



## FICHA TÉCNICA DE LA INTERVENCIÓN

Fondo IMPACTO EDU-LAC

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### **Kit Literacy+: Logic Model**

The following document aims to describe two implementation models of the Kit Literacy+ programme for the delivery of a pilot evaluation for 2022 in coordination with GLOT, SUMMA and EEF. The two intervention models are: After School Model and During Class Model.

### **What is Kit Literacy+**

It is a program that seeks to EVALUATE and IMPROVE the reading, writing and mathematics of children and adolescents who are lagging behind in primary school age. It has basic didactic material and access to offline training for the implementation of the Teaching at the Right Level (TaRL) approach with which these skills are effectively improved.

### **Schools Recruitment and Context.**

For pilot evaluations 2022, the programme will be delivered in 12 rural schools of Medellín, Colombia. The Municipality of Medellín has a total of 229 public schools and 25 rural schools. The recruitment and selection of schools for the pilot will be coordinated through the Secretary of Education of Medellín, which manages all public schools in the sector. The scaling up and implementation of the programme to a larger number of schools (efficacy trial) will then have to be coordinated with the State of Antioquia, where Medellín is only one of more than 120 municipalities.

The programme will be focusing exclusively in rural schools because these students have the lower levels of connectivity and the largest learning gaps in key skills. As rural schools are multigrade, the programme will be implemented from 1st to 5th grade (primary school).

The Table.1 illustrates the total number of rural schools in Medellín. It is important to consider that some schools have more than one location ("sede" in Spanish). For instance, "CENT EDUC LA ALDEA" represents one school with 7 different locations or "sedes". In total there are 25 rural schools in 56 different locations.

Table.1: Enrollment by grade in rural schools of Medellín.

SHOOL NAME	NUMBER OF LOCATIONS	ENROLLMENT PER GRADE					TOTAL ENROLLMENT 3-5 GRADE
		1	2	3	4	5	
INST EDUC RAMON GIRALDO CEBALLOS	1	105	88	80	93	81	254
INST EDUC HORACIO MUÑOZ SUESCUN	1	104	87	93	74	119	286
INST EDUC LOMA HERMOSA	1	73	71	71	64	70	205
INST EDUC DEBORA ARANGO PEREZ	1	101	86	67	70	80	217
INST EDUC NICANOR RESTREPO SANTAMARIA (ANTES LA HUERTA)	1	89	74	74	73	85	232
INSTITUCION EDUCATIVA LUSITANIA-PAZ DE COLOMBIA	1	144	145	119	150	121	390
CENT EDUC MEDIA LUNA	3	63	43	46	63	67	176
CENT EDUC LA ALDEA	7	36	48	26	38	31	95
INST EDUC CARLOS ALBERTO CALDERON	1	26	31	40	35	43	118
CENT EDUC EL SALADO	6	31	35	50	34	35	119
CENT EDUC JUAN ANDRES PATINO	3	58	46	53	45	49	147
CENT EDUC PERMANENTE MAZO	2	23	21	26	25	19	70
INST EDUC MARINA ORTH	2	30	30	34	36	28	98
INST EDUC HECTOR ROGELIO MONTOYA	1	20	14	27	30	29	86
INST EDUC MANUEL J. BETANCUR	2	106	96	106	97	107	310
CENT EDUC EL MANZANILLO	3	53	53	34	49	29	112
INST EDUC ALFONSO UPEGUI OROZCO	1	120	123	128	113	126	367
INST EDUC SANTA ELENA	2	15	18	26	32	31	89
CENT EDUC LAS PLAYAS	3	37	37	33	33	38	104
INST EDUC SAN JOSE OBRERO	2	103	109	112	141	107	360
CENT EDUC TRAVESIAS EL MORRO	2	87	97	94	97	86	277

CENT EDUC PEDREGAL ALTO	4	54	43	42	47	58	147
CIBERCOLEGIO UCN	1	17	18	14	15	32	61
ESCUELA POPULAR EUCARISTICA SANTA ANGELA	1	22	16	16	15	18	49
COL CAMPESTRE EL ENCANTO	1	12	16	9	15	15	39
<b>TOTAL</b>	<b>56</b>	<b>1.524</b>	<b>1.44</b>	<b>1.42</b>	<b>1.48</b>	<b>1.50</b>	<b>147</b>

Source: Official enrollment data from Medellín's Secretary of Education.

### **Kit Literacy+ After School Model**

This first model is framed within the guidelines of the Ministry of National Education that establishes the "Complementary School Day" programme "Jornada escolar complementaria" in Spanish, which seeks to implement pedagogical actions that strengthen basic skills for the use and appropriate use of free time, especially for the vulnerable school population, prioritizing attention to the risk of dropping out. In Medellín, the Complementary School Day programme was adopted for public educational establishments in the municipality (Agreement 50 of 2014), considering as minimum conditions for its implementation a minimum frequency of 2 days per week, 2 hours each day.

The programme in this model will be implemented after the regular school day in 5 rural schools during 2022, with the prior agreement of the school's directors, coordinators and teachers. The implementation of the Literacy+ Kit in the After School model will consider the following stages:

1. Selection of schools (in coordination with the Secretary of Education of Medellín)
2. Call for and selection of volunteers.
3. Training of volunteers and teachers on the Kolibri platform.
4. Initial evaluation, selection and grouping of children.
5. Approval of parents and configuration of the beneficiary group.
6. Implementation of TaRL activities in After School model.
7. Intermediate evaluation.
8. Final evaluation.
9. Data collection and analysis.

The implementation starts with the selection of participating schools, which includes the generation of agreements between GLOT, Medellín Secretary of Education and schools.

Additionally, headteachers and principals will receive a brief of the project detailing the steps and contents of the intervention.

## **Volunteers**

The After School model will be implemented by **volunteers** who will accompany each group. In addition, each school will have a GLOT mentor who will accompany the implementation and will be present in some activities and will guide them through mentoring. The groups will be composed of a maximum of 15-20 students and 1 volunteer. However, it is necessary to have at least a minimum of 5 volunteers per interventions in order to ensure that each level has minimum 1 volunteer.

The call for volunteers will be made through GLOT with the support of the Secretary of Education of Medellín. It will be carried out through an open call for volunteers for 3 weeks, with a communication and dissemination strategy focused on the community where the school belongs. For the selection process, volunteers must meet the following requirements: be of legal age, be able to read, write and do mathematical operations, and have a taste for working with children in vulnerable situations. It is desirable that they have experience working in communities or with children and it is mandatory that they do not have a criminal record.

## **GLOT Mentors**

GLOT mentors will provide ongoing support during the implementation of TaRL. This is done by visiting classrooms to observe classes and giving instructors feedback on the implementation of activities. The requirements to be a GLOT mentor will be to have a Bachelor's degree in Mathematics, Literature or Pedagogy.

For the implementation with 12 schools, there will be 6. In order to obtain a strong and cohesive group, each mentor will be accompanying the training process and leading their group of volunteers allocated according to the models assigned.

This will be a crucial part in the collaborative process of training between volunteers and their respective mentor of GLOT. Thus, each group will function as a learning community during the whole process starting with the training and ending with the results of the final evaluation.

For 2022 pilot, new mentors will be trained at a stage prior to the training of teachers and volunteers with additional work sessions on group management, implementation of activities and monitoring. Thus, the minimum of these additional mentor training sessions will be between 8 and 12 hours. Each mentor will then be assigned a group of volunteers and teachers, depending on the modality. With this group, the mentor will be responsible for leading and delivering the training in the TaRL modules.

Such as TaRL-Africa, GLOT mentors will have the following functions:

- Assist trainers in gaining in-depth knowledge of TaRL;
- Build the confidence of the trainers;
- Collect and incorporate feedback into trainings;
- Strengthen implementation by reinforcing key components of the approach;
- Understand key challenges to inform course correction and revision.

Mentoring is GLOT's way of supporting and managing the work of the teachers/volunteers to ensure that the results correspond to the proposal we make through the Literacy+ programme. Periodic follow-ups can be:

- Face-to-face or virtual visits
- Follow-ups through e-mail
- Tutoring or meetings

In module 8 of the program, there is a deeper explanation of mentoring sections and how they should be developed. Before the beginning of the implementation, GLOT Mentor coordinates and communicates to the school the mentoring plan that in general terms it contains the following items:

Week	Mentoring Activities			
	School visits	E-mail	Phone call or text message	Virtual meeting
1	2	on-going	on-going	when needed
2	2			
3	1 (random)			
4	1 (random)			
5	2			
6	1 (random)			
7	1 (random)			
8	2			

Note: mentoring plan and number of visits are the same in both models.

During the intervention, the mentor will make a series of visits to the institution or community to conduct an observation that may or may not be participant observation, i.e. the mentor may intervene in the development of the session or may conduct an observation to evaluate the ways in which the teacher/volunteer carries out his/her task. These visits can be announced in advance or they can be random. In this case, the aim is to provide feedback in order to monitor and reflect on the instructor's work, the students' learning and to resolve doubts, as well as to

verify whether the Literacy+ guidelines are being carried out in accordance with the TaRL methodology and to collect relevant information for the programme.

At the beginning, these visits may be more frequent, in order to provide the teacher/volunteer with the necessary guidance and security to develop the sessions. There will also be follow-ups by email and telephone for the same purpose.

Through email, the trainer can communicate anomalies or the development of the sessions if necessary. Short meetings can also be held through a virtual platform (if there is an internet connection), in order to process the different cases and discuss the experiences of each trainer.

### **Training process and Assessment Tool**

The training of volunteers, mentors and teachers in TaRL methodology will be done through the Kolibri platform<sup>1</sup>, which has 8 modules: 1) introduction to the program, 2) Sustainable Development Goals, 3) Child Protection, 4) Importance of literacy and mathematical logical thinking, 5) introduction to TaRL and evaluation, 6) Didactics of reading and writing by level, 7) didactics of Math by level, 8) implementation in the classroom. Furthermore, modules 6 and 7, have an extensive list of activities to do by level. In addition, the Platform indicates all the basic steps to implement the TaRL methodology and evaluation.

According to the content of the modules, more than 50% of the modules focus on training in TaRL methodology and its adaptation to the Colombian context.

- Module 5 - Introduction to TaRL, the levels and how it is assessed.
- Module 6 - Didactics of reading and writing by level and examples of activities according to the TaRL approach.
- Module 7 - Didactics of mathematics by level and examples of activities according to the TaRL approach
- Module 8 - Implementation in the classroom or community presenting the roles of the intervention.

Each of these modules has synchronous meetings with teachers and volunteers in order to deepen the concepts, learn from practice and solve doubts.

The training stage will have a total duration of 8 weeks, with an intensity of 3.5 hours per week (28 hours in total), where 2 hours correspond to asynchronous work on the platform and one synchronous meeting of 1.5 hours per week. In total, each volunteer and the accompanying teacher must pass at least 80% of the evaluations of the modules on the Kolibri platform and attend all synchronous meetings<sup>2</sup>. It should be noted that the training process emphasizes the

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<sup>1</sup> According to the results of the 2021 pilot, alternative strategies will be used for the training process.

<sup>2</sup> Requisites of completion are subject to change with the results of the 2021 pilot 2021.

simplicity of the methodology and the process is also evaluated according to learning objectives ranging from the assimilation of basic concepts of the TaRL methodology to the creation of activities according to its principles.

The initial reading and mathematics assessment will be given to all children in the school. Once the assessment has been applied, a baseline will be constructed and the programme will be offered only to those students who would be furthest behind in the foundational skills. The cut-off line will be related to the skills that each student should have according to grade, which in the case of Colombia are defined by the Ministry of National Education in the curricular guidelines and more specifically in the Basic Learning Rights (DBA, Derechos Básicos de Aprendizaje in Spanish). For this purpose, the following table should be considered, which compares the minimum fundamental skills according to the DBA and TaRL levels:

Grade	Initial age	TaRL level equivalence according to DBA Language	TaRL level equivalence according to DBA Mathematics
1	6 years	<b>Basic level</b> and letter level by text interpretation and message recognition.  <b>Letter level</b> by writing words.	<b>Beginner level</b> by number identification and counting  <b>Level 1</b> by solving additive problems and using positional characteristics to establish relationships between quantities and compare numbers.
2	7 years	<b>Word level</b> by identifying sounds in words and words in sentences.  <b>Paragraph level</b> by producing texts to serve a particular communicative purpose.	<b>Level 1</b> by recognizing and using the decimal number system to solve situations of addition, subtraction, multiplication and division and including it in everyday life.
3	8 years	<b>Paragraph level and story</b> by writing coherent literary texts, where grammatical and spelling aspects are also considered.	<b>Level 2</b> by interpreting, formulating and solving problems with basic operations, comparing quantities and justifying problem-solving strategies.
4	9 years	<b>History level</b> by writing texts from information or from a theme, using literary figures and considering audience and context.	<b>Level 2</b> because it identifies patterns and justifies different strategies to operate arithmetic situations with natural and rational numbers.
5	10 years	<b>History level</b> by production of oral and written texts of different types.	There is no TaRL level equivalence for this grade, as the methodology does not cover the topics covered in the DBAs. However, the topics of level 2 are exercised.

Once the group of potential beneficiaries has been determined, parental approval must be obtained for the final composition of the After School programme participants.

For the implementation, daily after-school activities will be organized for a total of two hours during 8 weeks (2 months), where the first month will be reading activities and the last will be math's activities. In total, the intervention has a duration of 80 hours (2 hours a day, 5 days a week, for two months), where the first month there would be 40 hours of literacy and the second month 40 hours of mathematics.

In the middle of each implementation (Math and Literacy), children will be given an intermediate assessment, where they can be promoted to another level if progress is verified, and at the end of the implementation, the test will be implemented again to obtain the final assessment. Additional data, such as attendance, will be recorded for data analysis. In addition, children will be monitoring and promoting to the next level during any moment of the intervention. This will be coordinated by the GLOT mentor.

### **Data collection**

Data collection in the field is part of the training process for teachers and volunteers, specifically in Kolibri module 5, where there is also a practice session in this week of the training process where the process is explained to the participants.

The field records are made on the forms established by GLOT for this purpose. Depending on the conditions of the context, the results may be recorded on a physical sheet in the field or on a digital form (if internet access is available).

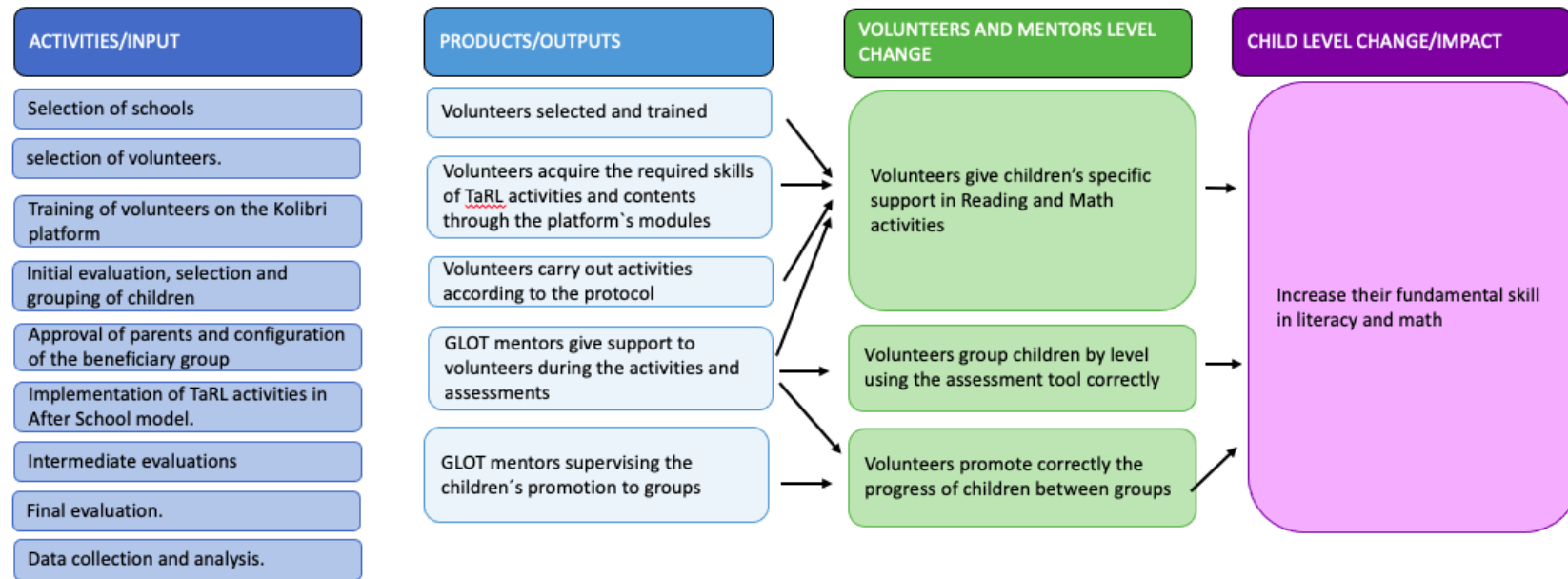
The teachers or volunteers who carry out the evaluation of the children will record the information in these formats, where the digital form will be sent directly to the GLOT databases and in the case of the physical format, the implementers will send the information to the mentor in charge of the school by the defined means (physical, photograph or email if it can be digitalized or the means established with the mentor according to the conditions of each context and according to the data quality protocols defined by GLOT). This process is repeated in each of the evaluations carried out.

If possible, socio-demographic data of the beneficiaries of the programme are also recorded, as well as additional information that allows for a broader analysis of the intervention, information centralised through the GLOT mentors. In any case, the data collected from the children is protected and confidentiality is ensured according to national and international laws, all this according to the policies and protocols that GLOT has established for this purpose.

GLOT has IT support staff for the centralization and management of these databases and their analysis from the coordination of the programme.



## After School Logic Model:



## ASSUMPTIONS

All volunteers selected approve the training assessment with more than 80% of correct answers

GLOT mentors have a good level of training in the application of TaRL activities

GLOT mentors are respected and accepted as leaders by the volunteers

Teacher and officials are actively involved in the whole process

All volunteer have the basic skills to assist children during activities

All volunteer know how and when to promote children to upper groups

All volunteer know how and when to promote children to upper groups

Teacher and officials are actively involved in the whole process

Assessment toll is well designed and represent a good measure of fundamental skills

Teacher, officials, principals are actively involved in the whole process and accept the results of the assessment as a valid mechanism to identified fundamental skills in their schools

### **Kit Literacy During class Logic Model**

The Kit Literacy+ During class model will be carried out with one group per school, specifically the "Acceleration of Learning" students, where those with an age-grade gap are, according to the requirements of Law 115 of 1994, Order 251 of 2008 and Decree 1860 of 1994 of the Ministry of National Education. Unlike the After School model, this modality will work without volunteers, but with teachers from the same school. This model considers the following stages:

1. Selection of schools (in coordination with the Secretary of Education of Medellín)
2. Teachers' selection process.
3. Training of teachers on the Kolibri platform.
4. Initial evaluation, selection and grouping of children.
5. Approval of parents and configuration of the beneficiary group.
6. Implementation of TaRL activities in During School model.
7. Intermediate evaluation.
8. Final evaluation.
9. Data collection and analysis.

The implementation starts with the selection of participating schools, which includes the generation of agreements between GLOT, Medellín Secretary of Education and schools.

In the During class implementation model, it is the teachers who carry out the activities with the school's acceleration group or another teacher assigned by the school's management for this purpose during the regular class. The total number of children per school depends on the number of acceleration groups with students from 1st to 5th grade of primary school.

As in the After School model, the training stage will have a total duration of 8 weeks, with an intensity of 3.5 hours per week (28 hours in total), where 2 hours correspond to asynchronous work on the platform and one synchronous meeting of 1.5 hours per week. In total, each teacher must pass at least 80% of the evaluations of the modules on the Kolibri platform and attend all synchronous meetings<sup>3</sup>. It should be noted that the training process emphasizes the simplicity of the methodology and the process is also evaluated according to learning objectives ranging from the assimilation of basic concepts of the TaRL methodology to the creation of activities according to its principles.

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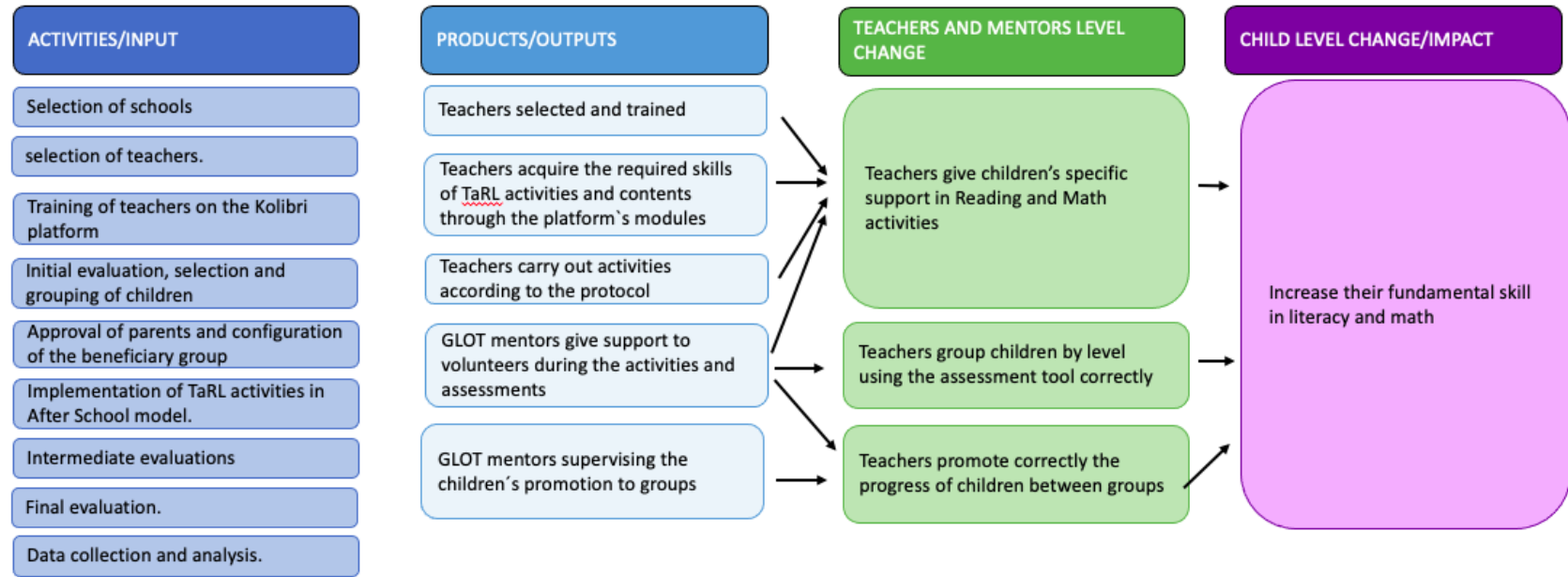
<sup>3</sup> Requisites of completion are subject to change with the results of the 2021 pilot 2021.

Once the training process is completed, the implementation stage follows, which begins with the initial assessment of the children and their grouping. In the classroom implementation model, all children will participate in the programme, so all children will be assessed and grouped according to their level. If children are located in the most advanced level, either for literacy or numeracy, they can support activities enabling peer-to-peer learning.

The intensity and frequency for the implementation of the activities in the school day should be previously agreed with each school, where it is recommended that daily activities are carried out for two hours (1 hour of mathematics and 1 hour of reading). In this hour all students in the acceleration group will participate in the activities according to the level where they are grouped. The implementation would be carried out during two months according to the school calendar, for which interventions are proposed between July and November (according to the Colombian academic calendar semester). These 8 weeks of implementation include the initial, intermediate and final evaluation of the children in each competition, as well as the accompaniment of the GLOT mentors for a correct development of the sessions. In total, teachers would implement the TaRL activities during 2 hours of class time per day (1 hour of mathematics and 1 hour of reading), for a total of 80 hours in this model (2 hours per day, 5 days a week, for two months). This would result in 40 hours of reading and 40 hours of mathematics.

During the implementation, intermediate evaluations of the children will be carried out, where they can be promoted to another level if it is verified that there is progress. Other data, such as attendance, will also be recorded for data analysis, which is the final stage of the process.

## During Class Logic Model



## ASSUMPTIONS

All Teachers selected approve the training assessment with more than 80% of correct answers

GLOT mentors have a good level of training in the application of TaRL activities

GLOT mentors are respected and accepted as leaders by the volunteers

Officials are actively involved in the whole process

All Teachers have the basic skills to assist children during activities

All Teachers know how and when to promote children to upper groups

All Teachers know how and when to promote children to upper groups

Officials are actively involved in the whole process

Assessment toll is well designed and represent a good measure of fundamental skills

Teacher, officials, principals are actively involved in the whole process and accept the results of the assessment as a valid mechanism to identified fundamental skills in their schools

**Table.3: indicator by delivery model.**

<b>Characteristic</b>	<b>After-school Model</b>	<b>During class Model</b>
Mentors teaching training time	8 weeks of virtual training through Kolibri (30 hours in total with 2 hours of dedication to virtual content, weekly meetings of 1.5h from week 1 to 7 and a last meeting of 3.5h on week 8).	8 weeks of virtual training through Kolibri (30 hours in total with 2 hours of dedication to virtual content, weekly meetings of 1.5h from week 1 to 7 and a last meeting of 3.5h on week 8).
Hours of volunteer / teaching training time	8 weeks of virtual training through Kolibri (30 hours in total with 2 hours dedicated to virtual content, weekly meetings of 1.5h from week 1 to 7 and a last meeting of 3.5h on week 8).	8 weeks of virtual training through Kolibri (30 hours in total with 2 hours dedicated to virtual content, weekly meetings of 1.5h from week 1 to 7 and a last meeting of 3.5h on week 8).
Target number of pupils per group	Check out in table 1	Check out in table 1
Target number of hours teaching	First month literacy during 2h each day (Monday to Friday) Second month math during 2h each day (Monday to Friday)  40h literacy 40h math	1h literacy and 1h math per day during class – 2 months  40h literacy 40h math
When the training is delivered to teachers/volunteers	April June 2022	April June 2022
When the programme is delivered to pupils	August to September 2021 or September to October 2022	August to September 2021 or September to October 2022
Number of volunteers and teachers participating	At least 30 volunteers Minimum 6 teachers.	Minimum 6 teachers.
Schools/campuses implementing the pilot 2022	6 schools (to be defined)	6 schools (to be defined)

## **EEF Pilot for 2022**

By 2022, an evaluation pilot for both models (After School and During Class model) is expected to be conducted with an independent evaluation team, which will be selected through a Call for evaluators.

This will be the second of this program. During 2021 a pilot evaluation was conducted by GLOT in 1 rural school (7 locations or “sedes”), with the participation of an independent intern researcher from the University of Sussex in the framework of the MA of International Education and Development Internship Program.

Although this was not an in-depth pilot evaluation, all the information was organized to follow the “Implementation and process evaluation (IPE) for interventions in education settings: An introductory handbook” by EEF and the University of Manchester (n.d).

The objective of the 2021 pilot was to test user experience in the use of the Kolibri platform, evidence of promise, feasibility of delivery and readiness for trial (only focusing on training the trainers phase using Kolibri and not the implementation with students). The report and the resulting dissertation can be used as input for the oncoming pilot.

For 2022, the pilot will be implemented in a total of 12 rural schools in Medellín (6 for each programme model), different from the school selected for the pilot in 2021.

In addition, it is expected to have information related to the experience of both models applied with students in 2021, which will serve as a basis for making adjustments to the implementation in 2022. For this pilot, at least the following steps are expected to be accomplished:

- Phase 1. Commissioning Evaluation: 3 months we prepared the Terms of References, Invited the teams and prepared the terms of the Call.
- Phase 2. Set up: 4 months: Tripartite coordination between SUMMA, the evaluation team and GLOT. The objective is to jointly define the specific terms of the evaluation, the structure and work process.
- Phase 3. Evaluation Preparation (Ethical application, recruitment and get informed consent of participants)
- Phase 4. Intervention Implementation.
  1. Selection of schools (in coordination with the Secretary of Education of Medellín)
  2. Teachers and volunteers selection process.
  3. Training of teachers and volunteers on the Kolibri platform.
  4. Initial evaluation, selection and grouping of children.
  5. Approval of parents and configuration of the beneficiary group.
  6. Implementation of TaRL activities in both models.
  7. Intermediate evaluation
  8. Final evaluation

9. Data collection and analysis.
10. EEF pilot closure

Research suggested questions for both models:

- Do teachers assess children accurately?
- How many visits to schools do GLOT mentors make? Is it enough?
- What support do GLOT mentors provide to teachers when in school?
- Does the sequencing of the activities or content of the intervention make sense?
- Do changes need to be made to the intervention materials or procedures (i.e. input/activities)?
- Which models show the best indicators of student compliance and attendance?
- Which model has the highest acceptance within the school community (teachers, parents and school management team)?
- Is it necessary and feasible to have a middle evaluation for children?