately 96 per cent.

2.1.3 Qualitative approaches

The qualitative approach included the use of FGDs, KIIs, case studies and transformative change stories. FGDs were mainly conducted with programme beneficiary groups who included learners (in schools and at youth centres), parents and community members. Both males and females participated in the FGDs (see Table 3 on evaluation reach) and each FGD group had 8–10 participants. Case studies and transformative change stories were identified from FGDs. KIIs were conducted at all levels: at district level, with District Education Officers (DEOs) and primary and nursery education officers. At school level, KIIs were conducted with remedial learners’ instructors and headteachers. At national level, KIIs were conducted with representatives from MINEDUC, REB, the Imbuto Foundation, the Hempel Foundation and Urunana Development Communication (implementing partners) and UNICEF Rwanda. KIIs were also conducted with UNICEF Regional Office education units.

2.1.4 Evaluation phases

Inception phase: This included inception meetings with the client and planning the inception report. An inception report, including data collection tools, was drafted and shared with the client. Primson Management Services (PMS) incorporated comments from the client and presented the inception report to the Evaluation Reference Group which included UNICEF Rwanda, ESARO and the Imbuto Foundation through an online presentation. Following the approval of the inception report, PMS applied for expedited ethical clearance from the Rwanda National Ethics Committee. The research board approved the research protocol and ethical clearance was awarded on 5 May 2023, prior to data collection. In line with research practice, all ethical considerations were put in place during the study. All participants were fully informed of the purpose of the study and their rights to participate, refuse or withdraw. Informed consent was obtained from all adult participants; learners gave their assent after obtaining parental consent. The study followed the UNEG Ethical Guidelines for Evaluation. Protocol on access to districts was followed and courtesy calls were made on arrival at each district. The UNICEF and MINEDUC letters were presented to stakeholders at the district level.

Training for fieldwork: Training for the Rwanda GEP Endline Survey was delivered in two phases as follows. **Phase 1:** Online five-day Tangerine Training Workshops for use in EGRAs and EGMAs; and **Phase 2:** Physical training workshop (including training on KOBO Collect for online data collection for all surveys) in Kigali during the period 2–6 May 2023.

Data collection: Quantitative and qualitative data collection was done concurrently. Pilot data was collected in Kayonza on 8 May 2023. The objectives of the pilot survey were to (i) test and validate research questions; (ii) test and validate the research team’s tool administration; (iii) determine the accuracy of the tools and identify possible critical points for further modification or explanation; (iv) test and refine tools; and (v) test and validate the duration of the fieldwork. Actual data collection was done

in the programme districts during the period 10–26 May 2023. National and regional level data were collected at different times depending on the availability of key informants during the period 5–16 June 2023. Table 3 presents the evaluation reach inclusive of qualitative and quantitative data.

Table 3: Evaluation reach

Groups		KAYONZA		RUBAVU		NYABIHU		NYAGATARE		NYARUGURU	
		Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Quantitative	**EGRAS/EGMAS**	296	104	282	97	301	100	301	98	313	102
	Learner survey	281	114	284	98	293	103	291	107	307	102
	Parents survey	258	138	253	128	258	138	265	137	254	158
FGDs	**Learners in schools**	8	8	10	8	8	8	8	8	8	16
	Learners at youth centres	12	8	8	7	7	7	11	12	12	8
	Parents/community	5	5	10	2	5	4	4	4	4	5
KIIs	**DISTRICT LEVEL**										
	School level		2		1		2	1	1		2
	Youth centres		1		1		2		1		1
	TTC	1			1				1		2
	District education partners		1	-	-		1	1			-
	Subtotals	861	381	847	343	872	365	882	369	898	396
	Total	**1,242**		**1,190**		**1,237**		**1,251**		**1,294**	
	NATIONAL LEVEL										
		Male				**Female**					
	UNICEF	1				1					
	REB	1									
	MINEDUC	2									
	Urunana	1									
	Imbuto	1									
	Total	**6**				**1**					
	REGIONAL LEVEL										
	UNICEF					2					

Sub-national level: Total reach was 6,214 where 4,360 (70 per cent) were female and 1,854 (30 per cent) were male. **National level**: Total reach was nine where six were male and three were female. **Grand total:** The total reach for the evaluation was 6,223 with 4,363 (70 per cent) females and 1,860 (30 per cent) males.

Data analysis: EGRAs and EGMAs data analysis: Data transformations and computations were made using SPSS.[7] Fluency (for literacy) and fluidity (for numeracy) were computed for each learner by enumeration the correct responses per minute for timed subtasks. Accuracy was also computed for all subtasks by computing the percentage of correct words/sounds/answers given for items that were attempted and/or presented. Total literacy and numeracy scores were computed by adding the scores across different subtasks for each of the subtasks presented to the learners as well as adding computed scores. A proficiency score was computed for each learner based on the four standard proficiency levels: not met benchmark, partially met benchmark, met benchmark and exceeded benchmark. A difference score quantified the changes made at the individual level.

[7] Statistical Package for the Social Sciences, a software package used for the analysis of statistical data.

Basic descriptive statistics were used to present the results. For the inferential analysis for significant changes, independent samples t-tests were used for between-group differences as required by the analysis (treatment/control and boys/girls). For the assessment of the relationship between proficiency levels and project conditions (comparison and treatment), chi-square for independence tests was used.

Analysis of teacher and household surveys: After data cleaning, the datasets were exported from Kobo Collect to SPSS for analysis. Specific indicators were generated in SPSS in line with the list of indicators outlined during the inception phase. Cross-tabulations and statistical tests were used to enhance the interpretation of data where necessary. The chi-square test was used to test for association. A comparison between values of indicators after project implementation and target values was used to assess effectiveness. At endline, the DiD technique was used to assess impact. Data matrices were used to extract quantitative data. Analysis of data from secondary sources was done in Excel.

Qualitative analysis: Field notes were reviewed and coded respectively. Manual data analysis was done using categorized information. An analysis report was generated and later fused with quantitative data.

2.2 Evaluation questions

Key evaluation questions guiding the evaluation were developed based on the programme evaluation framework, OECD DAC criteria (relevance, coherence, effectiveness, efficiency, impact and sustainability), programme outputs, ToC and key evaluation questions as presented below. Annex 3 presents the evaluation planning matrix that depicts the evaluation questions (and sub-questions), the data sources and methods of data collection and analysis.

Themes	Key questions
Relevance	• How relevant is the remedial education intervention, especially for marginalized girls and in relation to policy at the national level? • Are activities and outputs of the girls' education consistent with the national education policy and strategic framework? Do they contribute to the attainment of its objectives? • To what extent have contextual factors (at the national level and specific to each of the five districts) been considered in the design and implementation of the remedial programme focusing on girls' education? • To what extent have contextual changes, particularly at policy level, affected the relevance of the education remedial programme? • To what extent and how have remedial education interventions been adapted to meet the needs of learners from the most marginalized backgrounds?
Coherence	• To what extent is the remedial education programme addressing gender and equity? How have the rights of children with disabilities been consistently integrated into all aspects of programming and implementation? • To what extent has the remedial education programme contributed to the consideration of human rights, leaving no-one behind, and gender equality in the national education system? • How has the remedial education programme contributed to the government positioning and internal coherence in education system in Rwanda, and what are the strengths of the programme in comparison to previous similar programmes? • What are the comparative strengths of the remedial education programme? • Have the coordination and governance mechanisms of the remedial programme added value to other coordination mechanisms for existing education initiatives and more broadly?
Effectiveness	• How efficiently are the remedial education programmes rolled out with the support of the UNICEF and stakeholders with respect to meeting the needs of marginalized girls, and what are the major influencing factors? • To what extent have the remedial education programme objectives been achieved at the level of each results output and to what extent has the programme made progress towards achieving expected outcomes? • To what extent did the remedial education programme contribute to accelerating the achievement of national targets in learning outcomes?

	• What have been the major factors influencing the achievement or non-achievement of the remedial education programme objectives? • What have been the main challenges faced during the implementation of the remedial education programme? • To what extent did the remedial education programme adapt to the challenges and evolving context?
Efficiency	• How efficiently have the remedial education programmes been delivered, given the human and financial resources available? What have the costs been, including both funds and in-kind support? • Is the current organizational set-up, collaboration and contribution of MINEDUC, REB, schools and other shareholders working effectively to help ensure efficiency? What more might be done? • What were the lessons learnt in terms of the management of partnerships under the remedial education programme, and what might be improved for similar programme in the future? • Did the remedial education programme find synergies with other funding sources, grants and mechanisms of Government and UNICEF?
Impact	• Is there evidence of the remedial education programme contributing to the improvement in learning outcomes and increasing the performance of girls from marginalized backgrounds in target districts in the country?
Sustainability	• To what extent have the interventions implemented through the remedial education programme contributed to the sustainability of results, especially equity and gender-related results? • To what extent is the remedial education programme supporting long-term buy-in and ownership by duty bearers and rights holders?

2.3 Stakeholder participation at all levels

The programme had many layers of stakeholders from regional to community level. The programme is led by MINEDUC with support from UNICEF Rwanda. At the national level, REB plays an important role in coordinating and fast-tracking basic education programmes and activities aimed at providing quality education to all categories of Rwandans. The main implementing partners are the Imbuto Foundation and Urunana Development Communication (a non-profit communication civil society organization specializing in achieving behaviour and social change through edutainment). At district level, DEOs and primary-school headteachers oversee the implementation of remedial learning in the programme schools. However, the engagement of headteachers was minimal when the programme began. The midterm review noted this gap and its contribution to weaker programme monitoring. After the midterm review headteachers were trained to supervise and monitor the remedial learning programme. At this time parents were invited into schools to better appreciate the programme and increase their involvement in their children's literacy and numeracy development. At community level, community education workers monitored children at risk of dropping out of school and communicated with the school heads and class teachers. Urunana engaged participating communities through various avenues of communication, including radio dramas, soap operas and magazines.

2.4 Limitations and mitigation strategies

Limitations encountered by the evaluation team and the mitigation strategies are mentioned below.

The endline evaluation coincided with weather disasters that affected two of the programme districts (Rubavu and Nyabihu). Many households were affected – some lost livestock and their homes. The two affected district offices were busy dealing with the social and economic impacts of the weather disaster and the disturbances affected the participation of some parents and learners to a limited extent. To address this challenge, the order of fieldwork was adjusted to allow for the weather impacts to subside.

Some learners who participated in the baseline and midline had dropped out of school by the endline. This made it difficult to track the results for some of these learners and it was near impossible

to locate them during the evaluation. The evaluation team therefore replaced and match the learners to ensure a perfect match for the DiD analysis.

Some district officials were unavailable during the scheduled interview dates. The consultants therefore rescheduled the interviews at to allow these officials to participate.

Some districts did not have data readily available, which affected the administration of the district-level data mining tools. Where the data was not readily available, the PMS teams left the data mining tools with the district officials. This gave them time to gather the data – constant follow-ups were made until the information was received.

Some learners who were part of the midline could not be successfully recontacted for the endline evaluation due to school transfers, transition to secondary school and other reasons. These were replaced with new learners, but these learners had no midline scores. Replacement was done using propensity score matching – the replacement learners had the same traits as the ones they were replacing. All replacements were done in consultation with the headteachers who knew the performance of the learners. This allowed them to be eligible for the study and their results/performance to be comparable.

The treatment and comparison schools were not selected based on matched samples considerations. The schools selected for the intervention were chosen because of poor performance. The remaining schools from which the comparison/control schools were selected were generally better performing schools. The control learners had therefore tended to be better performers since the baseline, so the fact that treatment and control learners are performing at similar levels at midline and endline should not be mistaken for lack of programme effectiveness.

Since midline, it was established that some control schools were also receiving remedial lessons from REB. This may have reduced the measurable differences in scores between the treatment and the control schools and makes it difficult to attribute impacts solely to the remedial programme.

2.5 Ethical considerations

The study was set in line with UNEG Standards and Norms. The evaluation process was thus fully committed to taking care that vulnerable individuals, especially women and children, involved in the research activities were treated in a manner consistent with widely accepted ethical principles. Participants were protected from exploitation and abuse while building capacity and promoting well-being. The following ethics were upheld throughout the evaluation; i) human rights and gender sensitivity in research; ii) child protection; iii) free and informed consent; iv) confidentiality and anonymity; v) transparency in research and avoidance of harm; and vi) working with local experts and assistance.

3 DEMOGRAPHIC CHARACTERISTICS

This chapter presents the demographic characteristics of the sampled population for the endline evaluation. Household socioeconomic and demographic characteristics are vital in understanding learners and their home environment. The chapter elaborates the major socioeconomic and demographic characteristics of the heads of household and the characteristics of the learners.

3.1 Age and sex distribution of household heads

A total of 1,987 heads of households were surveyed. Most of them were females – they constituted 65 per cent (n=1,292) of respondent parents or caregivers while 35 per cent (n=695) were males. This gender disparity was attributed to death, divorce and the migration of men to the cities in search of jobs. There were slight differences between treatment and control households - 67 per cent female, 33 per cent males in treatment households vs 63 per cent female and 37 per cent male in control households.

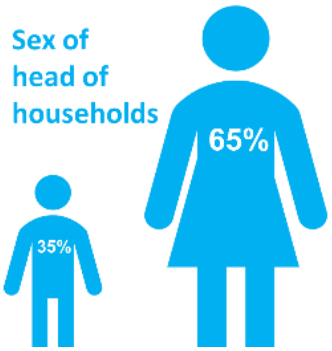


Figure 2: Sex of heads of households

Age of household heads: The largest group (41 per cent) of household heads at endline were in the age range 40–49 years. About 16 per cent of the households are headed by persons over the age of 60. A small proportion (2 per cent) were headed by youths aged 20–29. Figure 3 provides the age distribution for household heads in the sampled programme areas.

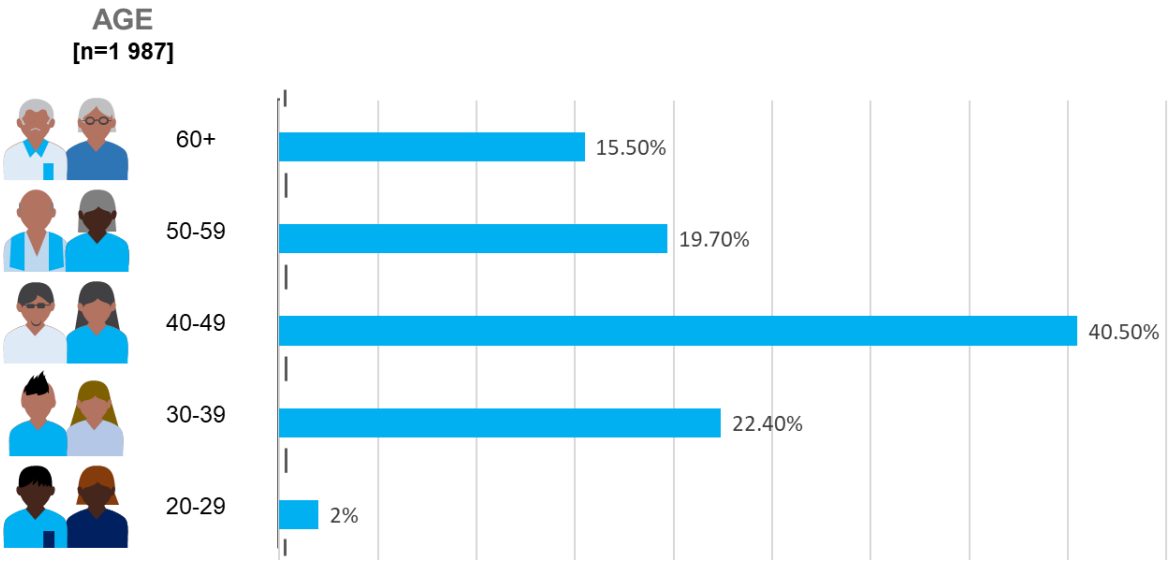


Figure 3: Age distribution of household heads

3.2 Education level of household heads

Findings show that 57 per cent of sampled households were headed by someone educated up to primary level: The percentage of household heads who had not attended any formal school or attained any formal education was 22 per cent. About 10 per cent of the sampled household heads had attained secondary school education; just under 2 per cent had attained tertiary education. The percentage of household heads who had reached junior high school was about 8 per cent. Literacy levels were adequate to understand a plethora of education and learning development promotional messages, but special messages needed to be developed to cater for the household heads who had never attended formal school.

3.3 Learners' characteristics and standardized assessment

Of the 1,994 learners reached, 1,493 were females while 501 were males (i.e. 75 per cent were females and 25 per cent were males). There were similar numbers of learners in the control (991) and treatment schools (1,003). **Error! Reference source not found.** provides a summary of the learners' characteristics across the programme districts at endline.

4 RELEVANCE

EQ1 - How relevant is the remedial education intervention, especially for the most marginalized girls and in relation to policy at the national level?

The relevance section has one key question and four sub-questions.

EQ1.1 - Are activities and outputs of the girl's education programme consistent with the national education policy and strategic framework? Do they contribute to the attainment of its objectives?

Key elements that contributed to policy operationalization: The remedial learning programme had several elements: i) the teacher capacity initiative targeting remedial learners, teachers, headteachers and TTC trainees focused on enhancing professional skills; ii) the remedial clubs (which had 80 per cent female participants) contributed to improved numeracy and literacy, especially for girls – one of the priorities of remedial learning in the five districts was to close the performance gap between girls and boys; iii) the use of ICT in target schools (increased access to internet services by teachers and learners and use of tablets by teachers and learners was critical in enhancing the use of ICT); iv) support to science and technology initiatives in schools and at youth centres contributed to national priorities to increase girls participation and performance in science, technology, engineering and mathematics (STEM); v) the community outreach initiatives supported through Urunana and other community efforts to address social norms was critical in reducing negative cultural and social norms against girls' education. The programme, through youth centres, also reinforced the government programme of encouraging girls to engage in vocational and trade training.

EQ1.2 - To what extent have contextual factors (at the national level and specific to each of the five districts) been considered in the design and implementation of the remedial programme focusing on girls' education?

Responding to the felt development challenge in the sector: The five programme districts were chosen due to their weaker performance in national examinations. UNICEF worked closely with REB to select these five lowest-performing districts, after which the lowest-performing schools in each district were identified. The advent of the Covid-19 pandemic witnessed the nationwide closure of schools, which affected learning and general access to education. However, to ensure that learning continued, the REB rolled out e-learning initiatives which delivered lessons through radio and television. The remedial programme responded to the needs of children who had no access to educational radio programmes and lagged in terms of their numeracy and literacy – this group also included children whose parents did not have a radio or could not help their children. Youth centres were able to accommodate those who had dropped out of school to learn vocational trades. They identified those who had business ideas to participate in specialized training and business Competition, which aimed to support the beneficiaries to get opportunities for access to finance/seed funds to either start new businesses informed by innovative business ideas/models or expand already existing businesses. The youth centres also supported and absorbed learners who dropped out from very early stages of education.

When learners returned to school after the pandemic, most of the children from disadvantaged homes lagged in numeracy and literacy, and they required remedial support. An education official had this to say:

> *"When learners came back from school after Covid, they needed a remedial approach to bring them back to the studying mood. It was a kind of redressing, guidance and counselling to bring them back into the line of studying."*
>
> ***KII, MINEDUC official***

Prior to the remedial learning programme, negative social norms and cultural practices discouraged the participation of girls in education. They were viewed as less important than boys and were relegated to domestic chores. The following was said in Nyagatare:

> *"The programme, both at youth centre and schools, has accommodated children from poor families and those that are from conflicted families. Such children usually perform poorly because of the home environment. Getting the chance to enrol in the programme contributes a lot to the performance of marginalized learners. In youth centres the programme has also adapted to the need of people with disabilities. We have identified 12 students with disabilities, most of them in upper primary level."*
>
> ***KII, Headteacher, Nyagatare***

Before the programme began, teachers had limited capacities to support learners who lagged behind or to provide gender-responsive learning environments.

EQ1.3 - To what extent have contextual changes particularly at policy level affected the relevance of the education remedial programme?

Overall, the remedial education programme was relevant: **Remedial education interventions are relevant to the National Education Policy (2003) and the ESSP:** Some objectives of the education policy link well with the remedial education intervention. The policy objectives include the need to promote science and technology with special attention to ICT and to eliminate all obstacles leading to disparities in education. The education policy provides for education stakeholders to closely monitor the performance of girls and other vulnerable groups at all levels and take necessary measures. Girls and other vulnerable groups are encouraged to participate in technology-related fields. It also calls for the sensitization of the parents, teachers and communities to monitor girls and other vulnerable groups' participation and performance in education.[8] The remedial learning intervention contributed to four out of nine priority areas of the **ESSP.** These included Priority 1 on enhanced quality learning outcomes; Priority 2 on strengthened continuous professional development and management of teachers across all levels of education in Rwanda; Priority 4 on enhanced use of ICT and Priority 7 on equitable opportunities for all Rwandan children and young people at all levels of education. The relevant outcomes included 1.1 All learners achieve basic levels of literacy and numeracy in early grades and beyond; 1.2 All school teachers have appropriate levels of skills and competencies to deliver the curriculum; 4.1 ICT is strengthened across all levels of education; and 7.1 Ensure gender parity in participation and achievement at all levels of education. The evaluation results suggest the remedial education interventions contributed to the realisation of the Rwanda Education Policy and Strategy Framework.[9]

EQ1.4 - To what extent and how have remedial education interventions been adapted to meet the needs of learners from the most marginalized backgrounds?

Consultations with MINEDUC stressed the relevance of the remedial learning programme and the fact that it was integral to MINEDUC priorities. The programme served both learners who had dropped out of school and those affected by the negative impacts of Covid-19. One MINEDUC official noted that when such learners returned to school, they had fallen behind in literacy and numeracy. The programme was thus designed to improve learning outcome for learners in Rwanda, especially marginalized girls.[10] The programme also included skills development for girls who had dropped out of school; learners with disabilities were also included. It was highlighted that it was common in the region for girls to start late and for learners from marginalized poor families to lag behind, making remedial and catch-up programmes of this nature very relevant. The Rwanda GEP therefore contributed to programmes supported by UNICEF in Eastern and Southern Africa.

[8] Republic of Rwanda, Ministry of Education, Science Technology and scientific Research (2003) Education Sector Policy.
[9] Republic of Rwanda, Ministry of Education (2018) Education Sector Strategic Plan 2018/19 to 2023/24.
[10] Interview with a senior education official from the Ministry of Education Rwanda

5 COHERENCE

EQ1 - To what extent is the remedial education programme addressing gender and equity? How have the rights of children with disabilities been consistently integrated in all aspects of programming and implementation?

At national level the GEP is fully aligned with national priorities. The programme has contributed positively to the implementation of the ESSP, specifically around i) enhanced quality of learning outcomes relevant to Rwanda's social and economic development; ii) strengthened continuous professional development and management of teachers across all levels of education in Rwanda; iii) enhanced use of ICT to transform teaching and learning and support the improvement of quality across all levels of education in Rwanda; and iv) equitable opportunities for all Rwandan children and young people at all levels of education.

The coherence section had one main question and four sub-questions:

EQ1.1 - To what extent has the remedial education programme contributed to the consideration of human rights, leaving no-one behind, and gender equality in the national education system?

Gender equity, consideration of human rights and leaving no-one behind are of utmost importance in the national education system. The evaluation revealed that the programme had used in-service training to give teachers gender-sensitive pedagogy skills. Teacher mentors had received training on gender-responsive pedagogy. At endline 60 per cent were receiving continuous coaching and mentoring in gender-responsive pedagogy compared to 55 per cent at baseline. Some 51 per cent of female teachers and 49 per cent of male teachers were trained in gender-responsive pedagogy. Twenty-one children with disabilities were enrolled in the remedial programme. The programme enrols all children (without discrimination); by particularly targeting the lowest-performing 20 per cent of children, the programme is adhering to the leave no-one behind approach.

EQ1.2 - How has the remedial education programme contributed to the government positioning and internal coherence in education system in Rwanda, and what have been the strengths of the programme in comparison to previous similar programmes?

Regarding the government positioning and internal coherence of Rwanda's education system, the SBM programme has been adopted and scaled up by MINEDUC through REB. The National School-Based Mentorship Programme appoints one teacher as a mentor at every school in Rwanda. These SBMs are responsible for supporting and training their colleagues through in-service teacher development. UNICEF supports the capacity development of the SBMs to ensure they have the necessary knowledge and skills to provide continuous support.

Guidelines were developed to ensure a systematic, coherent and harmonized approach to the management of the remedial programme in public schools (REB, 2021). Ministerial Instruction Order No 002/21 of 27/07/2021 (determining the modalities for the management of school timetable) identified three essential elements: a single shift, remedial classes for slow learners and teachers' continuous professional development. One KII acknowledged this as follows:

> *"Most of the programmes to support girls' education are in line with national development priorities for supporting the girl child. We have the girls' education policy to improve the lives of children. If we can compare girls and boys, we could see that women were still lagging, government priority was therefore to improve the situation of women and UNICEF contributed by improving education of disadvantaged learners, especially girls".*
>
> ***KII, MINEDUC***

The endline evaluation of the GEP shows that UNICEF, in collaboration with the Imbuto Foundation, has successfully established 150 remedial clubs in the 150 target schools in line with the MINEDUC instruction. The target schools also have SMBs to build in-service teacher capacity. The endline

evaluation concludes that the implementation of the programme is fully aligned to both global and national education policies and programmes, so the coherence of the programme is therefore rated **achieved.**

EQ1.3 - Have the coordination and governance mechanisms of the remedial programme added value to other coordination mechanisms for existing education initiatives and more broadly?

There were strong coordination and governance mechanisms for the remedial education programme: coordination mechanisms included UNICEF, the Imbuto Foundation, MINEDUC and REB. Coordination of the programme also involved district-level education officials to monitor programme performance. This approach has built strong foundations for sustainability. There is also strong buy-in of national institutions. Within the education sector, proactive measures are already being taken to develop ministerial instructions to govern the comprehensive assessment, promotion, repetition and transfer of learners within the education system. They are designed to establish standard procedures and modalities for comprehensive assessment in both general basic education and technical and vocational education and training across various levels. The instructions will encompass methods for supporting learners in improving their learning outcomes and performance in examinations and other assessments. They will also set clear benchmarks for assessing when learners should progress from one grade or level to the next. Modalities for promotion, repetition and learner transfers between schools will also be outlined within these instructions.

6 EFFECTIVENESS

QN 1 – How adequate is the remedial education programme rolled out with the support of the UNICEF and stakeholders with respect to meeting the needs of most marginalized girls, and what are the major influencing factors?

6.1 Access to structured remedial learning opportunities

Output 1: Girls have increased and sustained access to structured remedial learning opportunities.

6.1.1 Finalization of the remedial programme in schools and youth centres

The first sub-strategy of Output 1 was to finalize and model a remedial learning programme in schools and youth centres. The programme started in January 2020 and is a two-year curriculum. Girls were identified in P4 from the lowest percentile of their class (in terms of learning outcomes) to participate in the remedial learning programme. The programme was planned to operate for six hours per week with schools scheduling the classes as appropriate. The original 50 pilot schools integrated ICT into teaching and learning, to provide varied learning opportunities to meet the students' unique needs and improve learning outcomes. The initial pilot indicated the low capacities of students and teachers in using ICT. The ICT applications (apps) were loaded into tablets as part of the learning process. Apps were tracked for usage, monitoring and evaluation purposes.[11] Key achievements and challenges/gaps are described below.

[11] Ibid

Key achievements: At endline 94 per cent of the learners in the treatment group reported being aware of and having access to the remedial learning programme, while 8 per cent from the control group were aware of the programme: There was a marked increase in learners having access to structured remedial opportunities. The continual rise from baseline through midline to endline of the proportion of learners reporting having access to structured remedial learning is evidence of sustained access. Figure 4 shows the proportion of learners reporting to have access to the remedial learning programme.

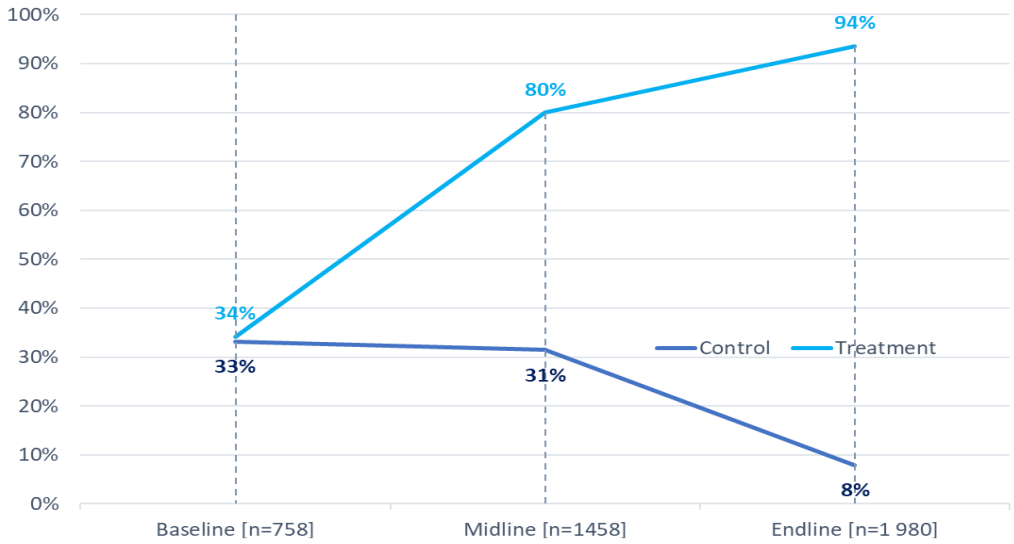
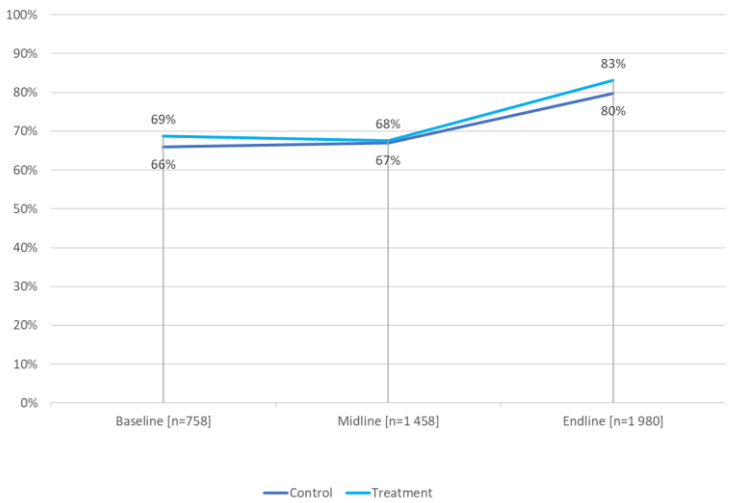


Figure 4: Proportion of learners who are familiar with remedial curriculum/clubs and participating in the remedial curriculum classes or clubs.

There has been a great improvement in accessing remedial learning programme from a baseline of 34 per cent to 94 per cent at endline. Facilitating factors included political commitment, parental involvement and community awareness of the negative social norms inhibiting girls' access to education.

Some 83 per cent of learners from the treatment group reported that marginalized girls were able to access the remedial learning programme: This is a significant improvement from the baseline statistic of 69 per cent who reported that girls were having access to education. (The figure had fallen by the midline, due to pandemic-related disruptions to education). Figure 5 shows the proportion of learners reporting that marginalized girls were accessing education at baseline, midline and endline.

Figure 5: Learners reporting marginalized girls having access to education.



Facilitating factors for improved access to education by marginalized girls included a community mobilization drive that had identified girls who had dropped out of school (mainly due to Covid) to return to school. The remedial clubs also provided an avenue for the lowest-performing percentile to receive concentrated attention on improving numeracy and literacy.

6.1.2 Improved learning outcomes (EGRA/EGMA)

Improved learning outcomes: Almost all (98 per cent) learners in the treatment group who participated in the remedial classes or clubs reported that they had improved their learning outcomes. The majority (96 per cent, n=1,000) of parents with their children in the remedial classes reported that the child's performance in school exams had improved since starting remedial classes/clubs. Results show that 96 per cent of learners in the remedial learning programme reported having improved in both numeracy and literacy. This showed that the GEP has made an impact on numeracy and literacy for the treatment group who were lagging behind in these learning outcomes. Most learners had also improved their gender empowerment skills (96 per cent) and metacognitive skills (95 per cent) due to the introduction of the remedial learning programme. Figure 6 shows the proportion of children reporting improvements in learning outcomes at endline.

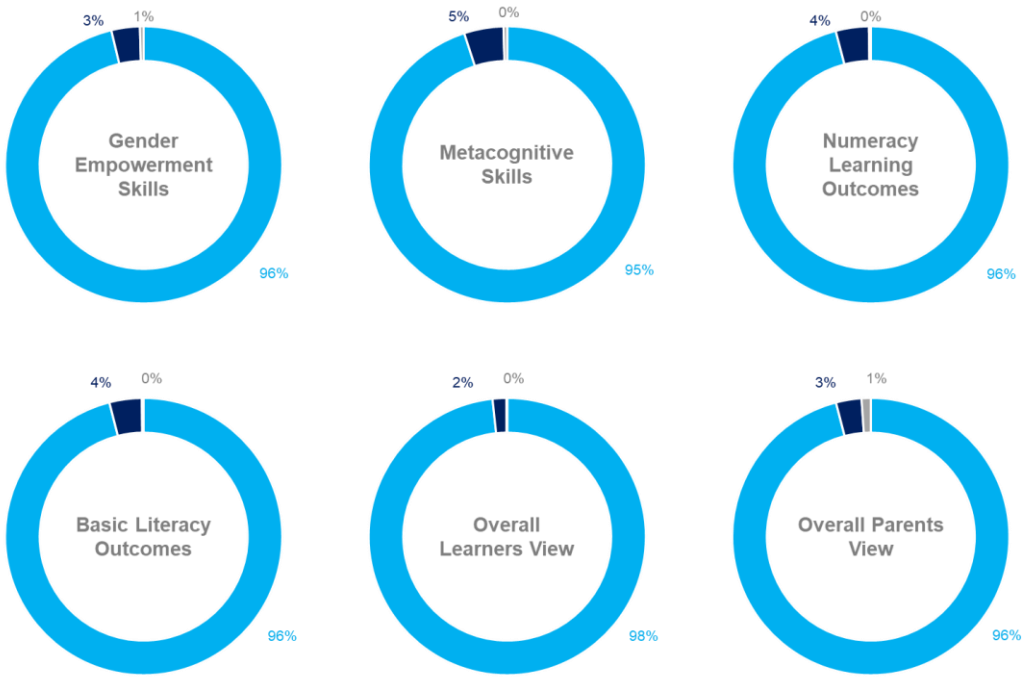


Figure 6: Proportion of those in the treatment group who reported an improvement after participating in the remedial classes (at endline).

The learners were highly motivated to learn, particularly when using ICT tools. Teachers gave adequate attention to all children irrespective of sex (demonstrating the use of gender-sensitive pedagogical skills). Feedback from learners also demonstrated that most of them were performing well and graduating to the upper 30 per cent in the class. Girls also showed increased personal confidence and believed they could outperform boys. The following quotations show positive results around learning outcomes.

> *"My personal view is that the remedial programme has helped low-performing children improve their performance in class and it made the community believe the importance of going to school".*
>
> ***KII, Headteacher, Nyaruguru***

"I saw change in my child. She was now motivated in learning. She is now open-minded. She comes at home and revises her materials. Her grades have also improved. She used to be number 20 plus but now is at number 15".

FDG, parent, Rubavu

Literacy learning outcomes in project schools improved: aggregate scores show that all learners in both treatment and control groups had made statistically significant improvements in literacy since baseline.[12] Both the treatment and control performed comparably the same on aggregated literacy scores with a slight comparable learning loss (1 per cent) from midline to endline.

[12] ***Comparison:*** t_{obt} (302) = -43.234, p = .000 / ***Treatment:*** t_{obt} (417) = -40.659, p = .000
[12]t_{obt} (721) = 1.059, p = .290

Table 4: Literacy summary for baseline (B), midline (M) and endline (E) – all figures are percentages.

	DIMENSIONS	COMPARISON			TREATMENT		
		B	M	E	B	M	E
LITERACY	**Average score**	14	60	59	14	57	56
	Score difference (percentage points)	46	-1		44	-1	
	The proportion of learners in each proficiency level						
	Not met benchmark	5.7	0.1	0.3	18.8	1.1	0.9
	Partially met benchmark	89.0	11.4	7.5	75.1	19.0	11.3
	Met benchmark	5.3	75.5	82.1	6.2	70.5	78.9
	Exceeded benchmark	-	12.9	10.2	-	9.4	9.0

At endline, there was no significant DiD between the treatment and comparison schools.[13] However, from midline, learners exceeding the benchmark emerged in both conditions, with the treatment learners having significantly more improvement than comparison learners.[14] The performance of boys and girls within each condition at midline and endline was not significantly different between the treatment[15] and comparison learners.[16] However, unlike at midline where there were no girl-girl and boy-boy differences, the final evaluation reveals a significant difference in girl-girl performance, with girls in treatment schools showing significant improvement[17] compared to the control girls. Boys' performance was the same for both treatment and comparison learners.[18] Table 5 provides the girl-girl/boy-boy overall DiD midline-endline comparison for literacy.

Table 5: Girl-girl/boy-boy overall DiD in terms of literacy.

	CONDITION	N	MEAN (E-M)	DiD (T - C)	LEVENE'S TEST FOR EQUALITY OF VARIANCES-SIG.	INDEPENDENT SAMPLES T TEST-SIG.
Boys	**Comparison**	242	-5.09%	3.09%	.076	.117
	Treatment	260	-2.00%			
Girls	**Comparison**	750	-3.71%	2.75%	.012	.020
	Treatment	741	-0.96%			

It can be concluded that girls in the treatment schools made significantly greater improvements in literacy than their female counterparts in the control schools.

Literacy proficiency: The proportion of learners not meeting the benchmark has decreased since baseline, with a significant change for treatment schools (18 per cent reduction in learners not meeting the benchmark at midline and below 1 per cent at endline). The control schools still have significantly[19] higher levels of proficiency since midline,[20] but it was observed that the proportion of treatment learners in the 'met and exceeded benchmark' (88 per cent) category had improved by 8 percentage points from midline to endline (compared to 4 percentage points for the comparison learners).

[13] t_{obt} (721) = 1.059, p = .290
[14] t_{obt} (1991) = -2.772, p = .006
[15] t_{obt} (999) = -.585, p = .559
[16] t_{obt} (462) = -.946, p = .345
[17] t_{obt} (1489) = -2.325, p = .012
[18] t_{obt} (500) = -1.555, p = .117
19($\chi 2(3, N = 1994) = 12.037$, p=. 007)
20($\chi 2(3, N = 2027) = 35.042$, p=. 000)

Table 6: Proportion of overall literacy – all figures are percentages.

CONDITION		PROFICIENCY IN LITERACY				Met and exceeded benchmark	Diff (E-M-B)
		Not meeting benchmark	Partially met benchmark	Met benchmark	Exceeded benchmark		
Endline	Condition						
	Comparison	0.3	7.5	82.1	10.2	92.3	3.9
	Treatment	0.9	11.3	78.9	9.0	87.9	8.0
	Average	0.6	9.4	80.5	9.6	90.1	E-M
Midline	Condition						
	Comparison	0.1	11.4	75.5	12.9	88.4	83.1
	Treatment	1.1	19.0	70.5	9.4	79.9	73.7
	Total	0.6	15.2	73.1	11.1	84.2	M-B
Baseline	Condition						
	Comparison	5.7	89.0	5.3	-	5.3	
	Treatment	18.8	75.1	6.2	-	6.2	
	Average	13.3	80.9	5.8	-	5.8	

There is an improvement from the midline where a higher proportion (90 per cent) of the learners meet the benchmark. It is important to note that control schools had a lower proportion of learners not meeting the benchmark (less than 6 per cent) than the treatment schools (almost 19 per cent) at the baseline – control schools had significantly better proficiency than the treatment schools.[21] Since midline,[22] the proportions of learners in treatment schools who meet and exceed benchmark categories have significantly improved. The fact that, at midline and endline, treatment and control learners are performing at comparable levels is a testament to programme effectiveness for treatment learners, especially considering the difference in performance recorded at baseline.

Assessment of foundational skills: Both the treatment and control learners demonstrated increasing reading fluency and accuracy of reading of both single words and prose. **At endline, girls in the treatment group were able to read an average of 67 correct words per minute, an increase from 52 words per minute at midline.** This contrasts with control girls who read at an average speed of 76 correct words per minute, an increase from 54 words per minute since midline. At endline, treatment boys read an average of 70 words per minute, an improvement from 53 words per minute since midline. Control boys recorded an average of 81 words per minute, having improved from 54 words per minute since midline. This concurred with feedback from headteachers and teachers. A teacher from Nyabihu had this to say:

> *"In a sample of 20 students, 18 can read and write well..."*
>
> ***KII, Teacher, Nyabihu***

School records also showed significant improvement of learners since 2020. About 31 per cent of learners in the treatment schools had improved their English scores compared to only 3 per cent whose scores had increased in the control schools.

As of 2023, about one in every two treatment learners (52 per cent) had scores above 50 per cent, a 12 percentage-point increase since 2020. Control learners had a 7 percentage-point increase (from 49 to 58 per cent), giving a 5 per cent DiD in favour of the treatment learners. **Error! Reference source not found.Numeracy learning outcomes in project schools improved:** Numeracy of treatment learners

[21] $\chi^2(3, N = 721) = 26.995$, $p = .000$ - Chi-square for independence
[22] ($\chi^2(3, N = 2027) = 35.042$, p=. 000)

improved from a difference of 17 percentage points at baseline to a 12 percentage point difference at endline – the GEP had improved the numeracy learning outcomes for learners in the project districts. The score difference of the control learners remained unchanged at 12 percentage points. Despite similar range of improvement, control learners were found to have significantly higher scores than treatment learners at endline.[23] Table 7 provides a summary of the numeracy rates between comparison and treatment learners from baseline to endline.

Table 7: Numeracy output table for baseline (B), midline (M) and endline (E) – figures are percentages.

	DIMENSIONS	COMPARISON			TREATMENT		
		B	M	E	B	M	E
NUMERACY	Average score	59	70	82	50	67	79
	Score difference (percentage points)	12	12		17	12	
	The proportion of learners in each proficiency level						
	Not met benchmark	-	-	-	0.3	-	-
	Partially met benchmark	19.5	4.3	-	33.2	7.3	0.9
	Met benchmark	69.5	63.7	25.9	58.4	68.8	30.9
	Exceeded benchmark	11.0	32.0	74.1	8.1	24.0	68.2

The numeracy DiD between the treatment and control group from midline to endline was 2.15 per cent and statistically significant[24] in favour of treatment schools. This followed the baseline to midline DiD of 5.41 per cent, also statistically significant,[25] in favour of treatment schools. **Therefore, learners from treatment schools made significantly more improvement in numeracy than those in control schools.**

Table 8: Overall comparison in numeracy DiD

	CONDITION	N	MEAN (E-M)	DiD (T - C)	LEVENE'S TEST FOR EQUALITY OF VARIANCES-SIG.	INDEPENDENT SAMPLES T TEST-SIG.
DiD	Comparison	992	10.74%	2.15%	.115	.011
	Treatment	1001	12.88%			

Further exploration to find midline-endline girl-girl and boy-boy differences revealed that treatment girls had improved significantly more than control girls.[26] This was also the case with baseline-midline comparisons.[27] Boys' performance had a comparable difference. Table 9 shows the girl-girl/boy-boy overall DiD comparison for numeracy.

Table 9:Girl-girl/boy-boy overall DiD comparison for numeracy.

	CONDITION	N	MEAN (E-M)	DiD (T - C)	LEVENE'S TEST FOR EQUALITY OF VARIANCES-SIG.	INDEPENDENT SAMPLES T TEST-SIG.
Boys	Comparison	242	11.91%	-1.48%	.591	.355
	Treatment	260	10.43%			
Girls	Comparison	750	10.36%	3.38%	.143	.001
	Treatment	741	13.75%			

The significant difference between control and treatment noted above can be traced to only the difference for the girls – control boys and treatment boys had made more or less the same

[23] t_{obt} (1993) = 4.959, p = .000
[24] t_{obt} (1981) = -2.558, p = .011.
[25] t_{obt} (655) = -2.454, p = .014.
[26] t_{obt} (1478) =-3.444, p = .001.
[27] t_{obt} (494) =-2.526, p = .012.

improvements in their numeracy while treatment girls had made significantly larger improvements than control girls.

School records of maths scores also revealed significant improvement by learners since 2020. About 31 per cent of learners in the treatment schools had improved their math scores compared to about 3 per cent of learners in comparison schools (similar to the pattern seen in the literacy scores).

Table 10: Changes in maths scores since 2020

Period		**2021–2022**		**2022–2023**	
Average maths scores	Maths score 2020/21	Maths score	Increase from 2020 (percentage points)	Maths score	Increase from 2020 (percentage points)
Comparison	45.6%	46.8%	1.2	48.3%	2.7
Treatment	44.9%	48.3%	3.4	48.8%	3.9
Proportion of learners with improved scores when compared to year 2020					
Comparison		2.7%		2.7%	
Treatment		31.9%		30.6%	
Proportion of learners with marks equal to and above 50%					
Period		2020–2021		2021–2022	2022–2023
Comparison		52.7%		51.4%	47.3%
Treatment		37.8%		44.3%	48.2%

As of 2023, 48 per cent of treatment learners had scores above 50 per cent, a 10 percentage-point increase since 2020. Comparison learners had a 6 percentage-point learning loss (from 53 per cent in 2020 to 47 per cent in 2023). This gave a 16 percentage-point DiD in favour of the treatment learners.

Officials from Kayonza District reported a 31 per cent increase in primary school numeracy from baseline to endline. The endline evaluation shows a 31 per cent increase in both numeracy and literacy scores. This shows that the interventions of the GEP were effective, but these results should be attributed not only to remedial education but also to other programmes such as school feeding and the availability of school libraries at lower primary level.

It was found that **competition induced learners to study more**. Learners highlighted that they used to spend most of their time watching TV at home but now, due to the competitive nature of the programme, they use the time for revision. FGDs with female learners demonstrated beyond doubt their enthusiasm and love for school. They shared examples demonstrating positive learning outcomes. The following are the voices of the learners:

> *"Remedial is useful because you have more time to revise and ask questions. For me actually, I was 20 in my class but after the programme I have improved to number 16."*
>
> ***FGD, female learner, Rubavu***

> *Remedial helped me to start revising at home because before I was not doing that. I used to be 27th in class, but last term I became 10th.*
>
> ***FGD, female learner, Nyagatare***

The female learners understood that remedial students may not grasp all concepts during the normal class period – they would require additional time to appreciate the concepts. In one school, female learners demonstrated the desire to support each other, particularly those who missed school on Saturdays for religious reasons.

"Usually, we do remedial on Saturdays 9 am. But we have some students who are Adventists and are not able to come on Saturdays. We then formed groups where we come back on Sunday to help those who could have missed the Saturday lessons. This is a student arrangement. The teacher will not be available on Sunday as such we explain to others what the teacher taught on Saturday".

FGD, female learner, Rubavu

The children showed the desire to carry everyone along with them. Most of the learners explained how they tried as far as possible to help one another, those with better understanding explaining issues to their peers. The clubs have created a spirit amongst the learners of working together.

The proportion of learners in the treatment group who reported using ICT in remedial classes increased by 60 percentage points (from 12 per cent at baseline to 72 per cent at endline): The use of ICT and supportive infrastructure was an enabling factor to improvements in learning outcomes. It is government policy that ICT be integrated into remedial education, but ICT should not be seen as a standalone component but rather it should be integrated into all aspects of learning. ICT was embedded in the programme to provide further support to the learning process. Its use was further strengthened through the mapping of open-source apps that support mathematics and English-language development as well as gender equity and life skills. This involved matching lessons with the remedial programme – the paper-based curriculum was complemented by a suite of open-source apps that support literacy and numeracy. The open textbook library was the most popular open-source application among the learners. Analysis of findings highlighted that the use of ICT helped enhance learning outcomes. Children used tablets to search for solutions using Google, for reading texts and looking for past national examination papers.

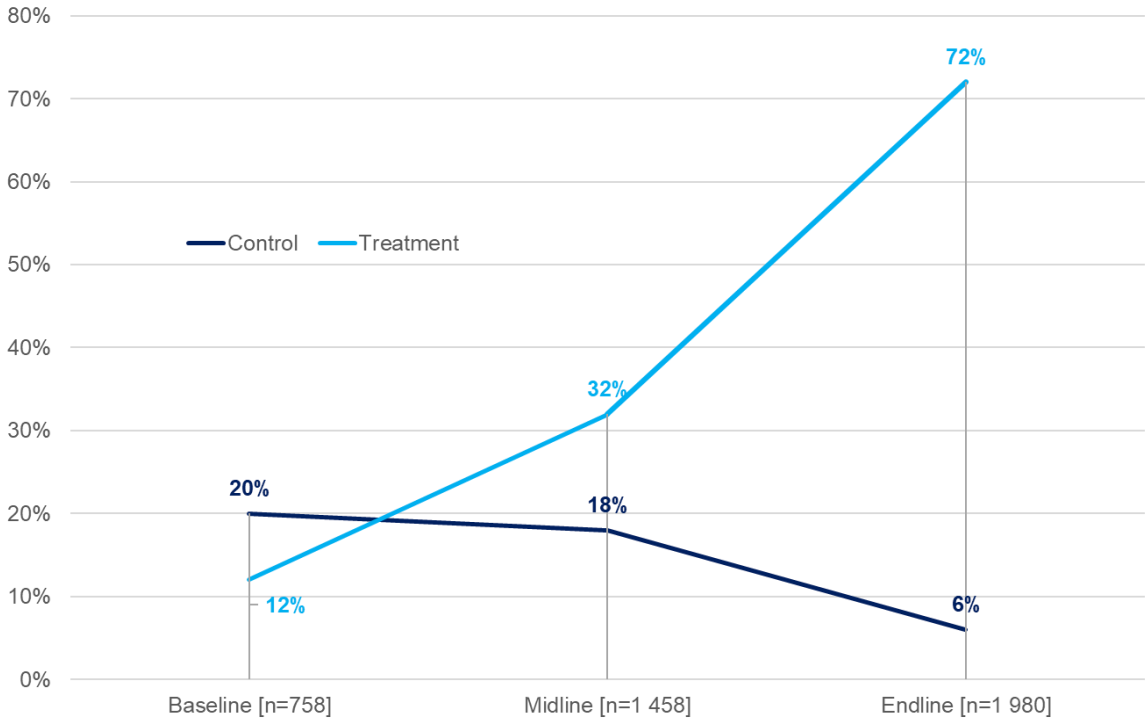


Figure 7: Proportion of learners reporting using ICT in remedial learning.

The following learners had this to say:

> *"There are many apps that we use and are working well to include Facebook, Yahoo, Google, ask.com and YouTube and they are easy to use".*
>
> ***FGD, female learner, Nyagatare***

> *"We use different apps. We learn how to write letters or messages, send or save them on computer. We can open and continue from where we left. We learn how to draw images and edit it. Sometimes when we see English words we do not understand, we search on Google and it reads for us. We improve our pronunciation and English".*
>
> ***FGD, male learner, Rubavu***

Due to the introduction of ICT, children learnt teamwork and how to collaborate in groups. The remedial learning programme aimed to have a total of 15 apps by the end of the programme – at endline the programme had introduced 12 apps which had been uploaded to the learners' tablets and were already in use. Table 10 lists the apps introduced by the GEP, the content areas and the respective grade level for learners.

Table 11: Applications introduced by UNICEF.

Application name	Developer	About	Content areas	Grade level
KinaUmenye	IDEMBE Ltd	Educational application to improve numeracy, literacy and gender skills for P4-5 children in Rwanda.	Literacy and numeracy	P2-P5
First Grade Math Free	Boriolapps	Maths practice: counting, addition, time, subtraction, geometry, fractions and money	Numeracy	P1-P2
Kid's Fun and Learn	Vinay Shelar	English, maths, grammar	Literacy and numeracy	P1-P3
English for Kids	Keepme	English basics	Literacy	P1-P2
Math Kids	RV AppStudios	Maths practice: addition, subtraction, division, multiplication	Numeracy	P3-P5
Word Search	Wordloco	Game for vocabulary and spelling	Numeracy	P2-P5
Number Line Fractions	Softschools	Fraction practice	Numeracy	P4-P6
English	Bravolol	Learning English phrases	Literacy	P4-P6
Spell and pronounce	Buildroid Apps	Spelling and pronunciation app	Literacy	P3-P6
Kids Learn to Read Lite	Intellijoy	Reading story app	Literacy	P4-P5
Bini Super ABC	Bini Bambini	Alphabet and reading basics	Literacy	P1-P2
Learn Food English	Muratos Games	Food vocabulary	Literacy	P3-P5

These apps were approved by MINEDUC and shared with teachers. The apps can also be uploaded to other computers for those schools with computer laboratories.

"Normally, kids are attracted to ICT and electronic gadgets. If you include it in learning, children are more engaged. Learning by means of devices that attract and fascinate them contributed to the strength of the programme."

KII, District Education Officer, Nyabihu

Youth centres absorbed girls who dropped out of school to enrol in vocational trades: Some of the girls who had dropped out of school were enrolled in youth centres. Those who enrolled in vocational skills training have succeeded and most are now employed. The remedial programme raised self-confidence in girls, especially teen mothers. An analysis of results from all five youth centres showed a variety of trades including carpentry, welding, tailoring and hairdressing. The centres were also equipped with ICT classrooms and, as with schools, the learners had access to tablets. Female learners at youth centres indicate that they used tablets for marketing purposes. Courses were chosen for dropout girls in accordance with their level of education. Those who dropped out early with limited mathematical and literacy skills were supported with vocational trades which did not demand high levels of literacy. Some of the success factors of the youth centres were attributed to the good relations between youth centres and implementing partners and leaders. The strong collaboration made the remedial education programme successful.

Feedback from both remedial learning schools and youth centres showed the inclusion of learners with disabilities: The head of a youth centre in Rubavu noted that a significant number of children with disabilities had passed through their institution and graduated. They had all the materials required for supporting the children including those with visual impairments. The school is in Kayonza and accommodates children from other districts. The following is an interview with the head of a youth centre in Nyaruguru:

"We have a student with disability in our youth centre. She did a course in tailoring. She used to spend most of her time on the internet looking for job opportunities. She applied for jobs from this centre and now she is employed in Muhanga District".

KII, Youth Centre Leader, Nyaruguru

High political commitment from the Government for remedial learning: REB worked closely with district offices and schools and circulated remedial learning guidelines on 3 October 2021. The guidelines covered the key principles of the remedial programme, when to start a remedial programme, incorporating the remedial programme into the school timetable, target subjects, time allocated to the remedial programme, identifying learners in need of remediation, remedial strategies, number of learners to be enrolled, assessing progress and the role of parents.[28]

6.1.3 Strategy of remedial education at the national level

The second strategy for Output 1 included scaling up the remedial programme within the national educational system. This entailed UNICEF working directly with MINEDUC and REB.

The programme also has strong sustainability aspects. Table 12 is a template for the results framework and targets for Output 1 and the overall grading.

[28] REB (3/10/2021) Transmission of remedial education programming guidelines for classroom implementation 2021.

Table 12: Output 1 Results

Output 1: Girls have increased and sustained access to structured remedial learning opportunities				
	Baseline (2019)	Target (2023)	Endline 2023	Rating
# of children reached through remedial education	2,500	10,500	25,960	●
# of apps used to support learning	0	15	12[29]	●
% of apps used on a weekly basis	0	50%	80%	●
% of schools still operating the remedial curriculum after 2 years	0	80%	100%	●

Key ● ACHIEVED ● PARTIALLY ACHIEVED ● NOT ACHIEVED ● PENDING DATA

OVERALL RATINGOUT OUTPUT 1:

● ● ● ● ● ● ● ● ● ● ACHIEVED

6.2 Teacher capacities for quality learning

Output 2: Teachers have strengthened capacity to provide quality learning in gender sensitive environments.

6.2.1 In-service teacher training

Planned programme design: The GEP aimed to use in-service training for teachers on the remedial education programme. This was aligned with the national priorities outlined in the ESSP as it strengthened continuous professional development and the management of teachers across all levels of education. Two teachers from each school implementing the remedial education programme were to receive in-service training to improve pedagogical approaches, gender sensitivity and inclusiveness in the classroom.

Key findings

The majority of teachers in the remedial learning programme had received in-service training: Initially, the programme did not include headteachers, but at midterm headteachers shared their concern that they were finding it difficult to supervise remedial teachers. The programme therefore began training headteachers and they are now capacitated to support remedial education in their schools. Imbuto already had relevant training manuals which had been used during the pilot period in 2017. Teachers were trained on gender-sensitive pedagogy and creating gender-sensitive classroom environments. In the project districts, 462 teachers were trained and have improved capacities. The following headteacher from Nyaruguru had this to say:

> *"On the remedial programme, teachers were trained about teaching children lagging behind. Teachers focus on gender through repetitive training. Before all leaders in the class were boys but now girls are leaders too. Seating arrangement used to be by sex, but now they can sit together."*
>
> ***KII, Headteacher, Nyaruguru***

[29] Report shared from UNICEF

Up to 78 per cent of the teachers in the treatment schools had received in-service training to improve pedagogical skills and provide inclusive school environments at endline: At the onset of the programme, it was observed that teachers and school heads could not create gender-sensitive and inclusive school environments. This has been attributed to the persistence of traditional gender norms in schools. At endline, 53 per cent of the teachers in the control group reported that they had received training in pedagogical skills and inclusive education. These teachers highlighted that some of the training was offered outside the GEP by other development partners. Figure 11 shows the proportion of teachers who received in-service training to improve pedagogical skills and provide inclusive school environments.

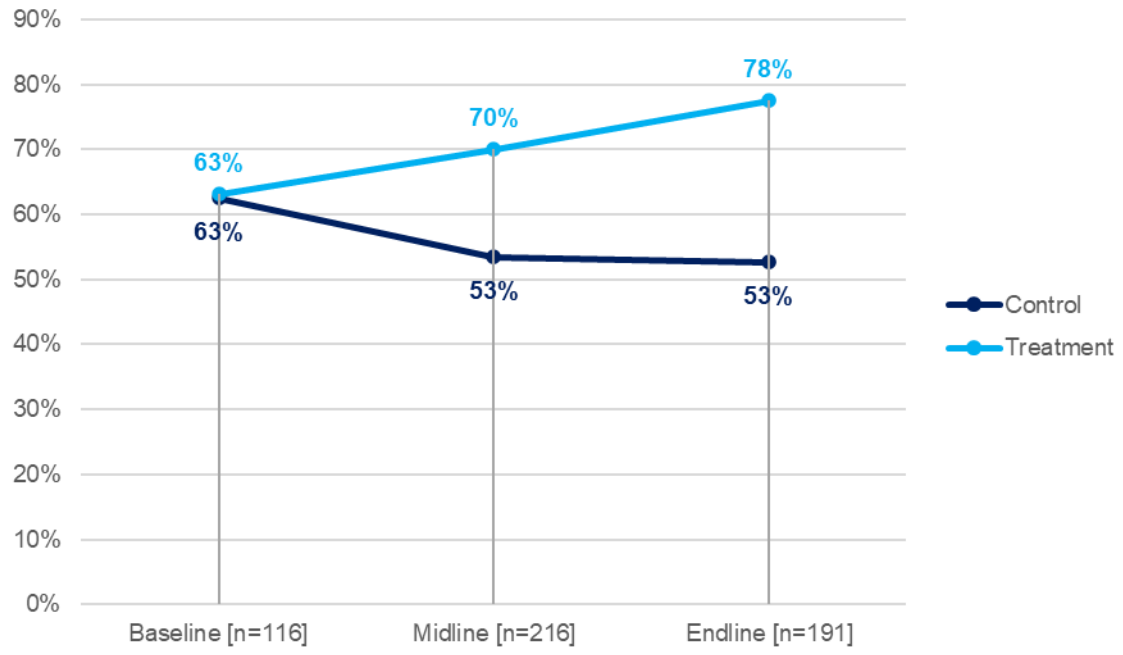


Figure 8: Proportion of teachers receiving in-service training.

Remedial teachers in the project schools in all districts reported to have received the training. This has seen an added value in terms of teacher capacity and contributed immensely to the effectiveness of programme delivery.

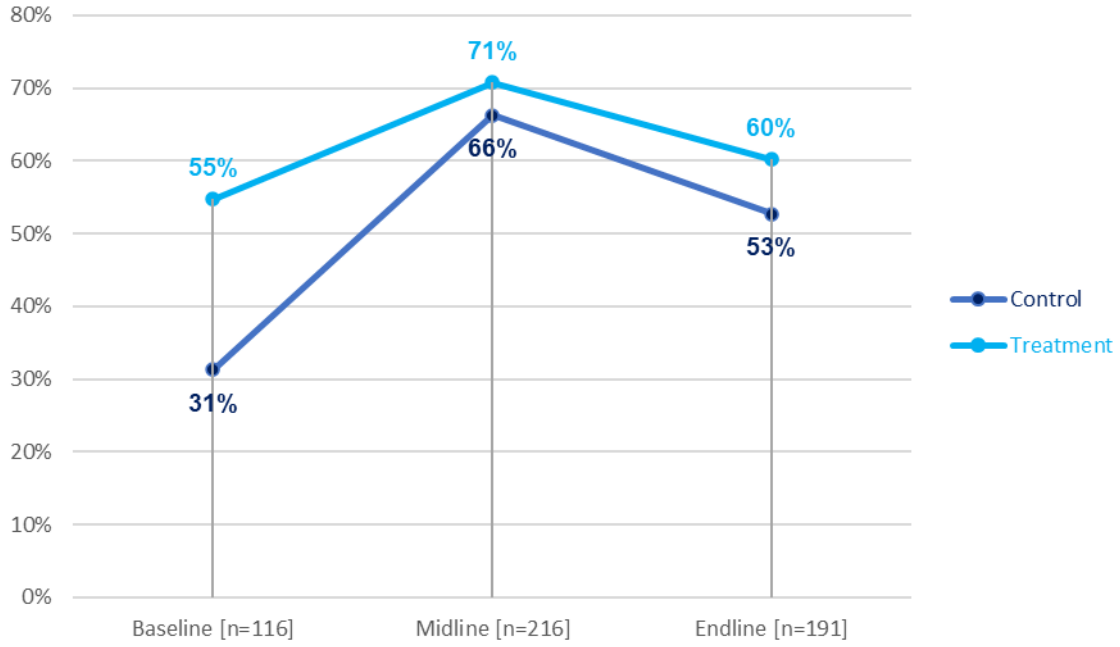


Figure 9: Proportion of teachers receiving continuous coaching and mentoring.

The SBM programme to complement the capacities of teachers has proved effective at endline: The National School-Based Mentorship programme appoints one teacher as a mentor at every school in Rwanda. These SBMs are responsible for supporting and training their colleagues through in-service teacher development. UNICEF supported the capacity development of the SBMs to ensure they have the necessary knowledge and skills to provide continuous support.

Overall, the evaluation found that the capacities of teachers around gender-sensitive pedagogy had been enhanced through in-service training. This improved the quality of learning for those in the remedial classes.

6.2.2 Pre-service teacher training

Planned programme design: The sub-strategy on pre-service training entailed building the capacities of tutors (professors) at TTCs to ensure that all graduating teachers had the necessary skillset to provide gender-sensitive learning environments and deliver the remedial curriculum. The tutors were to be trained over one week throughout the year.

Training in TTCs was part of the project design, but the teachers only received training towards the end of the programme: The programme activities for TTC were implemented towards the end of the project. Interviews with tutors at TTCs highlighted that training was received on gender-sensitive pedagogy in 2023 at all TTCs in Rwanda. The following is an excerpt from an interview:

> "At TTC level we trained on gender-sensitive pedagogy in all TTCs in Rwanda. They would share their knowledge with student teachers."
>
> **KII, Tutor, TTC**

Table 13 is a template for the results framework and targets for Output 2 and overall rating.

Table 13: Output 2 Results

Output 2: Teachers have strengthened capacity to provide quality learning in gender sensitive environments.				
	Baseline (2019)	**Target (2023)**	**Endline 2023**	**Rating**
# of teachers trained at in-service in gender-sensitive pedagogy	100	300	462[30]	
# of tutors trained at TTCs in gender-sensitive pedagogy	0	240	299	●
% of teachers and school leaders demonstrating improved knowledge and skills on gender-sensitive and adolescent-friendly pedagogy	0	300	1383	●

Key ● ACHIEVED ● PARTIALLY ACHIEVED ● NOT ACHIEVED ● PENDING DATA

OVERALL RATINGOUT OUTPUT 2:

● ACHIEVED

6.2.3 Teacher interactions with learners

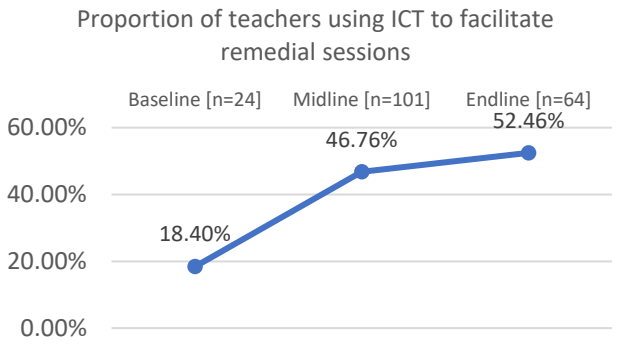
Since midline, it was established that teachers across the treatment-control divide were generally perceived as friendly, approachable, calm and patient. Only one per cent (a decrease from three) treatment schoolteacher was observed to harass, intimidate, tease or shout in their interactions with learners. A slightly higher proportion (7.5 per cent) of teachers in the comparison schools were observed harassing, intimidating, teasing, or shouting at their learners.

[30] Interview with Imbuto.

6.2.4 Use of ICT in remedial programmes

(Effect of Output 2 on teacher capacity)

The proportion of teachers using ICT to facilitate remedial sessions increased by 34 percentage points from baseline to endline. Of those who used ICT to facilitate remedial lessons, 99 per cent (n=135) reported that they observed an improvement in the performance of girl children after their participation in remedial lessons. This was far above the 81 per cent (n=163) observed by teachers who were not using ICT for remedial lessons. The 18 percentage-point difference between the two was considered statistically highly significant with a *p*-value of 0.0000.



There was generally a 50 per cent increase in the proportion of learners who reported using ICT to support remedial learning from baseline to endline. There were more students at endline (almost 3 per cent, n=932), who used ICT to support remedial learning, who reported an improvement in their performance when compared to those who did not use ICT. The *p*-value = 0.0012 is highly significant. Increase in ICT use affected the girls' performance – the comparison was made for students in the treatment group only, to find out whether ICT had affected the performance of the girl learners.

The relationship between use of ICT and improvement maths and English marks was also examined. A relationship was found between scoring above 50 per cent in maths and the use of ICT – more learners who used ICT than those who did not scored above 50 per cent in maths. The *p*-value = 0.0377 is significant. This was not the case with English, where the use of ICT did not affect scoring above 50 per cent. The *p*-value = 0.8802.

6.2.5 Learner participation

Most teachers in both treatment and comparison schools applied methods that allowed all learners to participate: there were no significant differences between treatment and comparison schools.

Table 14: Comparisons of schools on teacher and learner participation

CLASS OBSERVATION INDICATOR M-E = Midline to Endline	SCHOOL TYPE		TOTAL	Sig
	Comparison	Treatment		
1. Teacher applies methods that allow all learners to participate.	98.5%	100.0%	99.2%	.319
2. Teacher involving the learners that do not volunteer.	64.2%	71.2%	67.7%	.386
3. Majority of learners are eager to answer questions.	92.5%	84.8%	88.7%	.161
4. Teacher gives the possibility of learners to ask questions.	67.2%	63.6%	65.4%	.669
5. Teacher encourages all learners even if answers are incorrect.	85.1%	68.2%	76.7%	.021
6. Learners ask for help if they do not understand the exercises they have been given.	52.2%	54.5%	53.4%	.790
7. Teacher calls learners by their names.	88.1%	90.9%	89.5%	.592

CLASS OBSERVATION INDICATOR M-E = Midline to Endline	SCHOOL TYPE		TOTAL	Sig
	Comparison	Treatment		
8. Is the teacher complimenting learners when they do well.	95.5%	90.9%	93.2%	.290
9. Teacher is NOT discriminating against some group of learners in class (e.g., boys, girls, teen mothers, older learners, young learners, children with disabilities etc.).	100.0%	98.5%	99.2%	.312

Display of materials: Schools were reported to have adequate displays of charts, pictures, models and products from group work, an improvement from midline. At endline it was reported that teaching materials were being used in an appropriate and timely manner in class.

Treatment teachers had significantly improved in their organization of lessons since midline. Unlike at midline where teachers in comparisons schools were more organized in the use and development of lesson plans, the endline results show an improvement in the treatment group. Since midline, both treatment and comparison schools continue to improve in terms of having teachers review lesson plans to ensure inclusion.

6.2.6 Communication with learners

More teachers in treatment schools (73 per cent) use mother tongue (the local language spoken by most of the students) than in comparison schools (58 per cent) to deliver lessons).[31] However, since midline, teachers reported that some learners appear not to fully understand lessons because of language issues. This has worsened since midline for both types of school and the proportion of teachers using mother tongue has increased: treatment, midline = 30 per cent, endline = 73 per cent; comparison, midline = 41 per cent, endline = 58 per cent).

Feedback and group interactions: Treatment and comparison schools had similar scores[32] in terms of teachers assisting individual learners in class and the scores have improved since midline. Teachers providing time for learners to interact with each other on class topics showed a remarkable increase since midline. Teachers encouraging learners to share stories and experiences and provide time for learners to interact with each other (e.g. coordinate games to encourage learners to talk with each other and think through lesson topics) showed a slight increase for treatment and a deterioration for comparison schools. Although the endline difference was remarkable, it was not significant: both conditions are still lacking in terms of encouraging learners to share stories and experiences and of providing time for learners to interact with each other (e.g. games to encourage learners to talk with each other and think through lesson topics). Teachers ensuring that all learners can share experiences in class showed a slight increase.

6.3 Addressing negative social norms for girls' education

Output 3: Girls have improved demand for learning through addressing negative social norms

6.3.1 Community outreach

The original design of the output strategy. In partnership with the Imbuto Foundation, communities were targeted with awareness-raising and behaviour-change messaging. Such messaging was channelled through existing community groups including parent-teacher associations, parents' groups

[31] χ^2 (1, N = 133) =3.098, p=.078

[32] χ^2 (1, N = 133) = .420, p=.517

and volunteer initiatives.[33] UNICEF in partnership with the Imbuto Foundation worked with community structures to address negative social norms that hamper girls' education.

Despite the onset of the pandemic, which disrupted community outreach, UNICEF and the Imbuto Foundation employed strategies to ensure that awareness raising to address negative social norms on girls' education was enhanced. The proportion of learners who were reached by the awareness programmes increased from baseline to endline. The proportion of learners reached at endline for the treatment group increased to 88 per cent from 77 per cent at baseline. Although the increase was small, it was found that the programme had made significant impacts to address negative social norms. In the control groups, learners receiving awareness increased from a baseline value of 67 per cent to 72 per cent, which suggests that the awareness raising on social norms reached learners who were not in the programme. Figure 10 shows the proportion of learners reached with awareness at baseline and endline.

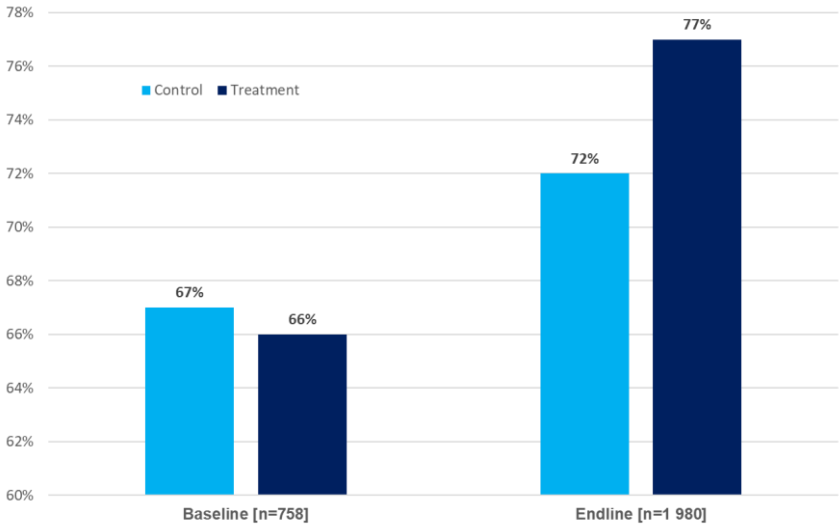


Figure 10: Proportion of learners reached with awareness at baseline and endline.

A model of working with community education workers to support learners at risk of dropping out yielded results: Another component of community outreach included working with community education workers to support learners who were at risk of dropping out because of challenges which the school might not be aware of. This model was reported to have worked very well as community education workers linked potential dropouts with the school authorities and supported their continued education. There was sufficient follow-up by community education workers to monitor students who had dropped out of school, as reported by 85 per cent of the interviewed learners. Some respondents had this to say:

85%

Learners felt there was sufficient follow-up by community education workers to monitor students who have dropped out of school

"I am a volunteer and I go into the villages that are not sending girls to school and this is helpful even though I am just a volunteer."

FGD, community education worker, Nyaruguru

"We have a parents' committee, and I am its head. We go to the home of each child who misses school to know what the problem is. Sometimes it is due to marital issues among parents, or poverty. We see what help we can give to address the problems so that the child may not continue to miss school. Collaboration between school and parents committee helps to change

[33] UNICEF Rwanda (2019). Project description for Hempel Foundation.

behaviour and mindset that negatively affect girl education. We do home visits to know what the problem is and try to find lasting solutions".

FGD, member of the parent committee, Nyabihu

"In Nyagatare mobilizing out-of-school children through community structures showed significant successes. From 2021 to 2022, the number of girls increased from 194,000 to 198,000 respectively, which suggests a re-enrolment of 4,000 learns who had dropped out of school. These figures show the success of community mobilization of out-of-school learners."

KII, District Education Officer, Nyagatare

The model proved effective in reducing girls' dropout rates. Stakeholder feedback (from parents, teachers and implementing partners (Urunana and Imbuto)) suggested that target communities had changed their social norms for the better in support of girls' education. Parents were encouraged to support children with their homework at home and reduce their burden of domestic chores to allow adequate time for learning. ***Results show that 86 per cent of parents in the treatment groups encouraged and supported girls' learning, which enhanced girls' access to education in Rwanda***. Figure 11 shows the proportion of parents highlighting that due to the programme, they have come to understand the importance of girls' education and started encouraging and supporting their learning.

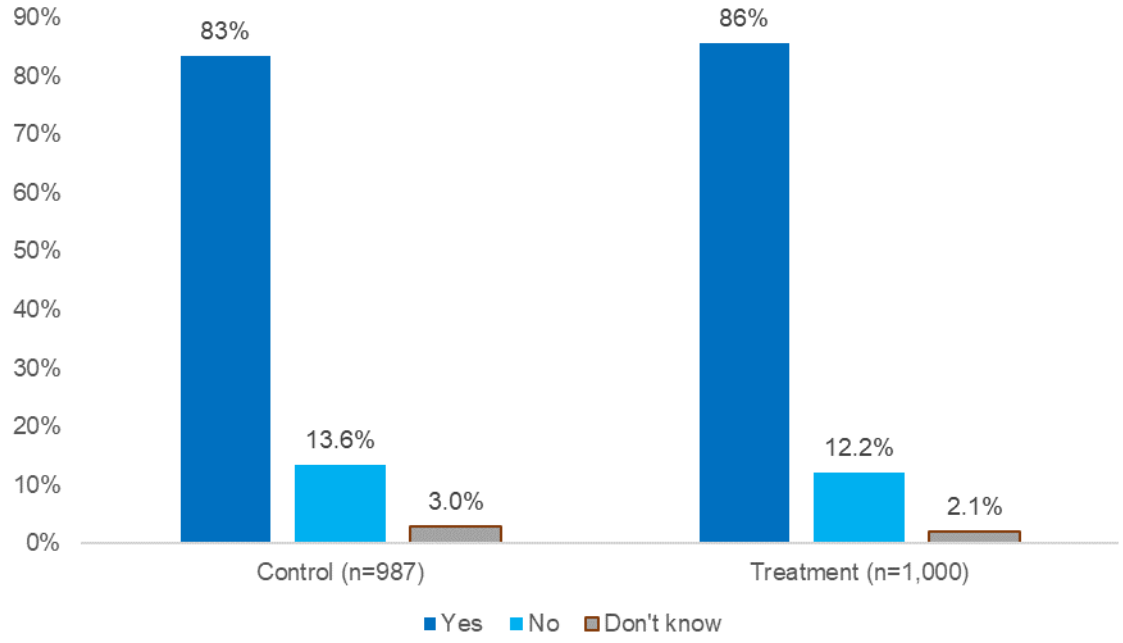


Figure 11: Proportion of parents who encourage and support girl's learning.

Using district monitoring measures the Government introduced fines for parents or anyone who denied children access to school of between 500,000 to 1 million of local currency.[34] Feedback from communities indicated acceptance of the message and some elements of changing behaviour in support of education of the girl child. Some parents had this to say:

"We received messages encouraging us to allow our girls to attend school and they also told us to allow boys and girls to be equal and now as a parent I can see that they are equal, and I have seen girls with good jobs."

FGD, parent, Nyaruguru

"Education community volunteers do awareness raising around education. They encourage us parents to give children time to revise at home, get involved in children's education and the

[34] Interview response DDE

importance of reducing chores done by the girl child thereby encouraging girls to concentrate on their schoolwork. They help prevent dropouts because of the sensitization in communities (abahwituzi)."

FGD, parent, Nyabihu

Overall, community outreach efforts through parents' committees, community education workers and volunteers contributed to educating communities and parents on the importance of supporting girls' education and reducing negative social norms.

6.3.2 Development and dissemination of radio messaging

Planned strategy: The partnership between UNICEF and Urunana used radio broadcasts to raise awareness of girls' education issues, change attitudes and promote gender equality in education. Urunana soap operas with nationwide coverage were aired weekly – its radio messages targeted at reducing negative social norms about girls' education reached many audiences.

Urunana radio messages reached a wide audience in the programme districts, countrywide and beyond (Burundi, Democratic Republic of Congo and Uganda) where Kinyarwanda is understood. As many as 103,111 people listened to the messages through social media.[35] Urunana aired different messages on radio, mainly over weekends, about how to prevent negative social norms. Six of the 13 episodes (2493, 2494, 2496, 2498, 2499, 2500) of Urunana's radio soap opera had messages on remedial education. They were broadcast on Radio Rwanda and Radio 10. Urunana also produced three sketches (small dramas) on remedial education, two of which have already been broadcast. Up to 45 per cent and 40 per cent of the treatment and control groups, respectively, reported having received messages on girls' education through the Urunana radio programme.

Consultations with Urunana indicated that the most effective time to air the messaging was soon after the news and during weekends when most people would be listening. An internal evaluation conducted by Urunana found that 70 per cent of the population followed the programme even in neighbouring countries that understand Kinyarwanda. More than 250 social groups including Facebook were giving regular feedback. They appreciated the programme and emphasized that communities should change their behaviour to support girl children. Other key modes of transmission were Rwanda TV Radio, Imbuto Foundation outreach and teachers at school. UNICEF took advantage of the radio channels to add a topic on remedial education so that parents would appreciate the programme.

The following is some of the feedback from the listeners:

On 4 March 2023, Urunana listener (728377107) called Alisa sent an SMS: *"How are you dear teachers? We like stories from Urunana. The story of a child who is not given time to revise her lessons at home made me feel sad. No child should be deprived time to go through what he started at school. Revision at home is very key for pupils. Thanks."*

On 26 March 2023, another listener (786110696) said: *"From what I have been listening to in Urunana, parents should provide all needed support if they want their children to bring good marks at the end of the quarter."*

During the first half of the project intervention, parents were not adequately involved in the remedial education programme and were not supporting learners in remedial classes. So in January 2023 a component on parental support to girls enrolled in remedial education was added to the Urunana initiative. By the time of the final evaluation, the programme on remedial education had been aired for only four months.

Overall, radio messaging proved an effective communication channel for addressing social norms and negative cultural practices that militate against the participation of girls in education. Radio reaches a

[35] Urunana official interview

greater audience than some other media, and there appears to be a sense among listeners that radio messages are always true. Feedback from listeners showed that they related easily with negative practices in their communities and were keen to change behaviours for the better.

Table 15 is a template for the results framework and targets for Output 3 and overall rating.

Table 15: Output 3 Results

Output 3: Girls have improved demand for learning through addressing negative social norms				
	Baseline (2019)	Target (2023)	Endline 2023	Rating
# of communication messages delivered	75	300	1075	●
# of community members reached	2,000	77,000	103,111[36]	●
% of family members and community members that demonstrate improved knowledge and attitudes towards girls' education	0	70%	85.7%	●

Key ● ACHIEVED ● PARTIALLY ACHIEVED ● NOT ACHIEVED ● PENDING DATA

OVERALL RATING OUTPUT 3:

● ● ● ● ● ● ● ● ● ● ACHIEVED

6.4 An enabling environment to support girls' education

Output 4: The enabling environment is enhanced to support girls' education

The programme set out to create an enabling environment to support girls' education. It was realised that the key barrier to achieving improved education for girls was the lack of national and local systems to ensure that girls' education was a priority. The two main strategies used to achieve this were: i) the development of a National Strategy for Dropout and Repetition; and ii) the development and piloting of a National Referral System.

6.4.1 National Strategy on Dropout and Repetition

This was formulated in response to statistics showing that dropout and repetition rates were increasing in both primary and secondary schools. The Government, through its various partnerships, wished to address this challenge as a top priority – Rwanda acknowledges the importance of quality basic education for the development of human capital and to trigger its social, economic and governance transformation. This is reflected in national strategies and the policy framework. One of the objectives of the pillar on social transformation in the National Strategy for Transformation (NST1) places strong emphasis on ensuring the quality of education for all, aiming to build a knowledge-based economy. Similarly, target 4.1 of SDG 4 is to ensure that, by 2030, all girls and boys have free, equitable and quality primary and lower secondary education, leading to relevant and effective learning outcomes. In the pillar for human capital development of Rwanda's Vision 2050, universal access to high-quality education is a top priority. The Rwanda Vision 2050 targets learners to achieve a minimum of 99 per cent proficiency in numeracy and literacy in lower secondary education (S3) by 2035.

The GEP achieved the target of developing a National Strategy on Dropout and Repetition by endline: The strategy defined dropout for a consistent application and improved the monitoring of students who would have dropped out of school. The strategy provided guidance to mitigate repetition, where unwarranted, and for systematic application. The Government, through MINEDUC, adopted the ESSP.

[36] Urunana representative interview

Table 16 shows the proportion of learners who knew a girl who had dropped out of school in the control and treatment groups.

Table 16: Proportion of learners who knew someone who had dropped out.

Period	Control (C)	Treatment (T)	Diff (T-C)
Baseline (n=758)	59.0%	54.1%	-4.9
Midline (n=1,458)	44.2%	43.7%	-0.5
Endline (n=1,980)	59.2%	58.4%	-0.8
Diff (T-C)	0.2%	4.3%	

The evaluation findings show an increase in the proportion of learners who were reported to be dropping out of school. A 4.3 percentage-point increase was reported for the treatment group compared to a 0.2 percentage-point increase in the control group.

Despite the development of National Strategy on Learning and School Retention, the national repetition and dropout rates remained an area of concern in Rwanda. Repetition increased from 10.0 per cent in 2018/2019 to 10.9 per cent in 2019/2020, and dropout rates increased from 7.8 per cent in 2018/2019 to 9.5 per cent in 2019/2020. The repetition rates increased for lower secondary schools from 6.0 per cent in 2016/17 to 8.9 per cent in 2019/2020, and dropout increased from 6.3 per cent in 2016/17 to 11 per cent in 2019/2020. The endline evaluation found (through the District Data Mining tool) that in Nyagatare District, the total dropout rates for the 2021/2022 school year for P4, P5 and P6 were 0.07, 0.10, and 0.03 per cent, respectively. The repetition rates for the 2021/2022 school year for P4, P5 and P6 were 8.4, 11.3 and 2.7 per cent, respectively. There was a clear need to address the high repetition and dropout rates and increase the number of learners completing the 12 years of basic education.

Findings noted that the main reason for dropping out, highlighted by learners in both treatment and control groups, was **poverty – a lack of finance** to meet necessary expenses. Other reasons were teenage pregnancies and unwillingness of parents to continue supporting girls to attend school. Some 54 per cent and 53 per cent of the learners from the treatment and control groups, respectively, highlighted lack of money being the reason for most school dropouts. School conflicts and schools being viewed as dangerous were the lowest contributing factors to girls dropping out of school. It is therefore recommended that the Government puts in place initiatives to address the ever-increasing dropout and repetition rates.

6.4.2 National referral system

The GEP worked across sectors in the development of the national referral pathway. The purpose of this referral pathway is to ensure that all marginalized children are identified and supported systematically to access appropriate services.

At endline, the national referral system was functional and running: There were channels in place to refer the learners to the services they need. The structure used a bottom-up approach with the identification of these learners starting at the school level.

The referral system had propelled the teachers and other responsible authorities within schools to recognise the needs of learners with disabilities. Teachers were able to identify learners with different disabilities within the school and refer them to places where they would be assisted. The referral pathway was a good practice, and it was envisaged that it would lead to the sustainability of the programme outcomes. This would be achieved through the creation of partnerships with the schools, local government at the community level and the different service providers whom they were working with. Table 17 shows the status of output 4 indicators at baseline and endline.

Table 17: Output 4 Results

Output 4: The enabling environment is enhanced to support girls' education	Baseline (2019)	Target (2023)	Endline 2023	Rating
National Strategy on Learning and School Retention developed	No	Yes	Yes	
National referral system developed	No	Yes	Yes	

Key ACHIEVED PARTIALLY ACHIEVED NOT ACHIEVED PENDING DATA

OVERALL RATING OUTPUT 4:

ACHIEVED

6.5 Other results of the project

6.5.1 Roll-out of the remedial education programme and facilitating factors

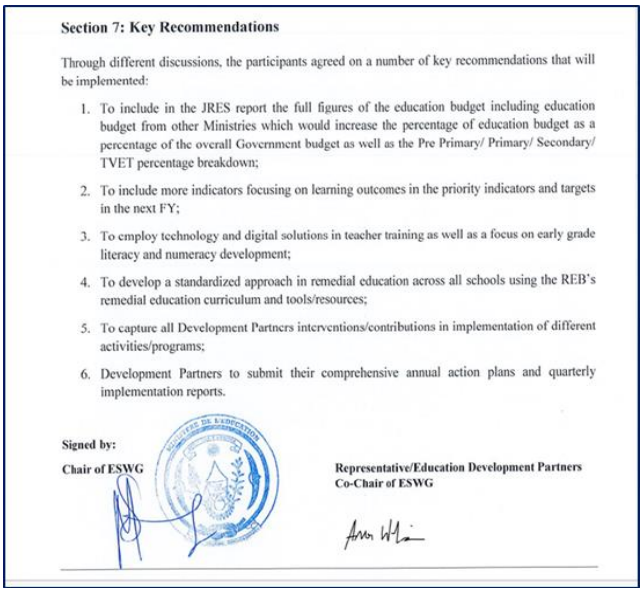
The remedial education programme has been adequately rolled out in the target treatment schools. Most of the elements of the programme were operational. Key factors that contributed to the overall achievement of the project included:

i. **Buy-in by the Government at all levels of the education system.** This was motivated by the alignment of project objectives, activities and planned outputs with the national educational priorities as outlined in the 2003 Education Policy and the ESSP.
ii. **The remedial learning clubs** proved to be a facilitating factor to positive learning outcomes. The clubs motivated learners to enjoy school, giving learners an opportunity to catch up and better understand what they struggled with in conventional classes. The results, as discussed in earlier sections, indicated that most of the learners were performing better than those who were not in remedial classes.
iii. **The use of ICT contributed to improved learning outcomes**: Access to ICT helped teachers to prepare classes and deliver appropriate lessons. Learners also made use of tablets with various apps designed to assist them with literacy and numeracy.

While all components of remedial learning were implemented, two components: i) incorporation of remedial learning in the TTC curriculum; and ii) the community awareness to address social norms which negatively impacted participation of girls in education were only addressed toward the end of the programme.

6.6 Unanticipated results

Adoption of the entire remedial learning programme by the Government before the end of the programme to become a nationwide programme was unexpected. Before the end of the remedial learning project, the Government had already adopted it as a national programme, scaling it up from 150 schools to all schools nationwide. Interviews with UNICEF indicated that UNICEF and Imbuto held regular meetings with REB to discuss experiences emerging from the implementation of remedial learning in project schools. The national adoption of a remedial learning programme also came with clear recommendations for improving the programme design. Figure 15 shows the recommendations provided by MINEDUC for the nationwide adoption of the programme.



Section 7: Key Recommendations

Through different discussions, the participants agreed on a number of key recommendations that will be implemented:

1. To include in the JRES report the full figures of the education budget including education budget from other Ministries which would increase the percentage of education budget as a percentage of the overall Government budget as well as the Pre Primary/ Primary/ Secondary/ TVET percentage breakdown;
2. To include more indicators focusing on learning outcomes in the priority indicators and targets in the next FY;
3. To employ technology and digital solutions in teacher training as well as a focus on early grade literacy and numeracy development;
4. To develop a standardized approach in remedial education across all schools using the REB's remedial education curriculum and tools/resources;
5. To capture all Development Partners interventions/contributions in implementation of different activities/programs;
6. Development Partners to submit their comprehensive annual action plans and quarterly implementation reports.

Signed by:

Chair of ESWG

Representative/Education Development Partners
Co-Chair of ESWG

Figure 15: Ministry recommendations for Remedial Learning Programme

6.7 Fulfilment of the Theory of Change assumptions

QN 1 – To what extent have the remedial learning education programme objectives have been achieved at the level of each results output in the ToC and to what extent has the programme made progress towards achieving expected outcomes?

Overall, the ToC was found to be fit for purpose and appropriate for the programme. The ToC has a clearly illustrated results chain showing the process involved up to the achievement of the goal. The relevance and appropriateness of the ToC is also seen in the way that the ToC has been operationalized throughout programme implementation to ensure the programme was able to meet its set. (See Annex 2.)

The evaluation provided evidence that the ***supply-side barrier due to lack of adequate learning support structures is being addressed.*** The introduction of the remedial programme has had the most significant effect on the key outcomes in the programme's results framework and ToC. There is evidence for increased and sustained access to structured remedial learning opportunities. For example, at endline 10,500 learners were reached by the remedial programme (up from 2,500 at baseline) and 150 schools had established remedial clubs as planned. The remedial activities were easily aligned and integrated into the national programme.

With regards to the ***lack of quality gender-sensitive teaching and learning environments****,* the evaluation indicates that teacher capacity and skills to deliver gender-responsive approaches was certainly strengthened through the teacher capacity-building activities of the GEP. Classroom observations suggest that the quality of teaching has improved in through in-service teacher training using a cost-effective model of SBM. During the GEP, TTCs have incorporated a gender-sensitive pedagogy module into their curriculum. In project districts 462 teachers were trained, resulting in added value in terms of their capacities. Up to 76 per cent of teachers in the treatment schools had received in-service training to improve their pedagogical skills and their ability to provide inclusive school environments. This capacity has led to improved learning outcomes, demonstrated in the increases in literacy and numeracy scores compared to baseline levels.

Demand side barriers in the ToC resulting from socio-cultural norms impeding girls' education are being addressed. The endline evaluation noted that in both the project and comparison schools, patriarchal societies were the main drivers of low demand for girls' education at baseline. However, at

endline, barriers were lower in target schools than in control schools. Some of the main barriers that marginalized women and girls' access to education included social barriers manifested through community attitudes and gender-based violence. The following respondent had this to say:

> "Before the programme, girls used to finish school at P6 but now they aspire to further schools to university. This was due to negative norms as barriers to accessing education for girls in the rural areas."
>
> **FGD respondent, Kayonza**

Other barriers included early marriages and household poverty which were reported to be lower at endline in project districts compared to control schools. The differences may imply that the community engagements promoted by the programme are bearing fruit and need to be sustained.

Community outreach efforts through Uranana radio programmes, parents' committees, community education workers and volunteers have contributed to educating communities and parents on the importance of supporting girl children and reducing negative social norms. Stakeholder feedback from parents, teachers and implementing partners confirmed a positive shift in social norms, attitudes and practices towards girls' education at both community and household level.

Survey results from both learners and households show ***notable positive change in attitudes towards girls' education***. The evaluation found an increase in the percentage of learners that reported behaviour change by parents towards their education (93 per cent in target schools compared to 91 per cent in the control schools). Increased participation of parents in girls' education was also observed. This was demonstrated through the increased percentage of parents able to spend time and assist their girl children with education (74 per cent in target schools compared to 70 per cent in control schools). Seventy-five per cent of parents were able to follow up what the children had learnt in school (compared to 26 per cent in comparison schools) and 86 per cent of parents were able to encourage and support girls' education.

The barrier of weak enabling environment (the lack of a national referral system) was addressed through strengthening a community-led dropout referral systems and its linkages to the national re-admission programme. A model of working with community education workers to support learners at risk of dropping out yielded results – at endline, dropout rates for learners in the programme schools reduced from an average of 5 per cent at baseline to a little over 1 per cent at endline (against a target of 5 per cent in the programme districts). This is below the national average dropout rate of 5 per cent. At national level, more effort is needed to reduce dropout to reach the 2019 ESSP target of 4.3 per cent. An additional impact of the ToC has been the effect of the remedial programme on repetition rates. The endline evaluation revealed that the repetition rate in programme schools has stagnated at 8.8 per cent although this is an improvement from the baseline, where repetition rates for girls stood at 9.2 per cent (10.9 per cent for boys in 2019). ***Facilitating factors for the low repetition and dropout included the introduction of a community programme to follow up and re-admit dropouts and send them back to school through the community education workers. School children also informed the schools about children who had dropped out.***

6.8 Monitoring and evaluation systems

This section assesses the degree to which this project used the results-based management.

Overall, the remedial education programme used a results-based approach to track progress against the results framework: The baseline study provided baseline values; at midterm, following the same cohort of learners, the assessment compared performance at midterm against baseline values. The midterm review was conducted in 2021. This endline evaluation report tracked performance of project indicators against both baseline and midterm data. Other monitoring activities carried out by Imbuto Foundation, MINEDUC and UNICEF include the following:

- Regular visits by education and Imbuto Foundation staff to assess the progress and extent of implementation and examine both activities and budget spending.
- The Imbuto Foundation's quarterly reporting on indicators in eTools (the UNICEF platform where implementing partners report regularly).
- Micro-assessments, spot-checks and audits also provided useful lessons for programme management.
- The longitudinal studies from baseline, midline and endline, and programme reviews by stakeholders.

Monitoring of the remedial learning programme at Mukarange Catholic school, Kayonza District

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This involved classroom observations and sessions with parents and with students. During classroom observations, learners were seen to be engaged in activities that help them improve their numeracy and literacy. They used apps and tablets to support their learning. Many children reported that their overall performance in school had improved since joining the remedial classes. The parents were asked how they viewed the programme. Their main response was that children were now more confident and able to express themselves without fear. They also indicated that their main contribution to remedial learning was to provide their children with school materials and to supervise their notebooks. In a session with students, the monitoring team asked what they felt about learning clubs especially during holidays. The main response was that they were very happy because learning clubs helped them improve their learning outcomes.

6.9 Challenges and gaps

QN 1 - What have been the main challenges faced during the implementation of the remedial education programme?

Incentivizing remedial teachers is not a sustainable approach: Feedback from participating remedial teachers revealed that some teachers had received incentives while others had not. Teachers viewed this as additional work and an additional source of income. However, to achieve full sustainability, the remedial education programme should be viewed as an integral part of the teaching services in schools.

Inadequate teacher capacities in schools outside the programme districts: Remedial education is a specialized service which requires specific teacher capacities. As the Government has now adopted remedial education as a national programme, teacher training remains a major gap in terms of bringing the programme into operation.

Inadequate infrastructure for remedial classes: Most schools visited during the evaluation lacked the space to allow remedial learners to be in a separate classroom from other learners. More classrooms would make the remedial education programme more effective. There were also challenges in accessing the internet (needed to use ICT effectively).

Parents initially unsupportive of the remedial education programme: Parents were initially less supportive because they did not understand the programme or its importance. At graduation, parents were invited to see the results for themselves. When they saw students being awarded prizes and learned that they were among the best performers, they started to warm to the idea of remedial education.

Documentation and dissemination of good practice: Apart from the baseline, midline and endline reports, the GEP was not well-documented or disseminated through channels that could enhance its visibility. The regional office has a role to play in disseminating examples of good practice; internally, if well packaged, such examples could be disseminated through the UNICEF community of practice for gender equality. Documentation of good practice could be used in resource mobilization for scaling up the programme.

Disruption of the programme by the onset of the Covid-19 pandemic: Not all learners had access to education programmes provided by the Government. This negatively affected learners in marginalized areas. Due to negative social norms, many girl children were relegated to household chores which affected their learning outcomes. This demonstrates that the home environment is still critical to girls' education.

ICT supportive environment inadequate in most schools: The first round of tablets was inferior to the later replacements, and maintenance of the tablets was also a challenge. Schools in remote areas with no access to electricity could make only limited use of ICT. Not all teachers were capacitated in the use of ICT, but REB trained remedial teachers on digital skills so that they could help learners to use ICT materials.

6.10 Adaptation to evolving context

QN 2 - To what extent has the remedial learning adapt to the challenges and evolving context?

The pandemic affected implementation, as schools were closed to prevent the spread of the virus. The main adaptation to Covid-19 was to broadcast educational programmes on the radio so that learners could continue with their education. However, less privileged learners with no access to radio were not able to participate in continuous learning. At the school level, learners in the remedial classes made innovations to the learning programme by organizing early sessions (before the start of morning school), so that learners from religious groups who went to church on Saturdays could make up lost time. Learners would share what they learnt with those who were not able to participate at weekends.

7 EFFICIENCY

The efficiency section had one key question and four sub-questions.

QN 1 - How efficiently have the remedial education programme been delivered, given the human and financial resources available? What have been the costs, including both funds and in-kind support?

The endline evaluation revealed that the programme had achieved all its milestones efficiently. The main drivers included the use of in-service school-based teacher mentors to train fellow teachers in

remedial learning. The REB guidelines for the modalities guiding continuous professional development for teachers provided one of the most efficient ways of capacity building. Both teachers and headteachers in target schools were trained. All TTCs in Rwanda had incorporated the curriculum on gender-sensitive pedagogy and it was easily shared with students.

Procurement for goods and services was carried out in compliance with Imbuto Foundation policies and guidelines. Supporting documentation for programme expenses were in place and maintained in accordance with Imbuto Foundation policies and the requirements of the funding agreement with UNICEF. Access to internet in rural schools remains a major challenge and future initiatives for remedial education should consider bringing in other ICT partners to increase the access to ICT.

QN1.1 – Was the programme implementation cost effective and affordable?

Overall, the GEP was efficiently run. The results were commendable considering the level of investment.

The remedial education programme was efficiently delivered through the existing education system: The programme trained two remedial teachers per school in all the treatment schools. At the start of the programme, the design had not included orientation of headteachers on remedial learning, making it difficult for them to supervise the remedial teachers. Midway through the programme, headteachers were oriented on remedial learning, which increased their ownership of the programme. District officials reported supervising the implementation of the remedial learning programme. The use of the existing education system to oversee implementation contributed to the efficiency of the programme. At the national level the relevant bodies (REB and MINEDUC) were kept informed of implementation progress. Table 18 presents the costs of the programme over the project period.

Table 18: Expenditure patterns for the project (USD)

Year	Allocation	Utilized	(%) Absorption
2019	53,085	53,085	100%
2020	928,317	928,317	100%
2021	368,494	368,494	100%
2022	747,035	747,035	100%
2023	330,684	256,597	77.6%
Total	2,427,614	2,353,527	96.9%

Source: UNICEF[37]

Analysis of the budget and expenditure patterns suggested a high absorptive rate of almost 97 per cent across the project period 2019–2023. The Imbuto Foundation indicated that they had not experienced any delays in the disbursement of project funds. The factual findings from the financial spot-check report by RUMA Certified Public Accountants for the remedial learning clubs programme (Twige Neza Dutsinde) on behalf of UNICEF did not find any qualified and adverse opinion. The report of September 2021 noted that the implementing partner (Imbuto Foundation) had been subject to a micro-assessment in February 2020, a project audit in September 2020 and a spot check in May 2021. Imbuto Foundation internal controls were reported to be strong. Recommendations from previous micro-assessments had been implemented and no issues were noted from the previous project audit and spot check. It further noted that the accounting system employed by the Imbuto Foundation had adequate controls to ensure proper recording of UN agencies' financial information. The Imbuto Foundation has a detailed Policies and Procedures Manual that stipulates the conduct of daily operations. Adequate internal control procedures were well laid down in the policies and procedures manual.

[37] SC190318 Financial Report Hempel Foundation

QN1.2 - Is the current organizational set-up, collaboration and contribution of concerned MINEDUC, REB, schools and other shareholders working effectively to help ensure efficiency? What more might be done?

The project current set-up and collaboration contributed to efficiency: The project was implemented by the Imbuto Foundation in collaboration with the district education department and REB. The evaluation noted that the successful scaling up of remedial learning would require support in training teachers and increasing the number classrooms to accommodate remedial learners. Other civil society players were found to be supporting some schools in terms of access to internet. In such schools, teachers and students had increased access to ICT. Future interventions should encourage other stakeholders to support the provision of ICT in schools: UNICEF and the Government could collaborate with ICT NGOs and development partners who could support connectivity to the internet and access to ICT gadgets (establishing computer labs and distributing tablets).

QN1.3 - What were the lessons learnt in terms of the management of partnerships under the remedial education programme, and what might be improved for similar programme in future?

Lessons learnt in the management of partnership:

i. For education project interventions, working within the framework of the existing education system to include schools, districts and relevant education bodies (REB and MINEDUC) contributes to efficient delivery of interventions, country ownership and rapid adoption leading to scaling up.
ii. Involvement of the district-level partners in the delivery of education interventions contributes to improve monitoring.
iii. When project designs for the education interventions are aligned with the policy and strategic frameworks, they are more easily supported by Government as they contribute to national education priorities and strategies.

QN1.4 - Did the remedial education programme find synergies with other funding sources, grants and mechanisms of Government and UNICEF?

Government adopted the remedial model, and many stakeholders are considering adopting the same model to align with Government. This has made space for synergies with other funding sources, grants and mechanisms of the Government and UNICEF.

8 IMPACT

The impact section had three main questions (QN 3 is on p45):

QN 1 - Are the remedial learning clubs improving the learning outcomes of marginalized girls?

QN 2 - What are the enrolment /attendance/retention rates for girls, especially the marginalized ones in the target districts?

- What are the gaps in attendance /retention/enrolment for marginalized girls?

How can the remedial programme contribute to reduction of repetition and dropout and potentially increase the secondary school enrolment rate?

8.1 Impact on promotion rates

The overall goal of improving learning outcomes of girls in the lowest-performing quintile has been achieved. The GEP has led to the improvement in the end-of-term exams of the learners in the bottom quintile enrolled in the remedial clubs. The exam performance of the lowest 20 per cent of learners has shown significant improvement, with general upward mobility in their class position. Almost 83 per cent of underperforming girls (previously in the bottom 20 per cent at baseline) have moved away from the bottom 20 per cent within the last three years – 34 per cent are now in the upper 20 per cent. This has ultimately reduced the repetition rates.

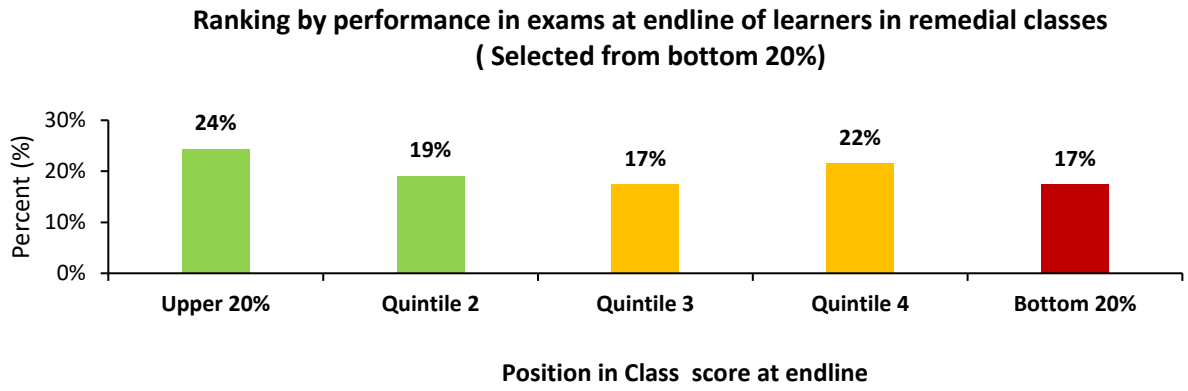


Figure 12: Ranking by performance in exams at endline of learners in remedial classes (Selected from bottom 20%)

There has also been increased uptake of ICT in target schools. Teaching approaches using ICT have contributed to improved performance. There was a relationship between scoring above 50 per cent in maths and the use of ICT. More learners who used ICT scored above 50 per cent in maths than those who did not, with a p-value = 0.0377 which is significant. This was not the case with English: scoring above 50 per cent was not influenced by the use of ICT (p-value = 0.8802).

8.2 Impact on dropout and repetition rates

The repetition rate for girls in treatment schools was 8.8 per cent and is significantly lower than the comparison schools (11.7 per cent). However, the endline target of 5 per cent was not met (the target was for the repetition rate to reduce from 12.4 per cent at baseline to 5 per cent at endline). The repetition rate for girls in the treatment group is significantly lower than that in the control group by 2.9 percentage points (Pr (Z>z) =0.0000). District Education Officers concurred with this finding. The following was said during an interview:

> *"The programme is helping the children with poor performance. Indirectly, the programme has reduced the number of dropouts in schools. At baseline, the repetition rate was at 3.7% in 2019 now it stands at about 0.9%."*
>
> ***KII, District Education Officer, Kayonza***

The dropout rates for girl learners in the programme schools was at 1.4 per cent at endline against a target of 3 per cent: The ultimate outcome of the programmes was for "adolescent girls [to] have improved gender-equitable opportunities in education". The target was for their dropout rate to decrease from a baseline of 6.3 per cent to 3 per cent. The calculated dropout rate was 1.4 per cent (n=47 schools) for girls in 47 schools in the treatment group and 1.6 per cent for girls in 48 control group schools. The two rates were all below the programme target of 5 per cent. The difference between the two (control and treatment rates) of 0.21 percentage points was slim. The two had a dropout rate which was also below the 3 per cent target. There was no difference in dropout rates (*p*-0.9997) between boys in control and boys in treatment schools.

Facilitating factors for the reduction in dropout in programme districts included the introduction of a community programme to follow up and re-admit dropouts to school through the communication education workers. Using ICT in classes also contributed to low dropout rates as it helped learners to enjoy school. There was consensus among officials at district and school levels pertaining dropout and repetition rates. However, the repetition rates remain high so there is need for the Government to design initiatives such as a social protection programme to address some of the drivers of high repetition rates. The following respondent had this to say:

"About retention, children used to drop out because no one was interested in them but now teachers would know before hand and be helped. In weekly reports absent children are very low now. The programme motivates children because there will be rewards for those who performed well thus children aimed at doing better to get rewards".

KII, Headteacher, Nyaruguru

The Government's nationwide adoption of remedial learning across all schools is another impact of the GEP. In Nyagatare the adoption of the remedial education programme was confirmed across the board. The following respondent had this to say:

"Remedial programme is highlighted in the Ministerial Instructions No. 002 of 2021 that was published on 26 July 2021. It also determines modalities for management of school timetable in its article 12 which provides a period of 40 minutes per day allocated to remedial activities. This makes up a total of 5 periods per week in the school calendar."

KII, District Office, Nyagatare

8.3 Impact on behaviour change towards girls' education

At community level, the programme has contributed to improved knowledge, attitudes and practices of parents and community members regarding girls' education. **Error! Reference source not found.** shows that the percentage of learners who reported behaviour change from their parents was 93 per cent in treatment schools and 91 per cent in comparison schools. Within the treatment group of parents, there have been positive strides in the level of parental support to girls' education, The percentage of parents able to assist a girl child with her homework was 74 per cent (compared to 70 per cent in control schools), the percentage of parent able to follow up what children learnt at school was 75 per cent amongst parents in treatment schools (26 per cent in control schools) and the proportion of parents encouraging and supporting girls' education was 86 per cent in treatment and 83 per cent in control schools .

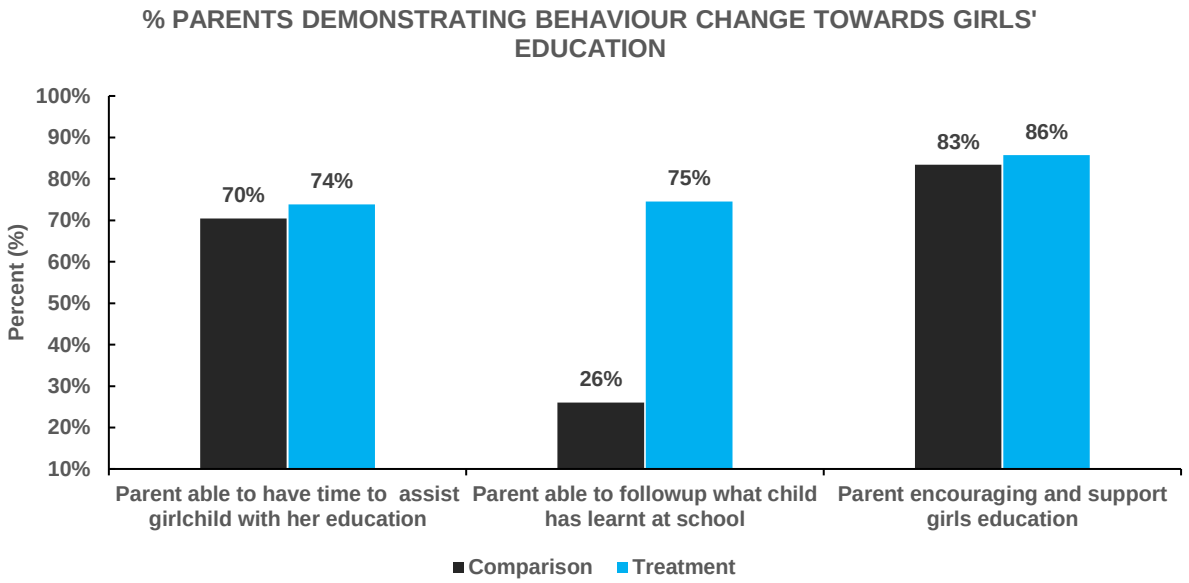


Figure 13: Percentage of parents demonstrating behaviour change towards girls' education.

QN 3 - What were the drivers, barriers and bottlenecks to the education remedial programme success that may support policy makers and programme designers adjust interventions going forward?

Drivers: Remedial clubs were a key driver of success. They provided an environment for learning through play and fun by using app and gadgets, and an enabling classroom environment where learners were motivated to support each other. The motivation gained from participating in remedial classes encouraged learners to want extra time for remedial clubs. Students who missed remedial classes due to religious activities were supported by fellow learners to cover the topics covered during their absence. This also reinforced learning, as learners shared with those that missed classes. Access to ICT benefited not only learners but teachers who used ICT to prepare for classes. The children were able to use apps loaded in computer labs (where schools had computer labs). The buy-in from headteachers to support the programme enhanced quality supervision of the programme.

Barriers/bottlenecks: Remedial classes were conducted with the rest of the students – there were no dedicated classrooms where teachers and remedial learners could meet and do their lessons. This barrier was noted in almost all the schools participating in the evaluation. Most of the participating schools did not have access to the internet; those with internet access were often supported by other development partners whose timeframe for support was limited. Future remedial learning programmes should therefore consider including remedial clubs. Future programmes should also find sustainable mechanisms/strategies to provide access to internet.

Table 19 shows overall performance of the outcomes at endline.

Table 19: Outcome results

Outcome: Adolescent girls have improved gender-equitable opportunities in education				
	Baseline (2019)	**Target (2023)**	**Endline 2023**	**Rating**
Dropout rate of girls in primary school	6.3% (2017/2018)	3% (2020/2021)	1.4%[38]	
Repetition rates of girls in primary school	12.4% (2017/2018)	8.8% (2020/2021)	8.8%	
Learning Outcomes of adolescent girls, in project schools	**Literacy:** 6.2% met or exceeded benchmark	-	**Literacy:** 87.9% met or exceeded benchmark	
	Numeracy: 66.5% met or exceeded benchmark	-	**Numeracy:** 99% met or exceeded benchmark	

Key ACHIEVED PARTIALLY ACHIEVED NOT ACHIEVED PENDING DATA

OVERALL OUTCOME RATING:

ACHIEVED

9 SUSTAINABILITY

Sustainability had 3 main questions.

QN1- To what extent have the interventions implemented through the remedial education programme contributed to the sustainability of results, especially equity and gender-related results?

[38] Endline evaluation findings (field data collection 2023)

Interventions implemented through remedial education contributed to sustainability of results: The results under the effectiveness chapter have demonstrated that, overall, the project was successful. Incorporation of remedial learning elements in the curriculum for TTCs offers an opportunity for sustainability, generating a new crop of teachers who already appreciate aspects of remedial learning as part of their teacher skills. However, for teachers already in the field, it was important to support in-service programmes to develop teachers' capacity. Involvement of headteachers in remedial learning sensitization has contributed to ownership and buy-in at school level.

QN2 - To what extent is the remedial education programme supporting long-term buy-in and ownership by duty bearers and rights holders?

The remedial education programme is supporting long-term buy-in and ownership by duty bearers and rights holders. The Government's adoption of the remedial education programme even before it came to an end was a strong signal of sustainability. UNICEF and implementing partners held several meetings with MINEDUC to extract learning useful for scaling the programme up to national level. Key recommendations for strengthening the programme were also drafted. At the start of the intervention, there was limited buy-in from parents, but the programme included sensitization of the parents and guardians on its aspirations. Midway through, parental involvement had enhanced their appreciation and there was strong buy-in as they could see the results. The learners too embraced the programme and were pleased by their achievements in literacy and numeracy.

QN3 - What is the likelihood of the remedial programme and innovative mechanisms being sustained beyond the duration of the programme?

The likelihood of the remedial programme and innovative mechanisms being sustained beyond the duration of the programme is very high: The participating five districts already know how to provide effective remedial services to the lowest-performing percentile learners in their schools. And the tools for scaling up are already available.

Channelling development partner funds towards teacher capacity building: Consideration should be made to channel more resources towards capacity building for teachers throughout the country.

10 CONCLUSIONS, LESSONS LEARNT AND RECOMMENDATIONS

This section sets out the main conclusions, lessons learnt and key recommendations from this endline evaluation.

10.1 Conclusions

Overall, the GEP was successful in contributing to enhanced access to education for marginalized girls in Rwanda. Despite the onset of Covid-19, which disrupted the education system, the programme contributed positively to the retention of learners after the pandemic. MINEDUC noted that the results of the programme were beyond their expectations. The key findings are summarized below.

Relevance: The GEP was aligned with Rwanda's Education Policy (2003) and the ESSP. The education policy and strategy framework highlight the importance of remedial learning for lower grades, focusing on literacy and numeracy, increased use of ICT and equal opportunities for all learners irrespective of sex, disability and geography. The design of the remedial learning programme had many elements which helped to operationalize the national education policy frameworks. The design of the programme also responded to the country's development challenges – the five selected programme districts were priorities due to their low performance in national examinations (compared with other districts). Consultations with the UNICEF regional office concurred that the programme was relevant in addressing the challenges faced by Rwanda's education system.

Coherence: The programme was coherent, being fully aligned with both global and national education policies and programmes. At the global level, the programme was well aligned with policy frameworks around gender and girls' education, including SDG 4 and SDG, CEDAW, CRPD, CRC and other regional policy frameworks. At national level, the programme was highly aligned to the provisions of the constitution, the Education Policy (2003) and the Rwanda ESSP 2018–2024. The remedial programme has mainstreamed the rights of children with disabilities by providing training to school-based mentors on children's rights. The programme enrols all children without discrimination and, by targeting the lowest-performing quintile, the programme is adhering to the leave no-one behind approach. The programme contributed to learning and adaptation of the Rwanda Remedial Education Programme Guidelines for classroom implementation 2021.

Effectiveness: The programme was largely effective – the results were commendable against the level of investment into the programme. Almost 99 per cent of learners in the treatment group reported that their learning outcomes had improved. Aggregate scores showed that learners had statistically significant improvements for literacy at endline. Learners also improved in numeracy. Facilitating factors for improved numeracy and literacy included the use of ICT and the inculcation of a sense of competition, which encouraged learners to study. Most of the teachers in the remedial learning programme received in-service training. The programme was effective when it came to addressing negative social norms around girls' education through community outreach programmes. UNICEF, in partnership with the Imbuto Foundation, employed strategies to ensure that awareness raising around addressing negative social norms on girls' education was enhanced by working with community education workers to support learners at risk of dropping out. The use of radio programmes through Urunana raised awareness of girls' education issues, contributed to change in attitudes and positively affected behaviour in terms of promoting gender equality in education. The programme developed a national strategy on dropout and repetition and set up a national referral system to address the high dropout and repetition rates.

Efficiency: The remedial education programme was efficiently delivered through the existing education systems (schools, district education offices, REB and MINEDUC). Schools were the centre of project implementation. Analysis of allocated and utilized resources highlighted that the programme was efficient when it came to the use of resources – there was a 97 per cent absorption rate across the duration of the programme. Procurement for goods and services was done in compliance with Imbuto Foundation policies and guidelines and was therefore deemed efficient. Imbuto used its strong internal audit systems to ensure efficient use of resources.

Impact: The repetition rate for girls in target schools fell. Repetition rates for girls was planned to drop from 12.4 per cent at baseline to 5 per cent at endline. Dropout rates for learners in the programme schools was at 1.4 per cent at endline against the target of 3 per cent. Factors contributing to the lower dropout rates include the introduction of a community programme to follow up and re-admit dropouts to school through the communication education workers, the introduction of ICT in learning, government commitment to the remedial learning programme, the national dropout and repetition strategy and the development of a national referral system.

Sustainability: Programme results were highly sustainable**.** Some of the noted elements included the adoption of the programme by the Government to be introduced in all schools in Rwanda even before the end of the programme. The remedial learning programme was also included in the curriculum in TTCs. The programme involved headteachers and communities in the dissemination of activities, a powerful sustainability element. The engagement of communities also contributed to addressing negative social norms around girls' education.

10.2 Lessons learnt

Key lessons from the programme are:

i. Involvement of parents of learners enrolled in the remedial education programme is key to success.

ii. A monitoring system to track children at risk of dropping out is key for reducing dropout.
iii. Remedial learning clubs proved to be an effective approach to motivate learners.
iv. Strategic partnerships for the programme contributed to the success of the interventions.
v. Most rural schools struggled with accessing ICT tools due to unavailability of electricity and low capacity in the use of ICTs.

10.3 Recommendations

i. UNICEF should consider documenting the good practices generated by the implementation of the GEP. Beyond this evaluation report, UNICEF and partners should create a compendium of key achievements and successes in remedial learning. UNICEF should consider working with Imbuto to document what has worked well, what can be modified, changed or removed and what can be added to make the programme more effective. Small videos around the different pillars of the programme could also be generated for wider dissemination.
ii. As the remedial learning programme is now a nationwide programme, the Government and supportive development partners should consider supporting the provision of the internet in schools.
iii. REB and UNICEF should develop operational guidelines for the implementation of the policy on children living with disabilities and national referral guidelines to support the design and implementation of different programmes aimed at inclusion of these children.
iv. Future remedial education programmes should consider using a lifecycle approach to cover services for ECD, lower primary grades and reproductive health services for young adolescent girls.
v. Future remedial education programmes should consider the inclusion of innovative ways of learning such as use of tablets, games and edutainment.
vi. Given that the remedial education programme now extends nationally, a sustainable incentive system for remedial education should be considered for schools and districts.
vii. Consider investing in teacher capacities to make the national remedial education programme effective.
viii. Consider the design of community awareness programmes to address social norms that negatively affect girls' participation in education.
ix. Against the backdrop that some learners come from marginalized families, future programmes should consider integrating social protection initiatives to support families with learners in the lowest-performing quintile.

REFERENCES

Baseline Study of the Girls' Education Programme in Rwanda. Final Report 2020

Equal Measure 2030, Data Hub, SDG 4: Education, https://data.em2030.org/goals/sdg4/ accessed 10 February 2023

Equal Measure 2030, Data Hub, SDG 4: Education, https://data.em2030.org/goals/sdg4/ https://www.unicef.org/rwanda/education

Fredriksson, A. and Oliveira, G.M.d. (2019), "Impact evaluation using Difference-in-Differences", *RAUSP Management Journal*, Vol. 54 No. 4, pp. 519-532.

Government of Rwanda (2017). 7 Years Government Programme: National Strategy for Transformation (NST1) 2017–2024

Government of Rwanda (January 2020). An Architecture for the Integrated Education Management Information System.

Midline Evaluation of the Girls' Education Programme in Rwanda. Remedial Learning Clubs. Final Report March 2022.

Ministry of Gender and Family Promotion (2011). National Integrated Child Rights Policy.

REB (3/10/2021) Transmission of remedial education programming guidelines for classroom implementation 2021.

Republic of Rwanda Ministry of Education. *2020/21 Education Statistical Yearbook*.

Republic Of Rwanda Ministry of Gender and Family Promotion (February 2021). Revised National Gender Policy Accelerating the Effectiveness of Gender Mainstreaming and Accountability for National Transformation.

Republic of Rwanda, Ministry of Education. Education Sector Strategic Plan 2018/19 to 2023/24.

Republic of Rwanda. Ministry of Education (2016). *A study on children with disabilities and their right to education*. Education Development Trust. UNICEF.

Republic of Rwanda. Ministry of Education (October 2018). Special Needs & Inclusive Education Strategic Plan 2018/19-2023/24.

Republic of Rwanda. Ministry of Education. Girls' Education Policy (April 2008).

Rwanda Ministry of Gender and Family Promotion (2021). The Revised National Gender Policy.

The World Bank, Girls Education, https://www.worldbank.org/en/topic/girlseducation

UNDP (2015). Human Development Index.

UNICEF (2017). *Knowledge, Attitudes, and Practices around Gender and Education in Rwanda*.

UNICEF Rwanda (2019). Project description for Hempel Foundation – Project document.

UNICEF, Plan International, Transform Education and UNGEI (December 2021). *Gender Transformative Education. Reimagining Education for a More Just and Inclusive World*.

World Bank (2023). *Closing the gap: Tackling the remaining disparities in girls' education and women's labour market participation*.

ANNEX 1: Results framework & ToR

ToR available here.

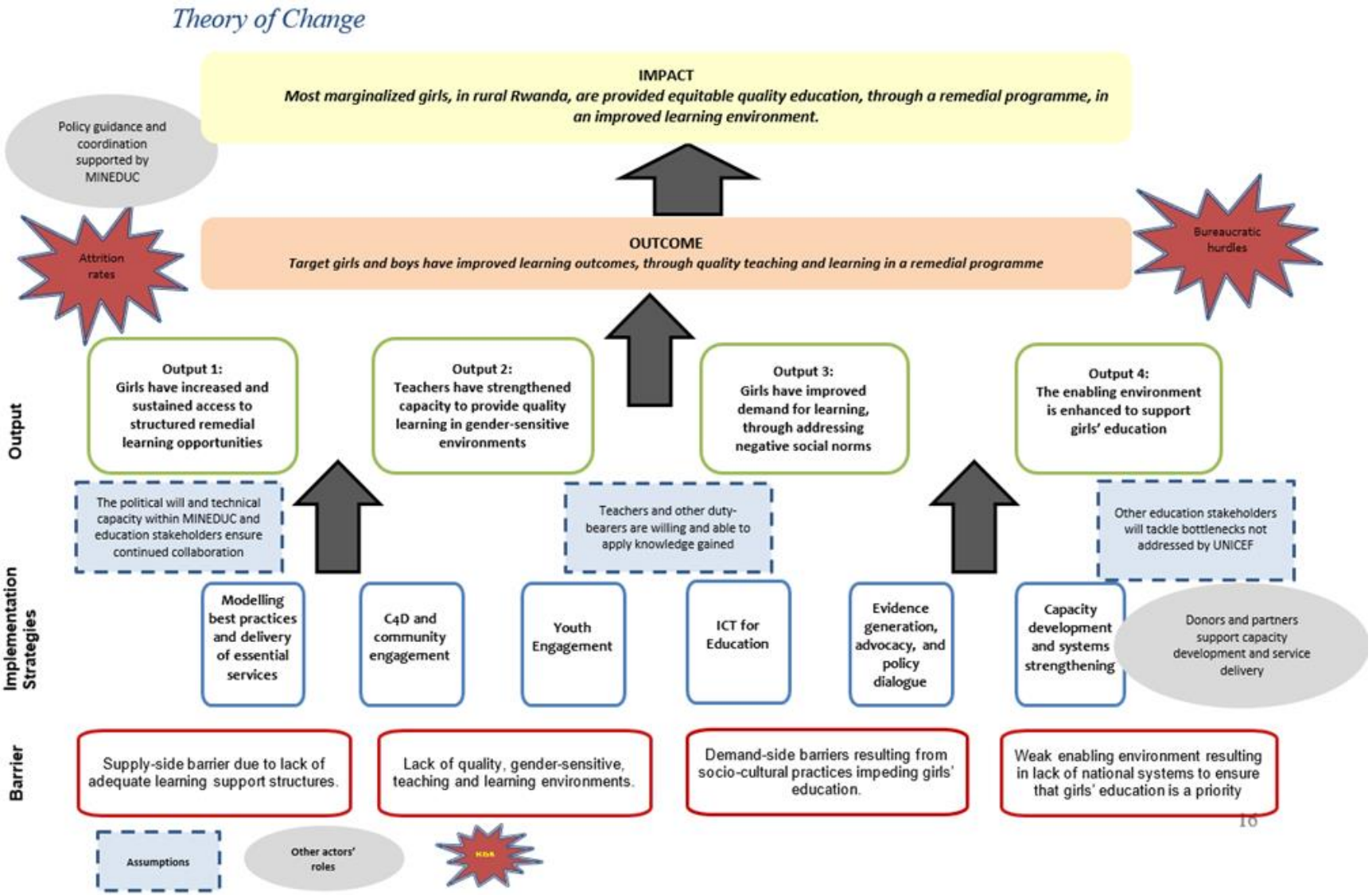
Indicator	Baseline	Target[39]	Endline	Means of Verification
Outcome: Adolescent girls have improved gender-equitable opportunities in education				
Dropout rate of girls in primary school	6.3% (2017/2018)	3% (2020/2021)	1.44% (2022/2023)	Ministry of Education, Education Management Information System
Repetition rates of girls in primary school	12.4% (2017/2018)	5% (2020/2021)	8.88% (2022/2023)	Ministry of Education, Education Management Information System
Learning Outcomes of adolescent girls, in project schools	**Literacy**: 6.2% met or exceeded benchmark **Numeracy:** 66.5% met or exceeded benchmark	Target not set after the baseline	**Literacy:** 87.9% met or exceeded benchmark **Numeracy:** 99% met or exceeded benchmark	Evaluation baseline and endline and summative evaluation
Output 1: Girls have increased and sustained access to structured remedial learning opportunities				
# of children reached through remedial education	2,500	10,500	25,960	Field trip reports
# of apps used to support learning	0	15	16	Field trip reports
% of apps used on a weekly basis	0	50%	80%	Field trip reports
% of schools still operating the remedial curriculum after 2 years	0	80%	100	Field trip reports
Output 2: Teachers have strengthened capacity to provide quality learning in gender-sensitive environments				
# of teachers trained in service on gender-sensitive pedagogy	100	300	462	Field trip reports
# of tutors trained at TTCs in gender-sensitive pedagogy	0	240	299	Field trip reports
% of teachers and school leaders demonstrating improved knowledge and skills on gender-sensitive and adolescent-friendly pedagogy	0	300	1,383	Evaluation baseline and endline and summative evaluation
Output 3: Girls have improved demand for learning, through addressing negative social norms				
# of communication messages delivered	75	300	1,075	Field trip reports
# of community members reached	2,000	77,000	103,111	Field trip reports
% of family members and community members that demonstrate improved knowledge and attitudes towards girls' education	0	70%	85.7% of parents reported supporting girls' learning.	0
Output 4: The enabling environment is enhanced to support girls' education				
National Strategy on Learning and School Retention developed	No	Yes	Yes	Government reports

[39] Targets will, as far as possible, be disaggregated by sector, district and national levels.

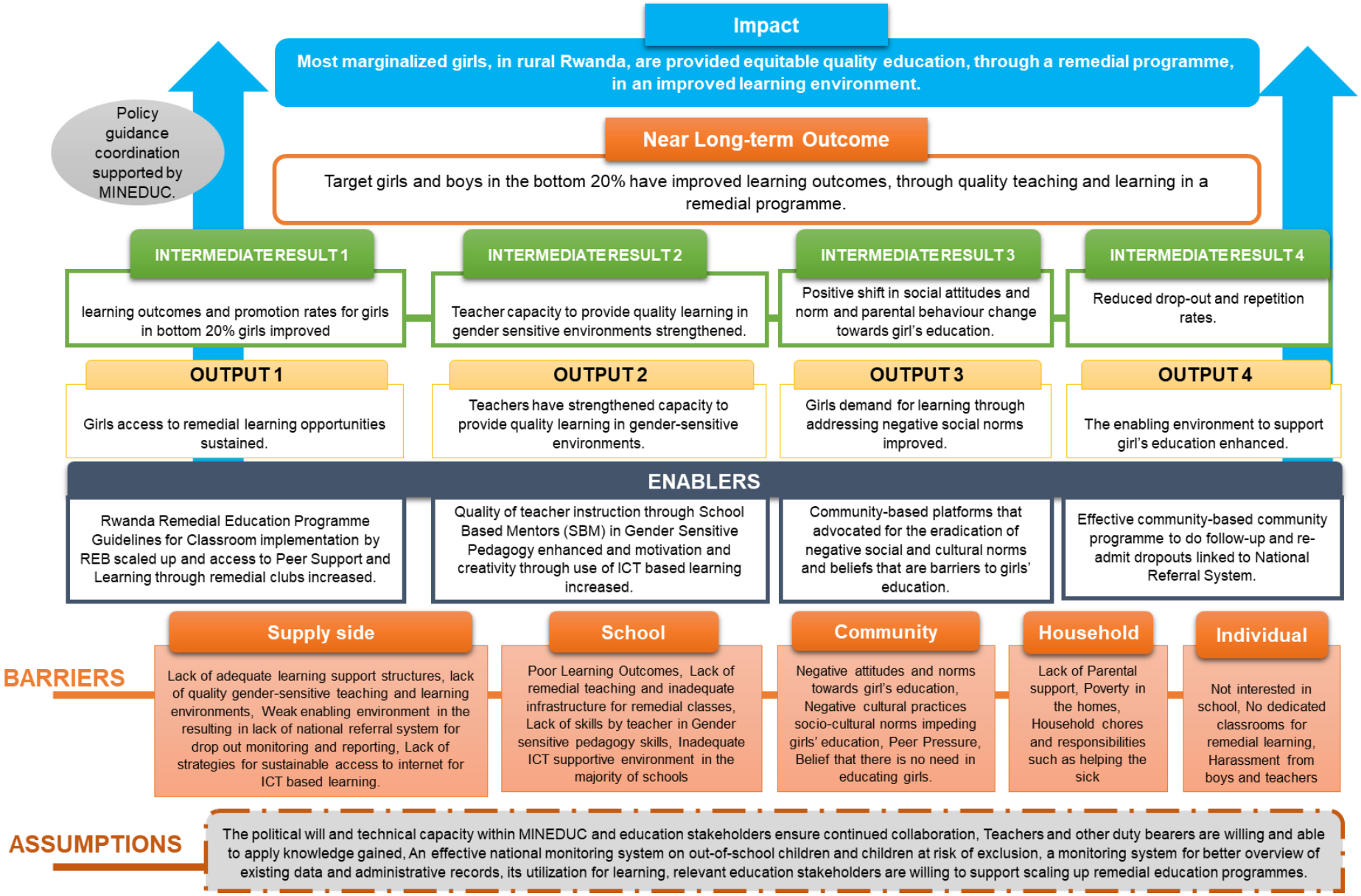
National referral system developed	No	Yes	Yes	Government reports

ANNEX 2: Theory of Change

Original Theory of Change



Reconstructed Theory of Change



ANNEX 4: List of people interviewed

Name	Position	Institution
REGIONAL LEVEL KII		
Kimberly Joanna Davis	Education Specialist – Eastern Southern Africa	UNICEF
Helen Cron	Education Specialist – Eastern Southern Africa	
NATIONAL LEVEL KII		
Pascal Karemera	Monitoring and Evaluation Specialist	UNICEF
Marie Therese Uwizeyeyezu	Education Officer	UNICEF
Munyaneza Beranard	Girls' Education Officer	MINEDUC
Ntaganira Jean de Dieu	In charge of primary education	MINEDUC
Nehemie Bacumuwenda	REB official	REB
Vincent Gakwaya	Project Officer/Head Writer	Urunana Development Communication
Jean Paul Kabanda	Programme Specialist in the Education Division	Imbuto Foundation
Jean de Dieu Kayiranga	Education Division Manager	Imbuto Foundation
DISTRICT LEVEL KII		
Alhonse Marie Nzahabwa	District Education Officer in charge of nursery and primary	Kayonza District
Iradukunda Florence	Maths teacher	GS Migera Kayonza
Elly Ntirandekura	Director Youth Centre Official	Kayonza Youth Centre
Vumera Makesha Jean Bosco	DDE	Nyabihu District
Iradukunda Louise	School teacher	EP Bukinanyana ADPER
Niyitegeka Jean Pierre	Youth Centre Official	Nyabihu Youth Centre
Valence Nyampeta	English and Special Education Tutor	TTC MATIMBA Nyagatare
Edith Batamuriz	District Director of Education	Nyagatare District
Karake Francois Xavier	Youth Centre Coordinator	Nyagatare District
Ngizwenimana Jean Marie Vianney	Headteacher	GS Bufunda Nyagatare
Thelespore Nkeshimana	Gikaya Headteacher	GS GIKAYA Kayonza
Nikuze Bernadette	College Principal	TTC Bicumbi Rwamagana
Pelagie	Trained science tutor	TTC Cyahinda Nyaruguru
Daniel Ndagijimana	Youth coordinator	Nyaruguru Youth Centre
Kabatesi Marie Leoncy	Ruseke Headteacher	EP Ruseke Nyaruguru
Alex Nkanika	Teacher in TTC	TTC Gacuba II Rubavu
Ndibwami Celestin	Headteacher	GS Buhaza Rubavu
Justin Mugabo	Acting Youth Centre Head	Rubavu Youth-Friendly Centre

ANNEX 5: Clearance and Approval Letter

UNITED NATIONS RWANDA

unicef for every child

Kigali, 25th April 2023
Ref: EDUC/MY-CA/23 - 008

To: Mayors of Kayonza, Nyabihu, Nyagatare, Nyaruguru and Rubavu Districts

Dear Mayor,

Subject: End-line evaluation of remedial programme on girls' education

With reference to MINEDUC letter to UNICEF N°0503/12.01/2023 date 11/04/2023, we are writing to inform you about upcoming end line evaluation of girls' education programme being implemented in your district in partnership with Imbuto Foundation. This follows an earlier letter from UNICEF N° REP/EXT/IL/PL/HD/21-011 dated 19th October 2021 (both letters attached) addressed to Mayors of the five districts informing about a baseline study of the programme undertaken by PRIMSON Management Services (PRIMSON). The upcoming end-line evaluation will be conducted by the same company (PRIMSON) to assess the programme impact and document lessons learned.

In this regard, a team will visit your district and targeted schools in May/June 2023 to collect the end-line evaluation data. The evaluation team will meet students, teachers, parents/guardians, relevant education officials and communities to obtain information that will help to assess progress and performance of the girls' education programme.

Approval of the end-line evaluation has been obtain from National Ethics Committee.

Kindly find enclosed MINEDUC supporting letter as well as the list of schools to be included in the end-line exercise per District.

I wish to take this opportunity to acknowledge our close partnership and joint objective to improve the quality of education in Rwanda.

Sincerely,

Min Yuan
Deputy Representative

Cc:
- Charles Karakye, Permanent Secretary, Ministry of Education

UNITED NATIONS CHILDREN'S FUND (UNICEF)
Boulevard de l'Umuganda - Kacyiru - Rwanda - Tel +250 252 59 2700 - Fax +250 252 59 2810 - Email: kigali@unicef.org

Educ 20/11/2019

REPUBLIC OF RWANDA

Kigali 20.11.2019
N°.3455/ 12.01/2019

MINISTRY OF EDUCATION
P.O Box 622 KIGALI

FOR REGISTRATION UNICEF KIGALI RECEPTION DESK Date: 20 NOV 2019 Time: Signature:

Nathalie Hamoudi
Country Representative (ai)
UNICEF, Kigali Office

Dear Country Representative (ai), UNICEF,

RE: Supporting letter to conduct evaluation on girls' education

The Ministry of Education is grateful for UNICEF's continued support to improve opportunities for equitable quality education through a remedial programme, in an improved learning environment in supported schools. The remedial learning programme is designed to improve basic literacy and numeracy learning outcomes, metacognitive skills, and empower girls and is also complemented by a suite of open-source applications that support use of digital content.

It is in this regard that the Ministry of Education will appreciate the support of UNICEF in capturing the impact of the programme and understand the extent to which the programme has improved opportunities for girls' education, specifically: the impact of the remedial programme on girls' learning outcomes; the impact of the teacher training on the learning environment and the sustainability and scalability of the programme;

The findings and recommendations from the evaluation will be used to enhance the design, planning, and implementation of girls' education programmes and provide technical guidance to different stakeholders engaged in girls' education in Rwanda. In addition, the results from the evaluation will inform future programming in the area of girls' education and interventions that include the use of ICT. We will appreciate if you could discuss with the technical team on their engagement and support of the evaluation.

Sincerely,

Samuel Mulindwa
Permanent Secretary

RECEIVED Date: EDUCA Time: 20 NOV 2019 By: UNICEF - Front Office

Cc:
- Minister of Education
- Minister of State in charge of Primary and Secondary Education
- Director General, REB

REPUBLIC OF RWANDA/REPUBLIQUE DU RWANDA

RWANDA NATIONAL RESEARCH ETHICS COMMITTEE / COMITE NATIONAL D'ETHIQUE DE LA RECHERCHE

E-mail: info@rnecrwanda.org
Web site: www.rnecrwanda.org
Ministry of Health
P.O. Box. 84
Kigali, Rwanda.
FWA Assurance No. 00001973
IRB 00001497 of IORG0001100

05th May 2023
No.249/RNEC/2023

Dr. Nedy Matshalaga
Executive Director and Principal Investigator

Your research project: "**Endline Evaluation of the Girls' Education Programme**" has been evaluated by the Rwanda National Ethics committee.

Name	Institute	Involved in the decision		
		Yes	No (Reason) Absent	No (Reason) Withdrawn from the proceeding
Dr. Jean-Baptiste MAZARATI	Chairperson of the RNEC	X		
Prof. Jean Paul RWABIHAMA	University of Rwanda		X	
Prof.Laetitia NYIRAZINYOYE	University of Rwanda			X
Ass .Prof. Egide KAYITARE	University of Rwanda	X		
Mr. Spencer BUGINGO	Lawyer	X		
Ass. Prof. David K. TUMUSIIME	University of Rwanda	X		
Ass. Prof. Lisine TUYISENGE	Kigali Teaching Hospital	X		
Ass. Prof. Darius GISHOMA	University of Rwanda		X	

The Rwanda National Research Ethics Committee, (RNEC), was established by Law N°. 015/2022 of 29/06/2022 Relating to Research on a Human Being in its Article 4.

Sr.Epiphanie MUKABARANGA	Rwamagana Nursing and Midwife school	X		
Dr. Vedaste NDAHINDWA	University of Rwanda	X		

After review of the protocol during RNEC Meeting of 22nd April 2023, where quorum was met, and revisions made on the advice of the RNEC submitted on 05th May 2023, **we hereby provide approval for the above-mentioned protocol.**

Please note that approval of the protocol and consent form both English and Kinyarwanda version is valid for 12 months.
You are responsible for fulfilling the following requirements:

1. Changes, amendments, and addenda to the protocol or consent form must be submitted to the committee for review and approval, prior to activation of the changes.
2. Only approved consent forms are to be used in the enrollment of participants
3. All consent forms signed by subjects should be retained on file. The RNEC may conduct audits of all study records, and consent documentation may be part of such audits.
4. A continuing review application must be submitted to the RNEC in a timely fashion and before expiry of this approval.
5. Failure to submit a continuing review application will result in termination of the study.
6. Notify the Rwanda National Ethics committee once the study is completed.

Sincerely,

Date of Approval: 05 May 2023
Expiration Date: 04 May 2024

Dr. Jean- Baptiste MAZARATI
Chairperson, Rwanda National Research Ethics Committee.
C.C.
- Hon. Minister of Health.
- The Permanent Secretary, Ministry of Health.

R.N.E.C P.O BOX: 84 KIGALI

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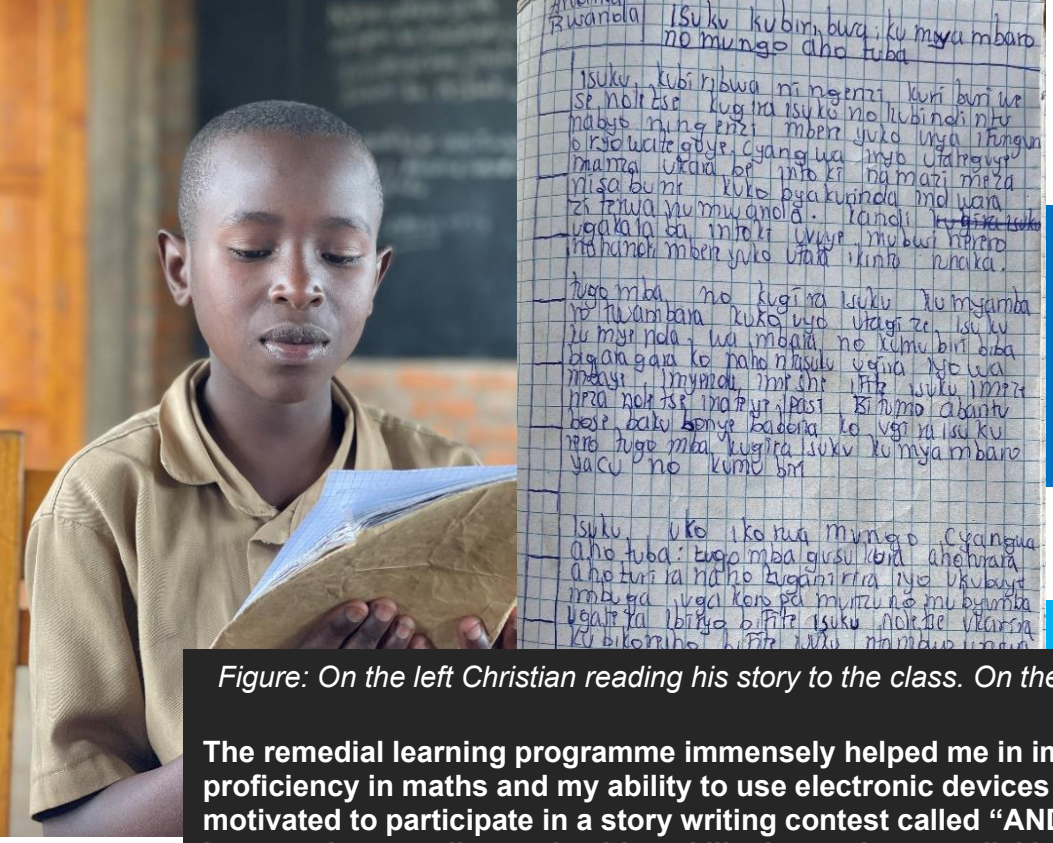
ANNEX 6: CASE STUDIES



MALE LEARNER

EP BUKINANYANA ADEPER School

Endline Evaluation of the Girls' Education Programme

Figure: On the left Christian reading his story to the class. On the right: A excerpt of his story

The remedial learning programme immensely helped me in improving my reading and writing skills, as well as my proficiency in maths and my ability to use electronic devices like computers and tablets. As a result of this programme, I felt motivated to participate in a story writing contest called "ANDIKA RWANDA". This contest picked my ability because I had improved my reading and writing skills due to the remedial learning programme. In both my classes and in the Remedial Learning clubs, we were given story writing exercises to complete. When the school announced the story writing contest, I asked my teacher if I could participate and used my remedial notebooks to gather vocabulary and insights to use in my writing. I chose to write my story on the theme of hygiene, specifically on the topic of "*Isuku ku biribwa ku myambaro no mu ngo aho tuba*". I drew inspiration and ideas from what we had learned in the club. My story was one page long, and it was rated by my teachers. I was thrilled to find out that my story was ranked first in the school, and it was sent to compete at the cell level. At this level, my story was among the best, and I was invited to the cell office to read and explain my story to the judges. My story was ranked first in the entire cell, which was a great achievement for me. My story was then sent to compete at the sector level. Later on, my teacher informed me that my story did not rank among the best at the sector level. Despite this setback, I was still happy that my story had reached at least the sector level, and I remained confident that it would perform well in the future. In conclusion, my experience is just one example of the many students who have benefitted from the remedial programme. Not only have we improved our learning, but we also feel empowered and confident to participate in different activities, including contests like the story writing competition.