

## Remedial Learning Program on Students' Improved Learning Outcomes: A Reference to Rwanda's Initiative in Basic Education

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### Abstract

The remedial learning program in Rwanda was set as part of the government's education policy to strengthen educational outcomes for primary education. This initiative addresses the academic challenges that primary school learners face, especially in lower primary. Thus, a study assessing a remedial learning program's impact on students' learning outcomes in basic education in Rwanda. Using a mixed-methods approach, this study purposefully selected 20 primary school teachers, 100 students, 10 school leaders, 10 parents, and 10 education stakeholders (NGO staff) from across Rwanda, representing four provinces and the city of Kigali, to ensure both regional diversity and National relevance. In total, the study engaged 150. Quantitative data were analyzed in Microsoft Excel, while qualitative data were analyzed thematically. The findings revealed that students' performance was boosted to some extent by the program itself, particularly in foundational areas such as literacy and numeracy. However, key challenges affecting learning outcomes include overcrowded classrooms, learner absenteeism, and a shortage of teaching and learning materials (TLMs). Additionally, the study emphasized the importance of creating personalized, interactive, and scaffolded learning environments in which learners support each other with appropriate guidance.

**Keywords:** Educational policy, Learning Outcomes, Remedial Learning, Teaching and Learning Materials (TLMs), Teaching at the Right level

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### Background

Remedial learning in basic education refers to targeted instructional support for learners who are performing below expected proficiency levels in core subjects such as literacy, numeracy, and science. The Remedial Learning Program in Rwanda was established in 2020 to align with Rwanda's commitment to educational reforms and equitable learning outcomes (REB, 2020). However, the program faced many obstacles, such as a large number of struggling learners in literacy and numeracy, which serve as the key foundations for learning, and significant remedial learning approaches were designed to raise academic success. Among others, we find Teaching at the Right Level, Universal Design for Learning (UDL), Play-Based Learning, Targeted Instruction, and Gender-Responsive Pedagogy (fhi, 2023). Where Remedial is, assessment must surround. In numeracy, some skills under concentration include reading numbers, comparing numbers, calculations, algebra, fractions and decimals, geometry and measurements, and solving worded problems. Moreover, skills associated with Literacy (language letters) include oral language (listening and speaking), reading, and writing. This was described as the long-term effects on the educational trajectory towards Vision 2050. Exploring the effectiveness of Rwanda's remedial learning program in improving academic performance, and on opportunities associated with this program like holiday teaching, weekend teaching, weekdays and Friday remedial day tabled as per the first to the fourth period by the Rwanda Basic Education Board (REB, 2020). Remedial learning in early grades is necessary because early identification and support of learning gaps prevent long-term academic failure and help children build foundational skills effectively (UNESCO, 2023).

### **Problem statement**

In Rwanda, the Ministry of Education introduced the remedial learning program as part of broader efforts to improve learning outcomes in primary education. The program was established in response to evidence showing that many students were not acquiring foundational skills despite progressing through the school system. It aligns with national goals outlined in the Education Sector Strategic Plan (ESSP) and with global commitments, such as Sustainable Development Goal 4, which aims to ensure inclusive and equitable quality education for all. The program emphasizes differentiated instruction, learner grouping based on performance levels, and the use of continuous assessments to track and support individual learner progress (REB, 2020). The goal is to bridge learning gaps by providing additional time, resources, and teaching strategies to ensure all students meet minimum learning standards. This approach has gained global recognition as a key strategy for promoting inclusive education and addressing educational inequality, especially in contexts where learners are affected by factors such as poverty, conflict, and under-resourced schools (Rai en Penjor, 2020).

Comparisons with remedial learning programs in countries such as Finland and Zambia highlighted potential pathways to sustainability, including intensive teacher training, the development of instructional materials, and the integration of technology to address existing barriers. The remedial learning model in Rwanda categorizes students into three main groups: struggling learners, consolidated learners, and extended learners (REB, 2020). Also, struggling learners receive intensified support to grasp foundational concepts, while consolidated learners are assisted to reinforce their competencies, and extended learners are challenged with advanced content to sustain their academic growth. This stratification enables teachers to address diverse learning needs within the same classroom, thereby enhancing teaching effectiveness and equity in learning.

Despite its promising design, the implementation of the remedial learning program faces several

challenges that limit its impact. Issues such as the need to cover many content areas, overcrowded classrooms, limited teaching and learning materials, inadequate infrastructure, high teacher-to-pupil ratios, and irregular student attendance hamper the program's effectiveness (Schwartz et al., 2012). Furthermore, some teachers struggle to adapt to new pedagogical approaches required for successful remediation, partly due to limited professional development and ongoing support. These challenges highlight the need for continuous evaluation, innovation, and investment in order to improve the sustainability and effectiveness of remedial learning in primary education (REB, 2020).

## **Literature Review**

### **Prior studies to remedial learning program**

Although it has many appellations, like "coaching" and "Catch Up," remedial learning programs have been widely adopted across the globe to support students at risk of falling behind academically. In this 21st-century learning design, different learning Styles have been applied to align with new trends. Some of them are mentioned by Schwartz (2012), who always focuses on the development of materials to meet all teaching levels (extended, consolidated, and struggling), indicating that resources and materials must satisfy learners' needs in education. He said that: *"To provide remedial learning resources for a learner usually requires prerequisite knowledge on basic skills like reading, writing, and mathematics."*

The effectiveness of these programs depends largely on the immense range of traditional and modern approaches, totalling seven, including Teaching at the Right Level (TaRL), inclusive education, Universal Design for Learning (UDL), gender-responsive pedagogy, play-based learning, targeted instruction, and remedial learning itself. The countries that implemented these approaches differently based on their educational systems, resources, and cultural orientation to solve learning challenges. What we need to note is that remedial learning is an integral part of improved learning outcomes for learners who identified a gap in their academic performance (Fhi360, 2023; Rai & Penjor, 2020).

### **A success through remedial learning doctrines, principles and practices**

Comparisons will be made with similar programs implemented in countries such as Finland and Zambia, where remedial education has been proven successful in the twenty-first century. *"Beyond creating a positive classroom culture, there are a variety of instructional strategies that teachers can use in both remedial and regular lessons that engage all learners, including those with difficulties. These strategies do not require additional resources, and teachers can easily integrate them into existing lessons"* (REB, 2020).

### **Key approaches that make remedial learning successful**

Successful remedial learning focuses on addressing individual learning gaps through targeted, supportive, and flexible teaching strategies. It aims to strengthen foundational skills while building learners' confidence and motivation through key approaches including:

*Teaching at the Right Level (TaRL)* is an educational approach that emphasizes meeting students' needs and performance levels rather than adhering to the curriculum level. It starts with assessing each student's prerequisites and current level of understanding so as to address their specific learning needs. According to Mitasari et al. (2023), engaging and attractive learning materials are used to make

knowledge more accessible to learners, based not on their grade level but on their actual ability. By grouping students according to their competencies rather than their grades. Thus, TaRL provides targeted tools to address learning gaps and build a strong foundation of knowledge (precise learning).

*Universal Design for Learning (UDL)* is an educational approach that can accommodate a Combined Activities for Maximised Learning (CAMaL), which involves three interactive steps: multiple means of engagement, representation, and expression (*flexible teaching*). UDL also promotes practice and the development of critical thinking skills by presenting content through multiple means, including visual, auditory, and tactile materials. Rooted in educational rights and legislation that ensure all students receive a free and appropriate education even in the least restrictive environment, UDL supports inclusive learning for every student. It can be applied across written assignments, oral presentations, and creative projects, allowing learners to showcase their individuality, strengths, and areas for growth while fostering inclusiveness and meaningful engagement (Ralabate, 2011).

*Inclusive Education* as an approach that caters for every child, regardless his/her abilities, background, gender, ethnicity, region or religion to access high-quality education (Equitable learning), and according to Moraña (2019) Inclusive education postulates the right to full participation and quality education. It is broader than schooling, combating discrimination, and creating a flexible, child-friendly community, on the basis that disability is not inability. This means it focuses on removing barriers to learning for students with disabilities or other learning difficulties (being poor, vulnerable, or abandoned). The core goal of inclusive education is to transfer knowledge regardless pupils' individual differences.

*Gender Responsive Pedagogy (GRP)* is an educational approach that considers the avoidance of gender inequalities in teaching and learning. While delivering lessons, materials, and activities are inclusive for both boys and girls. Furthermore, Gender Responsive Pedagogy emphasizes providing equal opportunities for both boys and girls to actively engage in the learning process (Chapin and Warne, 2020). It ensures that teaching methods, classroom interactions, and educational materials are inclusive and free from bias, fostering an environment where all students, regardless of gender, can participate fully and benefit equally from educational experiences. There were gender inequalities in a classroom, where boys performed better in daily status subjects such as Mathematics and sciences (Mukagihana, Sibomana & Ndiritu, 2024). It is of paramount importance to evaluate how gender influences education and how teaching can be more inclusive and equitable in schools (Buchmann et al., 2008).

*Play-Based Learning* is an educational approach that integrates playful, hands-on activities into the learning process, allowing children to explore, experiment, and develop new skills through play (*learning through play*). It is suitable for kids ages 4-5, but it can also work for older kids to encourage creativity, collaboration, and peer-to-peer learning, boosting curiosity, critical thinking, and real-world problem-solving (Parker et al., 2022). A playful pedagogy is characterized by being meaningful, socially interactive, iterative and problem-solving, joyful, and actively involving (Tümay, 2016; Zosh et al., 2017).

*Targeted Instruction* as an educational approach that focuses on addressing needs, abilities, and learning individual or group learning gaps (*structured teaching*). It encompasses differentiated instruction, learning plans, and formative assessment within the Learning Cycle (LC) of planning, practice, and assessment (Sibomana. Also, Moore (2007) emphasized that, when defining concepts, effective teachers prevent students from failing by using direct and explicit instruction with a variety of teaching methods to address learning needs. Direct instruction always guarantees teaching by

targeting instruction to foster success for every learner in a classroom after fixing important classroom routines.

*Remedial Learning* as an educational approach designed to provide extra support to students who are struggling to meet academic standards compared to their peers. According to Bauman and Tuzhilin (2018), one of the stages towards the success of remedial learning is the building of a Library of Remedial Learning Materials (Rai en Penjor, 2020). They meant creating a collection of supplementary resources that enhance the course content beyond the required readings. These materials can include textbooks, teaching aids, articles, videos, audios and other online resources relevant to the subject. Remedial teaching and a suitable opportunity to control challenging situations like the class sizes, learning difficulties and exorbitant classroom failure for continuous peer support.



Image 1. Seven approaches for effective remedial education

### Informant for remedial learning approaches

In Finland, remedial education is purely integrated into the school system. They are used to individualized learning and the extra support learners need after a regular lesson. Teachers provide additional help through small groups of learners, and tasks differ based on learners' categories/abilities. The Finish curriculum is adapted to ensure that all students, including those with learning difficulties and disabilities, receive appropriate support (Sahlberg, 2011). Looking at literacy and numeracy as basic skills, Sahlberg (2011) confirms that students' test scores can indicate whether an education system is meeting its goals or lagging behind the norm.

Finnish teachers are highly trained day by day to closely link the government curriculum to learners. They all uphold the principle that all students must have access to high-quality curriculum regardless of where they live or the school they want to attend. Moreover, teachers mastered a child-friendly school model, building strong relationships that facilitate the teaching and learning process. Various studies have shown that commitment among newly recruited and experienced teachers is highly recommended by policymakers for accountability and equity. Other studies showed the positive effects of Continuous Professional Development (CPD) and Community of Practice (CoP) on the continuity of self-professional devotion and development in this career (Miksic).

In Africa, referral countries like Zambia highlight the role of teachers in educational reforms, suggesting that teacher collaboration, teacher leadership, and classroom management can be agents of educational change and success (Datnow, 2020). Governments and organizations set out programs to meet learners' expectations. Education programs plan for each student to leave the school with a competence required solving real-life problems. When studies in this direction are examined, it is

evident that various countries aim to impart basic knowledge and skills to their students before leaving school through different programs (Balkan and Küçüktepe, 2021).

In response to known challenges such large class management and insufficient teaching and learning materials, some countries implemented a remedial learning program to assist students who are struggling academically (Schwartz, Working en Series, 2012). Teachers have a time for remedial or extra time to apply remedial lessons in the same classroom by providing specialized interventions, including permanent training, model lesson presentations and a number of teachers in the education sector, and the result ensured that students who are behind the traced line get the opportunity to catch up and build the foundational skills necessary for academic success. As a result, significant outcomes were positive, particularly in improving students' literacy and numeracy skills through the above interventions.

To measure progress in these basic skills, countries set up mid-term and end-term evaluations at the national level (in Rwanda: Term 1: Evaluation by teachers (at the school level), Term 2: Evaluation by Districts, and Term 3: Evaluation by the National Examination and School Inspection Authority).

### **Challenges and Opportunities of the Remedial Learning Program**

Remedial Learning (RL) program supports the idea that academic performance is a combination of diverse challenges and opportunities. Some of the mentioned ones include a list of learners' needs namely resources, parents' resistance to schooling and instability of teaching and learning styles in the education system (Rai and Penjor, 2020). However, remedial learning also presents significant opportunities, such as upgrades in educational technology, collaborative learning, curriculum updates, and continuous professional development.

According to Kremer, et al., (2013), to have a big class size is a challenge like *"The Kenya study suggests that if the government planned on hiring enough teachers to have a class size of 40 students in first grade, initially hiring teachers locally on short-term contracts at about one-fourth the salary, would in theory be infinitely cost-effective: It would improve learning while reducing costs relative to the current system."*

One of the primary challenges for the success of the RL program in Rwanda is the large number of learners, which exceeds a teacher's capacity to facilitate, to the extent that some schools still have a double shift from Monday to Friday. A number of teachers in primary schools is still struggling for the language of instruction (English), although training with various partners like the British Council, Building Learning Foundation (BLF), USAID, *Flemish Association for Development Cooperation and Technical Assistance* (VVOB), Rwanda Equip and so many others have put their useful plots in various subjects. Additionally, students possess different learning difficulties, including poverty among families and conflicts leading to children's instability and dropping out before finishing primary schools, or being mostly absent from the classroom. Additionally, disability cases can hinder learners' performance on a desired level of flexibility and expertise at every school. According to Kanamugire and Rutakamize (2008), this method of assisting pupils' programs started in 2002. He emphasized that Rwanda's remedial program offers a flexible solution to its strong formal education system, one that will last for a long time to allow children and young people to support each other. Although Limited resources in some classrooms make it difficult to use educational technology for personalized learning, there is also a stigma surrounding remedial programs that causes many students to resist participation, fearing they'll be teased or labelled as "inferior" or "behind" in a classroom setting. Parents may also view these programs as unconventional or unnecessary, resulting in reluctance to provide necessary

learning materials, hindering effective participation in remedial programs.

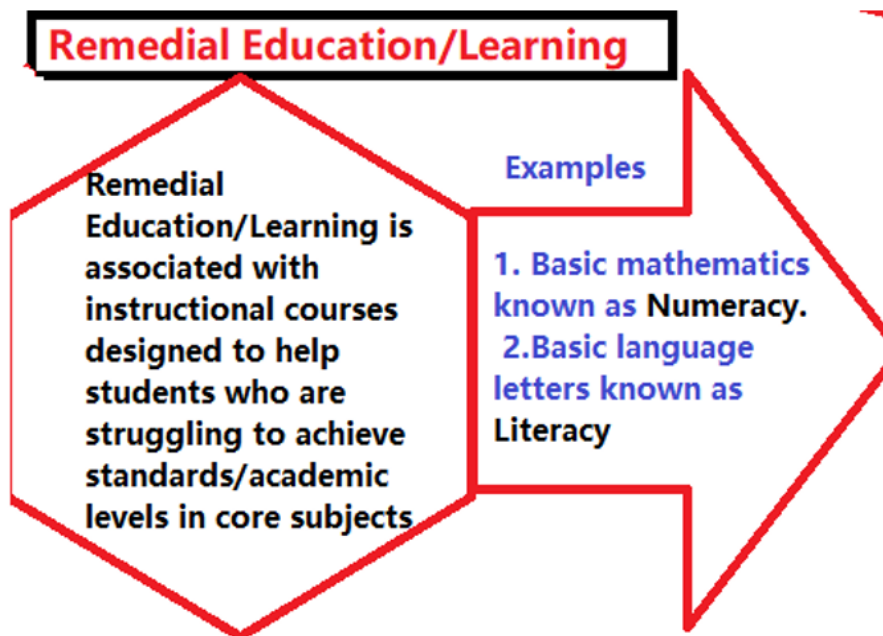


Image 2. Remedial Learning view

### Practice for Remedial Learning sessions

Effective delivery of remedial learning lessons requires structured, inclusive, and engaging practices that meet learners' needs. These practices ensure foundational skills are strengthened through targeted support and the active participation of teachers, parents, and learners themselves. The following are important steps before conducting a remedial lesson:

*Conducting Needs Assessment:* It is a diagnostic process used to identify learners' current skills and learning gaps before teaching. According to UNESCO (2023), before instruction, we must plan, collect, interpret, communicate, and decide what support to provide.

*Assessment planning* involves designing formative, diagnostic, and summative assessment tools and strategies to monitor the progress of all learners and inform our planning. UNESCO highlights that Continuous Assessment Tests, must be planned to meet/inform learning pathways (Masferrer et al., 2012).

*Assessment Practices* involve the strategic implementation of what to do next. Adapt to strategies and feedback to facilitate students.

### Best Practices for Remedial Lessons

Rwanda's education partners, including UNICEF, recommend a structured seven-step approach to delivering high-quality remedial lessons, beginning with a warm-up to energize students and set the mood, followed by a review of the previous lesson to reinforce continuity towards the new lesson. Next, the teacher models a sample activity before students split into three proficiency-based groups extended (advanced), consolidated (on-level), and struggling (requiring support) to work as a team, explain concept questions together, receive group feedback, work on an individual activity, and finish with a conclusive summary that addresses misconceptions. All of these are enhanced by the diversity

of learners, schools, and communities through appropriate languages of teaching and learning (Guiro and Stanso, 2024).

Table 1. Rwanda Remedial Practice

Stages	UNESCO Concept	Rwanda Remedial Practice
1. Pre-lesson: Needs Assessment	Identify learning gaps	Warm-up + review → diagnostic tasks
2. Pre-lesson: Assessment Planning	Plan tools & criteria	Design sample exercise + group activities for levels
3. In-lesson: Assessment Practices	Formative checks	Group work, feedback, and an individual task
4. Lesson closing	Communicate & decide	Lesson conclusion & next steps

### Opportunities for the success of the Remedial Education

The Government of Rwanda has taken significant steps to address learning challenges, particularly by expanding classroom infrastructure across the country. Beyond improving facilities, efforts have also focused on strengthening teacher capacity, especially for uncertified teachers recruited after the COVID-19 crisis. Since April 2024, these teachers have undergone structured training programs designed to ensure equitable professional standards comparable to those of graduates from the sixteen Teacher Training Colleges (TTCs). Professional development initiatives have included training in English proficiency, digital skills, and STEM subjects, among others. These efforts have been implemented in collaboration with the Ministry of Education (MINEDUC) and key educational partners such as UNICEF (through IEE-Rwanda), Mastercard Foundation, Leaders in Teaching, and Foreign, Commonwealth and Development Office (FCDO), all of whom have played a prominent role in strengthening Rwanda's education system.

What we have to add is that remediation today is strengthened by the Rwanda Basic Education Board (REB) decision taken during the 2024 end-of-year holidays, when teachers tried to assist learners (with a focus on lower primary) so that those who would pass could be promoted to another level. MINEDUC instructed that automatic promotion cannot align with the vision we want to achieve (2050 Vision) to develop a knowledge-based economy, with a particular emphasis on science and technology, as learners progress through secondary school. By stepping outside the traditional schooling model of the Knowledge-Based Curriculum (KBC) to the modern program known as the Competence-Based Curriculum (CBC), in many experimental alternatives, there will be many changes and sacrifices to attach approaches to real-life scenarios that can reintegrate students in a competitive mode of instruction, as Kituu and Koech (2022) confirmed.

Tied to the partnership with MINEDUC and Inspired Educate and Empower Rwanda (IEE-Rwanda) in their Philosophy, they supported the idea that "Education systems need to lay strong foundations for this, by fostering knowledge and skills and strengthening the capacity and motivation of learners to continue learning beyond school." To mean that building essential knowledge and skills while also motivating students to keep learning even after they leave school is the key foundation of a strong, dominant education system (*Lifelong Learning*).

In the context of the remedial program, students are categorized into three groups based on their academic needs such as Struggling Learners (marked in Orange) who require additional and meaningful support to catch up; consolidated learners (marked in blue) who are on track but need

reinforcement to strengthen their understanding in a classroom; and extended learners (marked in Green) who are capable of moving beyond the standard curriculum and require more challenging tasks so as to sharpen their mind and alert others while teachers are out of the classroom. Each group has specific needs and struggles (red colour), allowing teachers to design and identify more effective, individualized instruction tasks (REB, 2020).

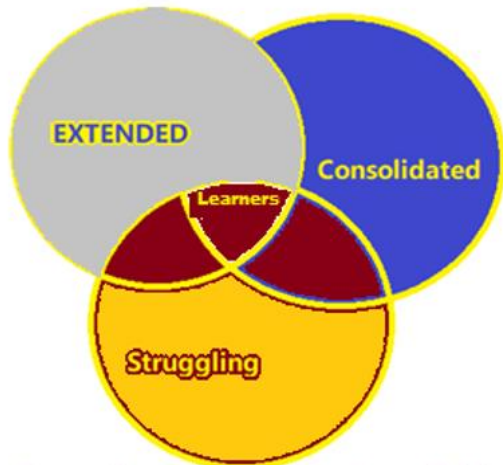


Image 3. Categories of learners in a remedial lesson

To categorize these learners, assessment is conducted before, during, and after the lesson, at the end of a unit, or at the end of the overall term. According to Black and Wiliam (2018) we cannot totally separate formative and summative assessments in educational discussions. Both types of assessment should be observed as interconnected rather than distinct categories. Formative assessment helps guide instructional actions to support student learning, while summative assessment evaluates a student's status or future potential (what he/she will be able to do). The distinction lies in the assessment's purpose and use. Also, formative assessment focuses on improving learning, while summative assessment focuses on evaluating outcomes; thus, for teachers to group learners, they can use formative assessment.

Reference is made to the Rwandan Basic Education Board (REB) weekly timetable published in 2024 (Upper primary 2.2). The Friday morning hours from 8:45 to 11:00 AM are designated for remedial sessions, without disrupting the normal school schedule. This designated time allows students to receive focused support while maintaining their regular school activities after this specific time. REB has also expressed interest in extending remedial opportunities during school holidays.

Looking at the image above (Image 3), learners in each category share similar challenges, but they approach and process learning in different ways based on their needs. Struggling learners may need more support, while extended learners require more advanced challenges than consolidated learners. Moreover, Shaw (2008) suggests that the timetable reveals the underlying assumptions and beliefs of those who design the course, reflecting their views on what students need to learn. Later in academic year 2025-2026, that hour was removed from the timetable, which led teachers to consider an integrated lesson instead.

These assumptions often involve implicit theories about education, learning, and student abilities that influence how the course is structured and how it will be conducted in a classroom. Other opportunities to improve the effectiveness of remedial learning programs can be early morning hours

before teaching, involvement of family members, online available resources for education, teachers flexibility to learn and upgrade their knowledge and skills, curriculum development, and infrastructure together with a continuous training in English and other technology based arrangements that can positively impact students to reduce the pressure and stigma often associated with personal, social or occupational reasons to accelerate learning for all, (Schwartz, 2012). Also, remediation works best when it enhances or supports the teaching methods already used by teachers in any country, rather than replacing them entirely and adapting to the new ones. In low-income countries, research shows that school-based remedial education can be especially effective in helping students who are struggling academically improve their performance significantly (Schwartz, Working en Series, 2012).

### **Social-cultural theory of learning applied to remedial learning**

The socio-cultural theory of learning appropriately aligns with the study's intention, as it focuses on improving learners' understanding through interaction, collaboration, and guided support. Vygotsky's theory emphasizes that cognitive development occurs through social engagement within a cultural context, which aligns with remedial learning practices that support learners through peers, teachers, and their learning environment (Nurfaidah, 2018). In remedial settings, students benefit from shared activities, discussion, and guidance that help them move from what they can do independently to what they can achieve with support, reflecting the concept of the Zone of Proximal Development (Shabani, 2010).

Furthermore, Guile's (2010) view of learning as a process of "remediation" strongly supports the purpose of the study, which aims to address learning gaps and correct misunderstandings. Remedial learning allows students to refine their thinking by continuously adjusting their mental processes in line with social norms and shared knowledge. By engaging collaboratively and reflecting on mistakes, learners reconstruct their understanding, leading to deeper learning and positive transformation. This theoretical framework therefore, provides a strong foundation for a study aimed at enhancing learning through support, interaction, and continuous improvement. Thus, the general objective of the study is to evaluate the impact of the remedial learning program on improving learning outcomes in Rwandan primary schools with the following specific objectives:

To examine the challenges faced by primary school teachers and students during the implementation of the remedial learning program

To evaluate the effectiveness of the remedial learning program in improving student academic performance in primary schools

To explore the opportunities and enabling factors that support the successful implementation of the remedial learning program in primary school

## **Research Methodology**

### **Research Design**

In this study, we employed a mixed-methods research approach, with qualitative data collected through interviews and focus group discussions with teachers, students, parents, and educational partners/stakeholders. Interview questions were designed to help the interviewer learn more about remedial learning and to inform our research on whether it is recognizable and whether it impacts positively or negatively. On the other hand, quantitative data were gathered from students' performance in two basic lessons associated with literacy and numeracy (key foundations), as well as other additional subjects learnt in Rwandan Primary schools as core subjects. This means languages lessons (English and French); mathematics; Social and Religious Studies (SRS), Science; and Elementary and Technology (SET). These were focused on, as literacy and numeracy are key foundations that enable individuals to communicate, solve problems, and engage with the world for academic success and day-to-day decision-making.

### **Participants**

Based on the level of randomization as Stuart and Lalongo (2010) and on the fact that participants were categorized into four groups; teachers, parents, stakeholders, and students. We purposefully targeted 20 primary school teachers from across Rwanda, selecting them from five provinces and the city of Kigali (North, South, East, West, and Kigali) to ensure regional diversity. Thus, 100 students were selected, among them 20 from each province, nominated by outstanding teachers actively working in the field. To further strengthen the sample, we included 10 school leaders and 10 parents from the community, and 10 Educational stakeholders from Non-Government Organizations, actively engaged in school improvement efforts. This brings the total to 150 respondents, made up of school leaders, teachers, stakeholders, parents, and students. The population and the sample were strategically designed for representation across regions and educational roles, ensuring a balanced and meaningful reflection of Rwanda's national education landscape.

### **Instruments**

Based on our documentation and observations, we employed multiple data collection instruments, including structured written interviews, online surveys, and student performance data. This mixed approach enabled us to measure changes in students' achievement over time, following the structure positioned by Zaza et al. (2000) in their review of effective educational evaluation practices.

### **Data analysis Procedure**

To analyze data, we employed Microsoft Excel for quantitative data, while qualitative data were analyzed thematically. The data analysis and discussion section presents information from various respondent groups, including teachers, students, parents, and educational stakeholders. By examining patterns and responses across these categories, we identify key trends related to school improvement efforts and willingness to participate in the remedial learning program. This analysis helps validate the study's objectives and reveals practical implications for education in Rwanda.

## **Findings and Interpretations**

Table 2 and Figure 1 indicate that schools are overcrowded (100%), as we can see above 56 learners in a room. Again, since remedial learning was introduced, a large number of learners have joined classes, although 43% are still absent.

Table 2. **Challenges encountered during the remedial learning program**

<b>Challenges observed</b>	<b>Statement description</b>	<b>Numbers out of 30 respondents</b>	<b>Percentage</b>
Overcrowded Classrooms	The teacher-student ratio is high, making it difficult to provide individual support, especially to struggling learners.	30	100%
Absenteeism	Teachers emphasized absenteeism as a barrier to remedial lessons because some students attend irregularly.	13	43%
Limited Resources	Some schools lack resources such as textbooks, teaching aids (manila folders, flip charts, markers, toolkits, etc.), and educational technology (projectors, computers (XoLAPTOP) to boost effective learning.	17	56%
Language Barrier	The use of English as the medium of instruction creates challenges for students and some teachers who are not fluent in the language.	26	86%
Teacher Capacity and Motivation	Teachers often lack training in remedial education, and some are unmotivated by performance contracts tied to student results at the end of a year.	21	70%

This doesn't mean the program hasn't impacted learners' attendance and performance. Some Primary schools in Rwanda are also behind due to limited resources (56%), such as computers, and yet others have a large number that can even be shared with the remaining.

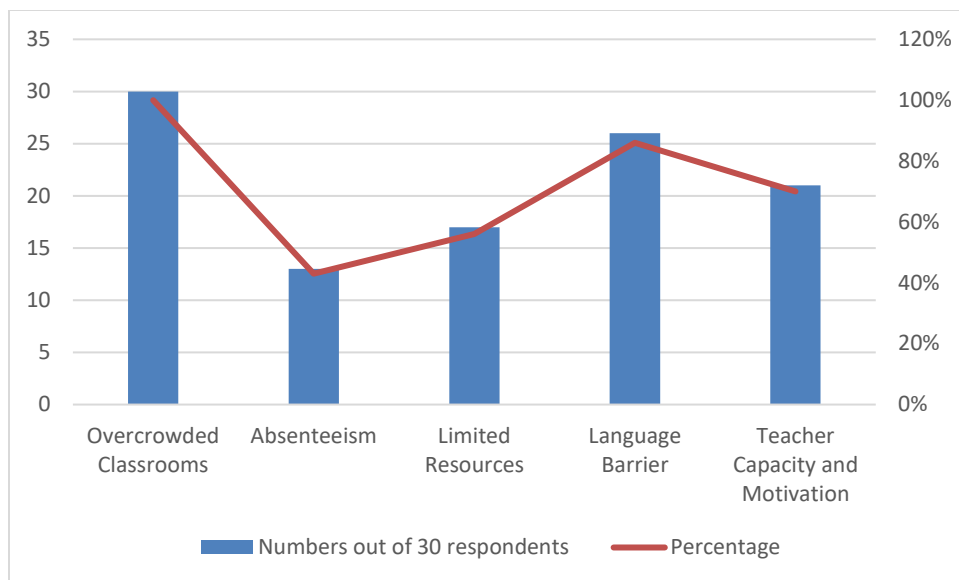


Figure 1: Challenges encountered during the remedial learning program

Teachers need to learn and be trained in English because 86% are not good at English as a medium of instruction. This will be associated with their motivation towards their performance contract appraisal, as indicated by a notice that a large number are not motivated (70%).

Table 3. Opportunities for Remedial Learning Program success

Opportunity	Numbers out of 30 respondents	Percentage %	Description
<b>Smaller Class Sizes</b>	Agree 26	86%	Remedial classes are smaller, allowing teachers to give more individualized attention to each student.
	Disagree 12	40%	
	Neutral 2	6%	
<b>Government Support</b>	Agree 20	66%	The government's commitment to education reform and teacher training provides a foundation for improving the program.
	Disagree 9	30%	
	Neutral 0	0%	
<b>Technology Integration</b>	Agree 13	43%	The use of digital tools and resources can enhance learning, offering personalized support and engaging activities for students.
	Disagree 16	53%	
	Neutral 1	3%	

Similarly, looking back at these perspectives, as shown in Figure 2 and Table 3, it is noticeable that some respondents were neutral toward the statements (Strongly Disagree:1 & Neutral:3). They told us

that they want to hold on because they are the agents of change, though they don't engage/act as required.

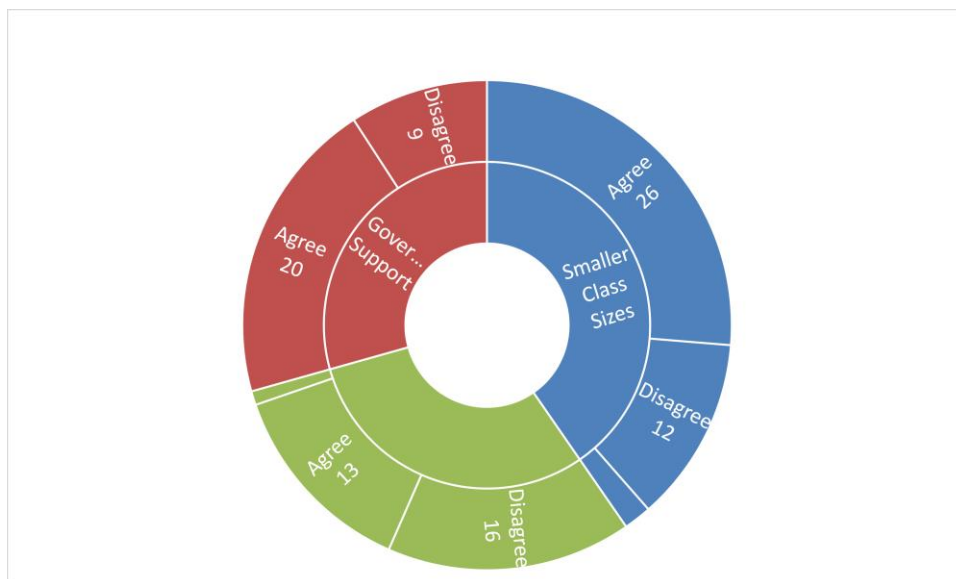


Figure 2. Status of the Opportunities of the Remedial Learning in Rwanda

A large number disagreed with (1) because they believed that classes are overcrowded and teachers are burdened. In (2), respondents highlighted that unstable changes in education are the main agent of an unfixable quality of education, as in other countries around the world, and in (3) they pointed to schools with nothing at all as technology. In whatever reason, we can say that "where there is a will, there is a way" and no turning back.

Table 4. Common failure/impractical notices in literacy and numeracy as key foundations

NUMERACY	Ratio out of 100 Respondents	LITERACY	Ratio out of 100 Respondents
1. Reading numbers	30 that is 30%	i. Speaking	56 that is 56%
2. Comparing numbers	20 that is 20%	ii. Writing	44 that is 44%
3. Calculations	41 that is 41%	iii. Reading	59 that is 59%
4. Algebra	55 that is 55%	iv. Self-skills development (library & media access)	15 that is 15%
5. Fractions & Decimals	43 that is 43%	v. Grammar and comprehension (oral & Written)	49 that is 49%
6. Geometry & Measurements	28 that is 28%	vi. Effective Creative writing	41 that is 41%
7. Solving worded problems	70 that is 70%	vii. Effective Public Speaking	39 that is 39%

On this note, we can confirm that some concepts seem to be complicated for all learners in numeracy and literacy. In general, the higher the percentage, the more complex the situation becomes. As we can see, 7, 4, and 3 in numeracy are higher than 1, 2, 5, and 6. In literacy i, ii, iii and v are higher than iv, vi and vii. Students fail in speaking and reading, and this affects their listening and writing in literacy.

### Subject success compared to core foundational skills (Math and English)

The data shows strong performance in Kinyarwanda and Social Studies, likely due to cultural familiarity and language comfort. In contrast, French and Science present challenges, largely due to limited language exposure and limited practical application. This highlights the need for improved instructional strategies in foreign language and instructional language (English) use to develop skills.

Table 5. Subject success

Subject Area	Subject Name	Category	Purpose/Role	Average Performance (%)	Analysis
Literacy (Foundation almother tongue : Ikinyarwanda)	Ikinyarwanda	Foundational Core	Language of learning and mother tongue for understanding <sup>1</sup> .	88%	Learners struggle with comprehension (vocabulary+literature) and, writing, grammar.
Literacy (Foundational Official language)	French	Additional Language (official one)	Promotes multilingual competence and Francophone integration	42%	Performance is weaker due to limited use outside the classroom; need for more oral practice. (communication, vocabulary, comprehension and grammar+ literature)
Social & Religious Studies (SRS)	Social and Religious Studies	Core Subject examinable in P6)	Builds cultural, moral, and civic understanding	87%	Generally well-performed due to relatability; integration of real-life situations aids comprehension (limited by English language)
Science & Technology	Science and Elementary Technology (SET)	Core Subject	Encourages curiosity, experimentation, and environmental understanding	73%	Performance varies; practical science is engaging, but theory-heavy content challenges learners. (limited by expression and practice)

Generally, the study reveals that while the remedial learning program has positively affected students' outcomes, several challenges continue to limit its full potential. It is certain that students who attended remedial lessons day to day since their integration into the primary school timetable showed improvements in academic performance, particularly in literacy (language skills) and numeracy (in some major assessment domains). Conversely, the program's effectiveness was hampered by factors

such as classroom size (number of students), limited resources and teaching-learning materials (books, teaching aids), absenteeism, specialized training in remedial education (Professional development), and doubtful mastery of the instructional language (English).

### **Evidence story towards the remedial learning program**

As a head teacher, I am thrilled to share that I personally **visited the sessions five times** and consistently found engaged learners, well-prepared teachers, and clear improvement in classroom participation and confidence. “*Since the introduction of the **Catch-Up known as Remedial Learning** in Rwanda, a significant progress has been observed in addressing learning gaps, particularly among students who were at risk of repeating classes. Implemented during school holidays and integrated into regular school schedules, **RL lessons** have created new opportunities for struggling learners to catch up with their peers. One key intervention is the weekly remedial session scheduled weekly on **Fridays from 8:45 a.m. to 11:00 a.m.** and Weekends/holidays specifically designed to support struggling learners in literacy and numeracy.*”

On side of teachers, “*According to school-level performance data, **repetition rates have significantly reduced**, with most learners showing strong improvements in both reading fluency and basic mathematics skills. In practice, this initiative is making a measurable difference. **Students who were previously classified as repeaters are now performing at the same level as their peers**, due to targeted instruction and differentiated group activities with UDL and TaRL.*” The RL program uses group-based approaches, extended, consolidated, and struggling groups to ensure that each learner receives the attention they need. Teachers are trained to use formative assessments and provide real-time feedback, enabling personalized support.

Various educational stakeholders echoed these sentiments, providing testimonies that highlighted the impact of remedial learning initiatives, including targeted support programs, structured catch-up sessions, differentiated instruction strategies, and competency-based assessments designed to address learning gaps and enhance student achievement. However, high teacher-student ratios were identified as major constraints, presenting the following key challenges:

*Overcrowded Classrooms:* Many Rwandan schools still have large class sizes in lower and upper primary. Some schools have a double shift to allow for personalized teaching, which is essential for remedial learning programs. Individual support for every learner who attends a class, especially struggling ones, is less effective than in countries such as Finland and Zambia, where class sizes in remedial education are kept small to ensure that every student receives the necessary support.

*Stuck by absenteeism (attendance records):* The issue of absenteeism is significant to students' remedial lessons, and this is caused by a lack of family responsibilities and stakeholder involvement. To address this, schools could explore ways to make remedial learning more accessible, such as collaborating with local authorities (village cells) and encouraging learners not to miss classes.

*Availability of teaching resources:* The lack of adequate teaching and learning materials is a critical barrier to the effectiveness of the remedial learning program. Many schools are in need of textbooks, learning aids, and educational technology. Providing schools with resources (digital tools and printed materials), can greatly enhance the excellence of remedial learning.

*Language of instruction:* English as the language of instruction in the Rwandan curriculum is a significant attribute for purposeful remedial learning. Many students are not proficient in the English language. This barrier makes it difficult for teachers and struggling learners to fully engage with the curriculum, particularly in remedial lessons to reinforce their teaching and learning. One possible solution would be to continuously train teachers how to offer remedial lessons, especially for struggling learners.

*Teacher training and motivation:* Teachers often deliver remedial learning as regular classes because they don't fully understand its unique requirements. This is due to lack of awareness and preparation to the program. Furthermore, many teachers feel deprived of their status due to performance contracts that are based on salary and bonus increments of 3% (when it is not above 80 Marks) and 5% (when it is above 80 Marks), and this is ranked based on pedagogical document fulfilment and students' results. To address this, teachers must be trained in time and timeless time to become fully motivated.

*Limited Time Allocation for Remedial Lessons:* Teachers reported that the 4-hour weekly allocation was insufficient, as learners tend to forget content easily without continuous reinforcement. Due to timetable congestion caused by subject overload, these hours were eventually removed, leaving remedial support to be offered only during holidays and weekends. In many cases, students require additional time to revise collaboratively with their peers. Therefore, there is a need to expand remedial education time and schedule it on alternative days, rather than Fridays, to avoid disrupting the completion of the regular academic program.

## **Conclusion and Recommendations**

Remedial learning program in Rwanda has academically influenced the learning system when it kicked on. Teachers are testifying that it allows for more personalized teaching, enabling assessment to identify the unique needs of each student for purposeful learning outcomes. This is the effort by the Rwandan government, on behalf of the Ministry of Education (MINEDUC) and the Rwanda Basic Education Board (REB), to strengthen remedial activities during teaching and learning. Additionally, as the world is advancing technologically, the integration of technology into Rwanda's educational system has increased opportunities for remedial learning. Educational gadgets like digital resources (computers, projectors), language resources (reading books), and kits (mathematical sets, rulers, manila, markers, and flip charts) can make learning more engaging and joyful for both sides.

It is recommended that remedial lessons be integrated into regular classroom teaching through cross-curricular, team-taught lessons to maximize learning time without overloading the timetable. To maximize the effectiveness of the remedial learning program, especially in providing maximum assistance to struggling students, interventions are necessary and commendable. First and foremost, the issue of language of instruction should be addressed by offering continuous remedial learning trainings. Also, encouraging parental involvement in this program is crucial for students' awareness and attendance. Schools and educational partners (leaders and NGOs) must organize campaigns and formal meetings to emphasize the importance of remedial education for children's academic progress. With the above-mentioned strategies, the remedial learning program can greatly improve the performance of struggling students in the coming years for lifelong learning. However, this study has not exhaustively examined all existing gaps, underscoring the need for further research to better assess and highlight the impact of remedial learning programs in Rwanda.

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