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Evaluation of *Leer Juntos, Aprender Juntos* Early-Grade Reading Intervention in Peru

Final report

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ABSTRACT

This report estimated the impact of the two main components of *Leer Juntos, Aprender Juntos*—an early-grade reading instruction program for linguistically diverse communities. Save the Children developed the program based on its Literacy Boost model and implemented it in Apurímac, Peru. The in-school component aims to train and coach teachers to be better equipped for reading instruction in the early grades. The community action component aims to strengthen parental and community involvement and increase children opportunities to practice reading outside school.

We randomly assigned schools to one of three evaluation groups: Group A schools implemented both program components; Group B schools implemented only the in-school component; and Group C schools did not implement the program. To assess the impact of the community action component, we compared Group A with Group B. To assess the impact of the in-school component, we compared Group B with Group C. Within each school, we followed a group of children from 1st grade through the end of 3rd grade.

We found a positive impact of *Leer Juntos, Aprender Juntos*' in-school component on reading comprehension, and on some, but not all, of the measures on decoding and fluency. The positive impacts were mostly driven by girls.

We found no impacts of *Leer Juntos, Aprender Juntos*' community component on reading outcomes. Children's reading skills were similar between schools implementing both program components and schools implementing only the in-school component.

We estimated a program cost effectiveness of $136 per 0.10 standard deviation increase in the basic reading comprehension rate.

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CONTENTS

TABLES

FIGURES

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ACRONYMS

DIGEIBIR	General Office of Intercultural, Bilingual, and Rural Education
ECE	Evaluaciones Censales de Estudiantes
EGRA	Early Grade Reading Assessment
GRADE	Grupo de Análisis para el Desarrollo
IBE	Intercultural and bilingual education
INEI	Instituto Nacional de Estadística e Informática
LAC	Latin America and the Caribbean
LAC Reads	Latin America and the Caribbean Reads
LJAJ	Leer Juntos, Aprender Juntos
NGO	non-governmental organization
PD	Professional development activities
PELA	Strategic Learning Outcomes Program
REDES	National Rural Education Network Program
SPI	Intercultural Pedagogical Support
UGEL	Unidades de Gestión Educativa Local
USAID	U.S. Agency for International Development

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EXECUTIVE SUMMARY

A. Introduction

This report presents results of the impact evaluation of the *Leer Juntos, Aprender Juntos* program—an approach to early-grade reading instruction in communities with linguistically diverse populations. Save the Children developed the *Leer Juntos, Aprender Juntos* program based on its Literacy Boost model, which includes teacher training and community involvement, and implemented the program in Quechua-speaking Apurímac region of Peru and the K'iche'-speaking region of Guatemala. Mathematica designed a rigorous evaluation of *Leer Juntos, Aprender Juntos* in both Peru and Guatemala. This report focuses on the impact evaluation findings for Peru. A separate report presents the impact evaluation findings for Guatemala (Lugo-Gil et al. 2021b).

The *Leer Juntos, Aprender Juntos* intervention has two main components, the in-school component and community action component.

In-school component: teacher training and coaching. The in-school component of *Leer Juntos, Aprender Juntos* was based on the Literacy Boost model. The goal of this component was to train and coach teachers to be better equipped for mother tongue and/or Spanish reading instruction in the early primary grades. This component entailed six main activities intended to increase reading instruction class time and improve the quality of reading instruction:

1. Training trainers in reading instruction techniques in both Spanish and mother tongue
2. Training teachers in the five core skills of reading: alphabet knowledge, phonological awareness, vocabulary, fluency, and comprehension
3. Creating materials for print-rich classrooms in both Spanish and mother tongue
4. Mentoring and coaching teachers in reading instruction practices
5. Training teachers in conducting formative assessments to track progress of children's reading skills
6. Guiding teachers to incorporate five core skills of reading and related reading instruction techniques into daily school activities

Teacher training consisted of nine modules on a range of reading instruction topics, including introduction to reading acquisition and instruction in the early primary grades, use of formative assessments, and five core reading skills. Following the teacher training, the program's technical staff (coaches) visited classrooms at least once (and in most cases, two or three times) every three months. These visits aimed to support teachers by observing their work, demonstrating teaching techniques, and suggesting improvements in the use of reading instruction strategies. Coaches also moderated teacher learning groups to strengthen and practice topics discussed in the training workshops, which included conducting activities to develop the five core reading skills, designing lesson plans incorporating core reading skills, and planning strategies to develop literacy skills in students' mother tongue. The training and coaches did not dictate or favor one language of instruction over the other.

Community action component. The community action component of the program, also based on the Literacy Boost model, aimed to strengthen parental and community involvement in building children's reading abilities and increasing their opportunities to practice reading outside regular class time. This component was delivered primarily by trained community volunteers and included engaging group activities. Specifically, the community action component included the following main activities:

- Creating printed materials in the children's mother tongue, Spanish, or both, to build portable libraries known as book banks
- Promoting the use of book banks among community members
- Conducting reading activities in the community such as story hours, reading camps, and reading festivals or fairs
- Coordinating peer assistance through reading buddies
- Conducting school–community accountability meetings and reading awareness workshops with parents and community members

B. Evaluation questions and design

The evaluation was implemented as a randomized controlled trial. The evaluation team randomly assigned schools to one of three evaluation groups: Group A, schools that implemented both components of *Leer Juntos, Aprender Juntos*; Group B, schools that implemented only the in-school component of *Leer Juntos, Aprender Juntos*; and Group C, schools that did not implement the program—we refer to these schools as prevailing practice. The evaluation aimed to answer the following two primary evaluation questions:

- What is the impact of the teacher training and support component of *Leer Juntos, Aprender Juntos* on early-grade reading and other outcomes relative to prevailing practice? This question contrasts schools in Group B to those in Group C.

- What is the impact of the community action component of *Leer Juntos, Aprender Juntos* on early-grade reading and other outcomes relative to an intervention that does not have the community action component? This question contrasts schools in Group A to those in Group B.

In addition to these two primary questions, the evaluation addresses the following question about implementation:

- Were the program components implemented as intended? This question relates to whether each program component's services were offered as originally intended, whether participants took part, and whether these program components had intermediate impacts on teaching and the availability and use of reading materials. It also considers any barriers or challenges to effective implementation.

In Peru, we recruited 145 schools. Within each school, we followed a group of children from 1st grade through the end of 3rd grade. The implementation of *Leer Juntos, Aprender Juntos* in Peru started in May 2013 and ended in December 2015. Because Save the Children planned to

roll out the program in phases, we also carried out the evaluation in two phases. We randomly assigned eligible schools and collected baseline data in the first half of the evaluation schools in 2013 (Phase I), and the second half of schools in 2014 (Phase II). We conducted two follow-up data collections after the baseline: one at the end of the second year of implementation (midline, in 2014 for Phase I and 2015 for Phase II) and another at the end of the third year of implementation (endline, in 2015 for Phase I and 2016 for Phase II). Implementation of the program started in May 2013 for Phase I schools and March 2014 for Phase II schools. We present results for students pooled across the two phases because we did not find any significant pattern of differences between phases.

As part of the evaluation, we also conducted an implementation evaluation and a cost effectiveness analysis. This involved data from several sources, described in Chapter II, including school observations, classroom observations, teacher surveys, focus groups, and interviews. The observations took place at baseline (first year of the evaluation) and midline (second year). Teacher surveys took place at baseline, midline and endline, as described in Chapter II. For the cost-effectiveness analysis, described in Chapter V, we relied on program implementation and cost data provided to us by Save the Children.

C. Summary of findings

The results for Peru suggest that the program's teacher training and coaching component did improve children's reading skills. By the end of 3rd grade, about 83 percent of the children in schools assigned to the basic *Leer Juntos*-school only intervention could read a simple passage and answer at least one question correctly—an indication of basic reading comprehension (defined as be able to complete both the decoding and fluency tasks and answer at least one question correctly in the reading comprehension task)—compared to only 74 percent of children in schools using prevailing practices. This positive impact of nearly 9 percentage points on basic reading comprehension was statistically significant. Impacts on other reading skills, such as decoding accuracy and fluency accuracy, told a similar story. Subgroup analysis suggests that all of these impacts were driven by improvements in girls' reading skills. However, we found no statistically significant impacts on non-accuracy reading measures, such as fluency and decoding measured by number of correct words read per minute and reading comprehension when we measured it by number of questions answered correctly, instead of whether they were able to answer at least one question correctly.

Students in the in-school component-only group had better reading outcomes than students in the control group. The sizes of some of the impacts were substantial, equivalent to effect sizes of 0.19, 0.21, and 0.13 for decoding accuracy, fluency accuracy, and reading comprehension, respectively. These effect sizes represent 15 to 24 percent of the gap between indigenous and non-indigenous Peruvian children in Spanish language skills (Hernandez-Zavala et al. 2006). Impacts on decoding and fluency in terms of words read per minute were also positive, but as noted above, not statistically significant.

Impacts in Peru were driven by impacts on girls' emergent reading skills. There were positive differences in the means of the outcomes of interest between Group B and Group C for boys and girls, but the differences were statistically significant only for the girls. For example, the impact of the in-school component (difference between Groups A and B) on the percentages

of boys and girls who showed emergent reading comprehension skills is statistically significant for the girls. The results are similar for the decoding and fluency accuracy scores (statistically significant impacts for girls).

The estimated cost-effectiveness of the in-school component was $136 per student per 0.1 standard deviation increase in emergent reading skills. We estimate that three years of providing the full program (the community and the in-school components) cost $527 per child, and the cost of providing the in-school component only is $434 per child. If we use the impact estimate for the percentage of children who could read a simple passage and answer at least one question correctly (the children who had a basic level of reading comprehension), the cost of the in-school component per 0.1 standard deviation improvement on that outcome is $136 per child. Policymakers need to know whether these impacts are large enough to justify investing resources in *Leer Juntos, Aprender Juntos* compared with other ways to improve early-grade literacy

The evidence of favorable impacts of the program's in-school component is consistent with some of our findings generated by classroom observations and teacher survey data. The schools that implemented only the in-school component of the program provided a more print-rich environment in their classrooms than did schools that did not implement any of the components of the intervention. In particular, the evaluation team observed materials to facilitate early-grade reading instruction in Spanish and Quechua in more classrooms implementing the in-school component of the program than in classrooms in the prevailing practice group. In addition, picture books that do not have any text were observed in more classrooms in the prevailing practice group than in the schools implementing the in-school component. On instructional practices, either reported by teachers or observed by evaluators, we found no meaningful pattern of statistically significant program effects.

We found no evidence of impacts on reading outcomes from the community component of *Leer Juntos, Aprender Juntos*. We did not find any meaningful pattern of statistically significant differences in children's reading skills between the group that implemented both components of the program and the group that implemented only the in-school component of the program. This finding is consistent with the qualitative evidence: implementing the community component activities was challenging. In Peru, recruiting and retaining volunteers for the community activities was difficult, attendance at parent workshops was lower than expected, and creating spaces dedicated to reading activities at the home was difficult for some families. Despite those challenges, however, program stakeholders had positive opinions of the community component activities. In focus groups, parents and teachers said they thought reading camps and book availability through the program's book banks did inspire children's interest in reading.

D. Conclusions, limitations, lessons learned, and recommendations

1. Conclusions

***Leer Juntos, Aprender Juntos* was implemented largely as intended, although there were some challenges.** Teachers in schools assigned to implement the in-school component of *Leer Juntos, Aprender Juntos* did receive the program's training and coaching activities. Teachers reported establishing positive and supportive relationships with the program trainers, expressed that the program's methodology and training approach are practical and feasible to

apply in the classroom, and reported observing increased student engagement. However, challenges in the implementation of this component included difficulty retaining qualified program staff for training and coaching.

The activities that were part of the community action component were delivered mostly as intended in the schools that had been assigned to receive that component. Those activities included access to book banks, story hour, reading camps, and reading festivals. Challenges in the implementation of this component included difficulty recruiting and retaining staff to lead the activities of the community action component, and logistical challenges for teachers, coaches, trainers, and volunteer coordinators due to the geography of the region and the limited access to public transportation.

The in-school component of *Leer Juntos, Aprender Juntos* had favorable impacts in the classroom literacy environment. Teachers in schools implementing only the in-school component of *Leer Juntos, Aprender Juntos* participated in the program training and coaching activities, and more classrooms in these schools than in prevailing practice schools had a complete alphabet in Spanish and Quechua that was visible to students and more books with text. Our findings also show that teachers in schools implementing only the in-school component established positive and supportive relationships with the program specialists who conducted training workshops and coaching sessions with them. In addition, teachers in schools implementing *Leer Juntos, Aprender Juntos* did use the reading instruction practices they learned from the program, and teachers reported observing increased student engagement.

The in-school component of *Leer Juntos, Aprender Juntos* had favorable impacts on some but not all measures of reading skills. Three years after the program started, about 83 percent of the children in schools assigned to only the in-school intervention component could read a simple passage and answer at least one question correctly—an indication of basic reading comprehension—compared with only 74 percent of children in schools using prevailing practices. This was a statistically significant positive impact on basic reading comprehension, driven mainly by improvements in girls' emerging reading comprehension skills. We also found positive, statistically significant impacts of the in-school component on decoding and fluency accuracy. The sizes of some of the impacts were substantial, equivalent to effect sizes of 0.19, 0.21, and 0.13 for decoding accuracy, fluency accuracy, and basic reading comprehension, respectively. However, we found no impacts on non-accuracy reading measures, such as fluency measured by number of correct words read per minute.

Three years of providing the in-school component costs an estimated $434 per child. If we use the impact estimate for the percentage of children who could read a simple passage and answer at least one question correctly (basic level of reading comprehension), the cost of the in-school component per 0.1 standard deviation improvement on that outcome is $136 per child.

The community action component of *Leer Juntos, Aprender Juntos* did not have an impact on students' reading skills beyond what the in-school component attained. We did not find evidence that students in schools implementing both *Leer Juntos, Aprender Juntos* components had better reading skills or spent more time on reading activities at home than students in schools that only implemented the *Leer Juntos, Aprender Juntos* in-school component. Implementation challenges could help explain this result. Program staff reported

challenges in recruiting and retaining volunteers, which resulted in delayed implementation of the community action component relative to the implementation of the in-school component. In addition, the reading buddies activity was eventually folded into the in-school component, with teachers delivering the activity in their classrooms during regular school hours once a week instead of volunteers conducting the activity in the community outside of school hours. Another possible explanation is that it was challenging for the community action component to create an effect in a context where parents were already engaging in reading-related activities with their children. In Peru, most parents in all treatment groups reported being literate and reading and looking at books with the children.

2. Limitations

The baseline of the evaluation was not a "true" baseline. The baseline assessment of students' early literacy skills was administered about three months after random assignment, which was about two months after the rollout of the program's teacher training activities. It was not feasible to measure baseline student outcomes before random assignment because several evaluation activities needed to be completed before data collectors could begin baseline data collection; these included identifying a local partner that could assist in recruiting and training field workers, implementing the data collection plan, and supervising data collection activities. As a result of the late baseline, the children's skills that we captured in the baseline assessment (when students in the evaluation were in first grade) reflect the ability of the students after up to three months of potential exposure to different conditions caused by assignment of schools to different intervention groups.

Despite this limitation, it is still appropriate to consider the evaluation's baseline assessment as the reference point for the evaluation. Under most circumstances, a late baseline will still be useful for estimating the impact of that intervention as long as the impact on skill development is slow in the early period of program implementation (Schochet 2010). That is the case in the current evaluation because the teachers in the groups receiving the program (Groups A and B) had only been practicing their newly acquired skills for at most two months when the baseline data collection took place, and literacy acquisition in children is a process that happens gradually over many months or even years.

The evaluation design assumes that the impacts of in-school and community action components of the intervention are additive. Specifically, the evaluation design assumes that the effect of the community action component on its own relative to prevailing practice is equal to the sum of the impact of the combined in-school and community action components relative to the in-school component on its own. This assumption could be violated if implementing the in-school component makes it easier or harder to simultaneously do community activities. We did not find clear evidence of such a violation, but it should be taken into account by any policymakers who wish to apply the lessons of this evaluation to a future implementation of community action on its own.

Findings from this evaluation may not necessarily apply to other parts of the LAC region. It is always tempting to generalize from the experience of one or two evaluations to other contexts, but caution is warranted. In Peru, the evaluation included schools from just 3 of 7 provinces in Apurímac, which is just one of 24 regions in the country. While a parallel evaluation was conducted in the El Quiche region of Guatemala, it too included schools from a

small area of the country. In both countries, communities were selected with the following criteria in mind: the locations had to be within reasonable driving distance from each other to facilitate intervention and evaluation activities. They had to contain a high percentage of families that spoke one language besides Spanish, in this case Quechua (in Peru) or K'iche' (in Guatemala). Results could differ if an approach like *Leer Juntos, Aprender Juntos* was taken in other communities with different characteristics and challenges than those communities included in this evaluation.

3. Lessons learned

Teacher training and coaching on how to teach literacy skills can be effective when they are distinct from other approaches already in use. In Peru, the in-school component was effective, generating positive impacts on some reading skills, whereas in Guatemala this was not the case. In Peru, the prevailing practice approach (recommended by the Ministry of Education) advocates a communicative and textual approach aimed at educating students to understand, speak, read, and write in their mother tongue and in Spanish, and to use both languages in communicative contexts. The communicative and textual approach is very different from the approach of the *Leer Juntos, Aprender Juntos* program, in which teachers are trained in specific strategies to promote foundational reading skills and reading comprehension in multilingual contexts; monitor students' mastery of those skills; and increase students' access to and use of reading materials in the mother tongue. In Guatemala, the prevailing practice approach to early reading instruction promotes foundational reading skills and reading comprehension. The national reading curriculum for the early grades emphasizes children's alphabet knowledge, phonological awareness, vocabulary, and decoding skills, and seeks to gradually improve children's reading fluency and reading comprehension skills, similarly to the *Leer Juntos, Aprender Juntos* approach. Therefore, the *Leer Juntos, Aprender Juntos* approach is more distinct to the prevailing practice in Peru than to the prevailing practice in Guatemala, which could explain why the in-school component had impacts in Peru but not in Guatemala.

Relying on volunteer work has substantial risks for fidelity of implementation. This evaluation demonstrated that implementing and evaluating a program component that relies on volunteer work has substantial risks. In the Apurímac region where the program and evaluation took place, doing volunteer work related to children's schooling is not common practice and people expected payment for their work. This made recruiting and retaining volunteers challenging and caused delays and disruptions in implementing the community action component.

4. Recommendations

Policymakers should continue implementing the in-school component of *Leer Juntos, Aprender Juntos* and possibly expand to other schools in the Apurímac region if they wish to improve literacy skills and do not have an alternative intervention that can deliver these impacts for this cost. The in-school component showed evidence of positive impacts on some reading outcomes, so sustaining and possibly expanding this component of the program might help further the region's progress in reading achievement. In addition, the region already has the capacity and experience to support the sustainability of this component. Nevertheless, the costs of the program are important to consider when thinking about continuing and expanding the program. We estimated that the cost of the in-school component of the program in Peru was

approximately $434 per child. This translates to an estimated cost effectiveness of the *Leer Juntos, Aprender Juntos* program of $136 per child per 0.10 standard deviation increase in the basic reading comprehension rate. This places the intervention on the high end of education interventions that were catalogued by Evans and Ghosh (2008) as being effective. It is not surprising that to improve reading comprehension in multilingual populations that are geographically harder to reach would be at the higher end of the range of cost-effective interventions.

Policymakers and donors should consider alternative ways to conduct activities that increase the time children spend reading outside of school hours. If there is a desire to continue testing activities that aim to increase time reading outside of school hours, we recommend exploring an alternative way to implement the activities that does not rely primarily on volunteer work. We also recommend assessing the feasibility and potential take-up of the alternative approach to ensure it suits the cultural context of the communities for which it is intended.

I. INTRODUCTION

A. Early grade literacy education in linguistically diverse contexts

The past decade has seen outstanding progress toward the Millennium Development Goals of universal primary school completion and gender parity in education, both around the world and in the Latin America and Caribbean (LAC) region in particular. Yet deficits related to learning and access to education for poor and marginalized populations persist, particularly for groups whose mother tongue is not the same as the societal or official language of their country or region (Benavides et al. 2010; Gove and Cvelich 2011; Kim et al. 2016). In Peru, for example, among dual-language students[1] in grade 4 in 2016, only 25 percent achieved the Spanish reading comprehension level expected for their grade (Ministerio de Educación 2017).

In LAC countries with linguistically diverse populations, such as Peru and Guatemala, children enter school with a wide variation in abilities to understand and speak the country's societal or official language (Cueto et al. 2012). In the case of Peru and Guatemala, the societal or official language is Spanish. In these countries, some children have no knowledge of Spanish, whereas others speak and understand it fluently, even if they live and attend school in a region where the predominant language is the same as their mother tongue. Therefore, the challenge for educational programs aimed at improving reading skills is to work with a range of instructional approaches in a context of significant linguistic diversity. Such programs must focus on helping children develop the underlying skills that will ultimately result in improved reading skills.

Studies have demonstrated that programs involving instructional practices and other supports in children's mother tongue improve academic outcomes in some developing countries (Chesterfield and Abreu-Combs 2011; Crouch et al. 2009; Friedlander and Goldenberg 2016; Hernandez-Zavala et al. 2006; Patrinos and Velez 2009; Piper et al. 2016). However, no studies based on a rigorous evaluation design have been implemented in the LAC region. Moreover, existing studies have not focused on assessing the effectiveness of comprehensive reading programs that incorporate both transitional instructional approaches in the classroom and mother tongue supports for building reading abilities outside the classroom. Models aimed at increasing instruction time in the classroom and reading practice time at home (such as community engagement models, volunteer training to teach low-performing students, and remediation provided by locally trained teachers) have shown promise (Banerjee et al. 2010, 2007; Bruns and Luque 2014). Again, such models have not been rigorously evaluated in the LAC region, and their cost-effectiveness is unknown.

B. The intervention and evaluation

To address the need for high quality evidence on interventions that improve student outcomes, particularly in reading, the U.S. Agency for International Development (USAID) contracted with Mathematica Policy Research as its independent evaluator to design and conduct impact evaluations of promising reading interventions and education-access interventions. The first program evaluated under the contract was the *Leer Juntos, Aprender Juntos* program. Hypothesizing that the community action component might be an effective way to improve

[1] This refers to students whose mother tongue is a language other than Spanish (Ministerio de Educación 2017).

learning by increasing time on task, USAID funded Save the Children to implement this promising approach to early-grade reading instruction in LAC communities with linguistically diverse populations. Save the Children based the program on its Literacy Boost model, which includes teacher training and community involvement, and implemented the program in the Quechua-speaking Apurímac region of Peru and the K'iche'-speaking region of Guatemala. Mathematica worked with Save the Children to design a rigorous evaluation of *Leer Juntos, Aprender Juntos* in both Peru and Guatemala. This report focuses on the impact evaluation findings for Peru, and a similar report presents the impact evaluation findings for Guatemala (Lugo-Gil et al. 2021b; Lugo-Gil et al, 2021).

1. Leer Juntos, Aprender Juntos

Leer Juntos, Aprender Juntos means *Read Together, Learn Together*. Save the Children, an international nongovernmental organization focused on promoting children's rights and providing relief and support to children in developing countries, developed this program based on its Literacy Boost model. Save the Children has implemented Literacy Boost in at least 24 countries (Save the Children 2013a), including El Salvador, Haiti, Ethiopia, Pakistan, and more recently, Rwanda (Friedlander and Goldenberg 2016). Literacy Boost has three main components: (1) an in-school component that includes teacher training and coaching, (2) a community component that relies on volunteers to engage with young students and promote a culture of reading outside of regular instructional periods at school, (3) and a formative assessment component to track children's progress in reading. The assessment component of Literacy Boost was incorporated as part of the in-school component of *Leer Juntos Aprender Juntos*. The combined in-school and community components represent the full *Leer Juntos, Aprender Juntos* intervention.

The in-school and community components of the *Leer Juntos, Aprender Juntos* program align with the elements of reading instruction that existing research (Comings 2012) has identified as effective when implemented simultaneously: (1) text and materials, (2) teacher training and support, (3) community and parental support, and (4) assessment and tracking. Therefore, in addition to targeting important changes in the classroom, the *Leer Juntos, Aprender Juntos* program sought to engage community members and parents in the learning process. The community outreach component is a potentially low-cost, effective way to increase children's time on task.

The *Leer Juntos, Aprender Juntos* program adapted the teacher training and community action components of Literacy Boost to K'iche'- and Quechua-speaking populations[2] in Guatemala and Peru, respectively. The program's primary implementers—Save the Children in Guatemala and Kallpa, its local partner in Peru—trained teachers to teach and monitor students' mastery of core reading skills. Save the Children and Kallpa also worked to strengthen parent and community involvement in building children's reading abilities and opportunities to practice reading skills in their mother tongue. Those efforts included creating and providing context-

[2] In Peru, the program was implemented in two provinces (Andahuaylas and Chincheros) in the southern-central Apurímac region of the country. Within those two provinces, the evaluation was implemented in three school districts (Andahuaylas, Chincheros, and Huancarama).

relevant reading materials in children's mother tongue and conducting community activities that promoted reading engagement and a culture of literacy.

The *Leer Juntos, Aprender Juntos* implementation team consisted of staff from two organizations; a management team from Save the Children/Peru based in Lima and Kallpa's field team primarily based in Apurímac. The implementation team was led by the project director based in the United States, in collaboration with a country project coordinator, a monitoring and evaluation coordinator, a finance officer, and an education adviser based in Lima. Save the Children's management team coordinated and monitored program activities implemented directly by Kallpa's staff in the region. Kallpa's field team consisted of two coordinators, who each oversaw a small team of specialists. Save the Children and Kallpa held weekly meetings; both teams met every two weeks with Save the Children's project director. In addition, Save the Children/Peru's country project manager conducted supervision visits in the region about five times per year.

Planning for implementation of *Leer Juntos, Aprender Juntos* in Peru began in fall 2012 and continued through the first quarter of 2013 with the development of a work plan and project strategy, recruitment and training of program implementation staff, meeting with stakeholders, development of a program monitoring and evaluation system, and preparation of program materials (Save the Children and Kallpa 2012, 2013). Save the Children rolled out the program in two phases. Implementation of Phase I started in 2013 and included half of the schools assigned to receive the full intervention, the teacher training and coaching component and the community action component, and half of the schools assigned to receive the teacher training and coaching component. In 2014, Save the Children continued implementing the program with Phase I schools and began implementing it with the remainder of the schools assigned to the groups where the full intervention and the teacher training and coaching component were offered. The community component rolled out in August 2013 with the training of community volunteers who would serve as 'reading promoters.' In December 2015, Save the Children completed the implementation of *Leer Juntos, Aprender Juntos*; closed out field activities; and prepared the sustainability strategy and materials.

In-school component: teacher training and coaching. The in-school component of *Leer Juntos, Aprender Juntos*, which is based on the Literacy Boost model, followed the recommendations of the National Reading Panel for best approaches in reading instruction (National Reading Panel 2000). The goal of this component was to train and coach teachers so they are better equipped to provide mother tongue and/or Spanish reading instruction focusing on five foundational reading skills (alphabet knowledge, phonological awareness, vocabulary, fluency, and comprehension), to monitor students' mastery of these skills, and to increase students' access to and use of reading materials in the mother tongue. Teachers learned to incorporate instruction in the mother tongue and adapt this instruction to the linguistic background of the students in a particular school.

The school-based component entailed six main activities, intended to increase class time on reading instruction and improve the quality of reading instruction:

1. Training trainers in reading instruction techniques in both Spanish and mother tongue

2. Training teachers in the five core skills of reading: alphabet knowledge, phonological awareness, vocabulary, fluency, and comprehension
3. Creating materials for print-rich classrooms in both Spanish and mother tongue
4. Mentoring and coaching teachers in reading instruction practices
5. Training teachers in conducting formative assessments to track progress of children's reading skills
6. Guiding teachers to incorporate five core skills of reading and related reading instruction techniques into daily school activities

The teacher training activities (for more details, see the teacher training toolkit [Save the Children 2012a]) consisted of nine modules focused on the following topics:

1. Introduction to reading development and instruction for young children
2. Formative assessment
3. Addressing language issues in the literacy classroom
4. Letter knowledge/alphabetic principles
5. Phonological awareness
6. Reading fluency
7. Vocabulary
8. Reading comprehension
9. Reflecting on and applying best practices for teaching reading comprehension and formative assessment

Teachers in 1st, 2nd, and 3rd grades in the intervention schools (schools implementing the full intervention and the teacher training and coaching component) received most of the training content at the beginning of the school year and completed their training throughout the school year.[3] Training in the nine program models in Peru was provided in eight one-day sessions in 2013 (to Phase I teachers) and six one-day sessions in 2014 and 2015 (to Phase I and Phase II teachers). Following training, the program's technical staff (coaches) visited classrooms at least once (and in most cases, two or three times) every three months. These visits aimed to support teachers by observing their work, interacting in the classrooms, demonstrating teaching techniques, and suggesting improvements in applying program teaching strategies (Save the Children and Kallpa 2013, 2014, 2015). Coaches also supported open discussion sessions (called Teacher Circles) with groups of teachers during the afternoons or evenings. These sessions focused on (1) strengthening and practicing the topics learned in the training, (2) conducting activities to develop the five core reading skills, (3) designing lesson plans that incorporate the five core reading skills, and (4) identifying language problems in different contexts and proposing strategies to develop literacy skills in the mother tongue. For more details on the implementation of the teacher training and coaching component in the evaluation schools, such

[3] The school year in Peru begins in March and ends in December.

as frequency of activities, please consult the *Leer Juntos, Aprender Juntos* midline report (Lugo-Gil et al. 2017a).

Community action component. The community action component of the program, also based on the Literacy Boost model, aimed to strengthen parental and community involvement in building children's reading abilities and increasing their opportunities to practice reading outside of school. (For more details, see the Literacy Boost community action toolkit [Save the Children 2012b].) This component drew on the many ways that parents, older siblings, and community members can support children in becoming readers. Community activities were designed to be enjoyable, to engage students, and to empower adults even if they themselves are not fully literate. Parents and community members who do not read can engage children in oral language through storytelling and still contribute to children's listening skills, oral comprehension, and vocabulary development. This component was delivered through entertaining group activities, such as reading camps, reading buddy sessions (peer assistance), reading festivals, and reading contests led by community volunteers. Specifically, the community action component included the following main activities (Save the Children and Kallpa 2013, 2014, 2015):

1. **Creating printed materials in the children's mother tongue, Spanish, or both, to build portable libraries known as book banks.** In Peru, the program team selected, collected, adapted, and produced reading materials covering different literary genres (such as legends, poems, and stories) in Spanish and Quechua.
2. **Promoting the use of book banks among community members.** Each community had at least one book bank.
3. **Conducting reading activities in the community such as story hours, reading camps, and reading festivals or fairs.** These activities were implemented during the school year (March through December) so that invitations for children and their families to participate in the activities could be distributed in the classrooms, and community volunteers could have time off during the school vacation period. The community activities were as follows:
    a. **Story hour.** This activity, for the most part, was conducted in parallel with the distribution of books through community book banks. Story hour activities took place about once a week. Children could attend the activity with their parents and siblings. During story hour in Peru, community volunteers, parents, and other community members shared stories about the community or acted out local legends and myths.
    b. **Reading camps.** In this activity, teachers read stories to children. This structured activity took place outside of school hours about once a week in each school community in Group A. The purpose of the reading camps was to stimulate the development of all five core reading skills (alphabet knowledge, phonological awareness, vocabulary, fluency, and comprehension) in the mother tongue or in Spanish, and incorporate storytelling and reading games to engage children. The reading camps also served as an opportunity for program staff to engage local youth to participate in the community volunteering activities.
    c. **Reading buddies (peer assistance).** In this activity, older children (in grades 4 to 6) read together with the younger children (grades 1 to 3) to help them improve their reading skills. This activity took place mostly within schools, to maximize the number of

children participating in the activity and to facilitate pairing younger children with older children, one or two times per week in each Group A community.

d. **Reading festivals.** Children participated in games and activities in which they could practice, develop, and strengthen their reading skills. In Peru, three to six reading festivals took place each year of program implementation. The reading festivals involved all the education stakeholders in the community: students, teachers, principals, parents, community volunteers (reading promoters), and local education authorities.

e. **School–community accountability meetings.** Program staff met with community leaders, government officials from the Apurímac region, and authorities from the provincial education units (known as UGELs, or *Unidades de Gestión Educativa Local*), which are similar to school districts, to discuss funding sources of reading activities, progress with the reading activities implemented in schools and the communities, resources used and their purpose, and future sustainability of the activities. In Peru, these meetings took place in each community during the second half of 2015, the last year of intervention implementation.

4. **Coordinating peer assistance through reading buddies.** The purpose of this training was to enable volunteers to implement the community action activities (such as promoting the use of book banks, reading buddies, and story hour) with children in their communities. During the training, volunteers learned how to lead the community reading activities and developed a weekly schedule of activities for their community to guide the rollout of implementation.

5. **Conducting school–community accountability meetings and reading awareness workshops with parents and community members.** The purpose of these workshops was to promote awareness and understanding among parents and community members about how the community reading activities help children learn to read. The workshops also aimed to raise awareness about how important it is for children to start learning to read in their mother tongue and to have a dedicated place for reading (‘reading corners’) at home.

2. Prevailing practice in Peru

In the region of Apurímac, where the evaluation was conducted, the prevailing practice was the early-grade reading instruction approach promoted by the Ministry of Education, known as “communicative-textual”, and. was also potentially influenced by other national policies and programs to promote literacy among the Quechua-speaking population. In addition, schools were subject to departmental and local decisions about education priorities and practices.

Peruvian authorities have a history of designing reading instruction with attention to students’ cultural heritage. Since the 1970s, the government of Peru has supported intercultural and bilingual education (IBE) service provision in selected schools. The Ministry of Education, through its General Office of Intercultural, Bilingual, and Rural Education (known by its acronym in Spanish, DIGEIBIR), recommends that teachers in schools offering IBE services should know and value the cultural heritage of their students. Teachers in IBE schools should also demonstrate oral and written language skills in the prevalent native language of the region

as well as in Spanish, must have received training in IBE, and must implement and practice IBE approaches in the classroom (Ministerio de Educación 2013). In addition, IBE schools should have a curriculum and a pedagogical approach that considers knowledge, skills, history, and cultural heritage of the students as well as knowledge of other cultures, and should provide educational materials for different content areas both in the prevalent indigenous language of the region and in Spanish.

The Ministry of Education in Peru advocates a communicative and textual approach aimed at educating students to understand, speak, read, and write in different contexts within and outside their communities (Ministerio de Educación 2008). DIGEIBIR recommends that IBE programs initiate instruction of literacy skills in the mother tongue but also provide oral instruction in Spanish. According to DIGEIBIR, children should first acquire literacy skills in their mother tongue and then gradually transition to learning those skills in Spanish. Therefore, in Peru, there is no specific grade level at which instruction should transition fully from mother tongue to Spanish; rather, the transition is expected to be gradual, and the extent of instruction in Spanish should increase as children progress to higher grades. The expectation for bilingual programs is that in grades 4, 5, and 6, the amount of instruction provided in the mother tongue and in Spanish in bilingual education programs is about the same (Ministerio de Educación 2013).

Two key initiatives from the Peruvian Ministry of Education to strengthen children's literacy skills are the National Rural Education Network Program (REDES, or *Redes Educativas Rurales*) and the Strategic Learning Outcomes Program (PELA, or *Programa Estratégico Logros de Aprendizaje*). REDES is a model of quality rural education that offers teacher support on classroom practices, teacher training, access to information technologies, curricular development for multigrade and single-teacher schools, educational materials in the mother tongue and in Spanish, and improvement in school infrastructure (Ministerio de Educación 2012). The PELA approach to educational policy change uses a performance-based budget strategy aimed at strengthening educational management and administration, teacher training, school infrastructure, and access to quality education (Vargas Dávila 2009). Participation in these programs is voluntary. Among the schools participating in the evaluation, participation in REDES and PELA was similar across the three groups of schools implementing each of the approaches that we are comparing in this evaluation: about 19 to 29 percent of the schools in each treatment group participated in REDES and PELA (see Table III.1 for more details on evaluation schools' participation in these programs).

In 2015, the last year of implementation of *Leer Juntos, Aprender Juntos*, the Ministry of Education began two new initiatives: *Soporte Pedagógico* (Pedagogical Support) targeting urban areas and *Soporte Pedagógico Intercultural* (SPI; Intercultural Pedagogical Support) aiming to serve bilingual schools located primarily in rural areas. The goal of these initiatives is to improve student learning in elementary schools in four ways: (1) providing training workshops, peer-to-peer study groups for teachers, and virtual educational support for teachers and principals; (2) implementing learning sessions designed to develop students' communication, math, and social studies skills that require additional support; (3) executing efficient mechanisms for timely allocation and use of appropriate teaching materials and educational resources; and (4) building capacity of principals, teachers, and parents to ensure adequate learning conditions for students.

In addition, these initiatives employ teachers who work after regular school hours (*docentes fortaleza*) to provide remedial support to students who are falling behind (Consejo Nacional de Educación 2016). Although the two initiatives aim to improve the quality of education and student achievement, SPI emphasizes the implementation of the Ministry of Education's bilingual intercultural education model with strong bilingual literacy acquisition (in mother tongue and in Spanish) and cultural diversity components.

C. Overview of *Leer Juntos, Aprender Juntos* evaluation

As noted in the introduction, the *Leer Juntos, Aprender Juntos* evaluation was conducted to contribute to the evidence base on what works in LAC to improve early grade reading. Knowing the most cost-effective approaches to improving reading skill acquisition can guide policy makers and educators in their efforts to promote child literacy. Specifically, this evaluation sought to understand whether the *Leer Juntos, Aprender Juntos* program was more cost effective than prevailing practice, and whether the community action component of the program was a cost effective approach to improve learning. It did so by comparing the impacts on learners and teachers of the full program, including the in-school and community components, the in-school program only, and the usual education services provided to schools (which we refer to as prevailing practice). In order to have a better understanding of the program in different contexts, we conducted separate but parallel impact evaluations of *Leer Juntos, Aprender Juntos* for Peru and Guatemala.

II. EVALUATION DESIGN AND DATA

As described in Chapter I, the goal of this evaluation is to determine the relative impact and cost effectiveness of the in-school and community action components of the *Leer Juntos, Aprender Juntos* program. This chapter details the evaluation design, the program's logic framework, the types of data collected, the analytic methods, and the evaluation sample.

A. Evaluation questions

The evaluation sought to answer the following two primary questions about program impacts:

- What is the impact of the teacher training and support component of *Leer Juntos, Aprender Juntos* on early-grade reading and other outcomes relative to prevailing practice? This question contrasts schools in Group B to those in Group C.

- What is the impact of the community action component of *Leer Juntos, Aprender Juntos* on early-grade reading and other outcomes relative to an intervention that does not have the community action component? This question contrasts schools in Group A to those in Group B.

In addition to these two primary questions, the evaluation addresses a question about implementation:

- Were the program components implemented as intended? This question relates to whether each program component's services were offered as originally intended, whether participants took part, and whether these program components had intermediate impacts on teaching and the availability and use of reading materials. It also considers any barriers or challenges to effective implementation.

B. Evaluation design

In Peru, we recruited 145 schools.[4] Within each school, we followed a group of children from 1st grade through the end of 3rd grade. The evaluation was implemented as a randomized controlled trial, in which the evaluation team randomly assigned schools to the three treatment groups (we explain the assignment process to treatment groups in detail in Chapter II):

1. Group A: These schools implemented the full intervention (the teacher training and coaching component and the community action component). We refer to this group as *Leer Juntos, Aprender Juntos,* or *Leer Juntos* for ease of presentation.
2. Group B: These schools implemented only the in-school component of the intervention. We refer to this group as *Leer Juntos*-school only). Including this group in the evaluation enabled us to isolate the effects of the in-school component from the effects of the community action component.

[4] In Guatemala, we recruited 150 schools.

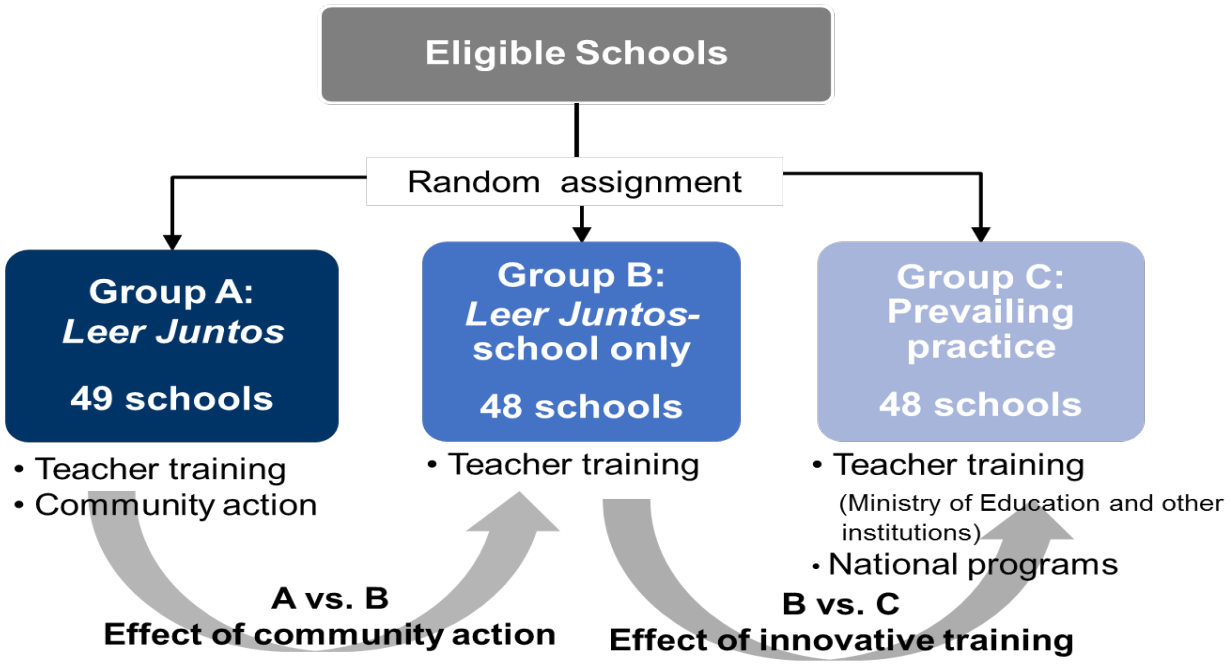
3. Group C: The schools assigned to this group did not implement any of the components provided by *Leer Juntos, Aprender Juntos*, but instead implemented the prevailing reading instruction approach and supports in the early-grades in each country, in this case, Peru. We refer to this group as the prevailing practice group.

To provide rigorous evidence on the relative impacts of the in-school and community action components of the program to improve early-grade reading, we used a randomized controlled trial design in which we randomly assigned schools to three intervention groups (Figure II.1). We conducted random assignment at the school level because the intervention was implemented at this level. Aligned with program rollout, the evaluation was carried out in two phases. We randomly assigned 74 eligible schools to intervention groups and collected baseline data in the first half of the evaluation schools in 2013 (Phase I), and then assigned 71 schools in 2014 (Phase II) [5]. After random assignment, the evaluation team randomly selected one 1st grade classroom, one teacher, and 10 1st grade students from each school to serve as the analysis sample. We sampled this way to minimize data collection cost and burden while still obtaining data that were representative of the schools and students in the evaluation. We conducted two follow-up data collections after the baseline: one at the end of the second year of implementation (midline, in 2014 for Phase I and 2015 for Phase II) and another at the end of the third year of implementation (endline, in 2015 for Phase I and 2016 for Phase II). Implementation of the program started in May 2013 for Phase I schools and March 2014 for Phase II schools. For a more detailed timeline of the data collection and program implementation activities, see Figure A.1 in Appendix A.

We present results for students pooled across the two phases because we did not find any significant pattern of differences (see Table G.3 in Appendix G) between phases. This is the same approach we have taken in earlier reports (Lugo-Gil et al. 2016b; Lugo-Gil et al. 2017a).

[5] In Guatemala, the evaluation team assigned a similar number of schools in the same manner: 75 schools in Phase I and another 75 in Phase II.

Figure II.1. *Leer Juntos, Aprender Juntos* evaluation design



Source: *Leer Juntos, Aprender Juntos* evaluation plan (Glazerman et al. 2013)

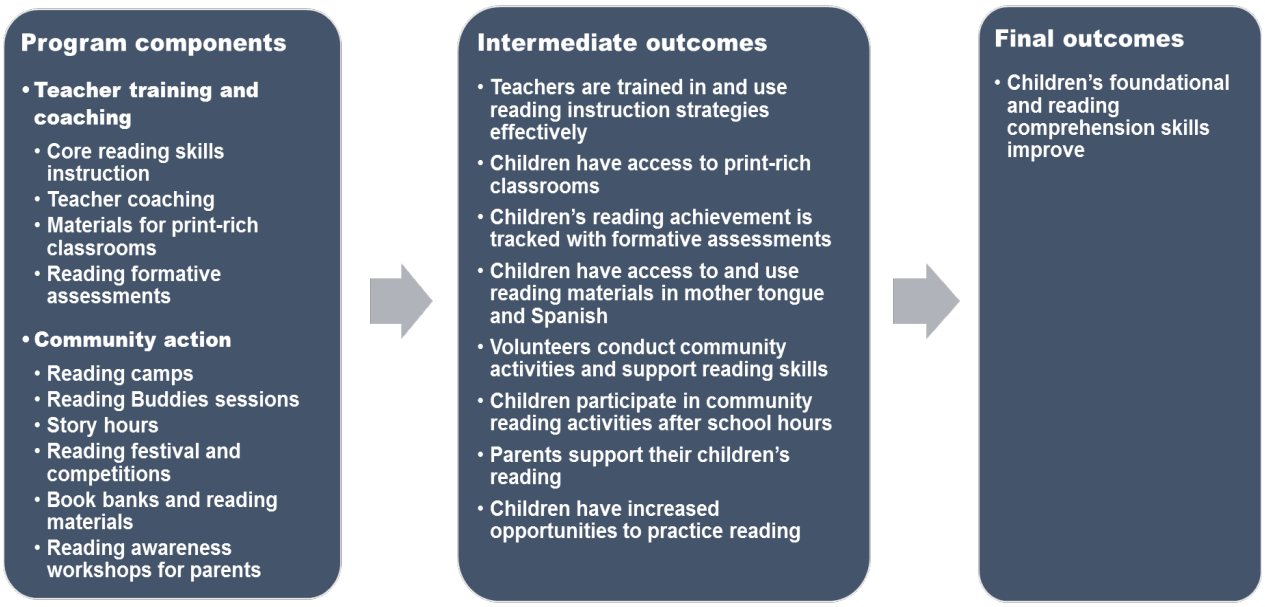
The primary outcomes of interest for the impact analysis presented in this report are early-grade reading skills, such as fluency and comprehension, but we also examined other outcomes, such as improved classroom practices and culture of reading at home and in schools. We answer the first question of the evaluation, about the impact of the teacher training and support component of *Leer Juntos, Aprender Juntos* on early-grade reading and other outcomes relative to prevailing practice, by comparing outcomes for schools in Group B with those in Group C. And by comparing the outcomes for schools in Group A with those in Group B, we answer the second evaluation question, which is to assess the community action component of *Leer Juntos, Aprender Juntos* on early-grade reading and other outcomes relative to an intervention that does not have the community action component. To understand the implementation context and address the program implementation question, we adopted a mixed-methods approach integrating survey data, interviews, focus groups, and a qualitative review of program documents. These data came from implementers, teachers, and parents of students.

C. *Leer Juntos, Aprender Juntos* logic framework

Figure II.2 illustrates the logic framework for the program. As described in Chapter I, *Leer Juntos, Aprender Juntos* has two components: (1) a teacher training and coaching component that was implemented within schools (Groups A and B), and (2) a community action component that was implemented outside of school hours with children and their families within the community (Group A). We expect the program to have effects in three key areas: (1) the instructional practices that teachers implement in their classrooms, (2) children's access to and use of instructional materials in their mother tongue and in Spanish, and (3) participation in community reading activities after school hours, among other intermediate outcomes. The

expected final outcomes for the program are children's improved foundational and reading comprehension skills.

Figure II.2. *Leer Juntos, Aprender Juntos* logic framework



Source: *Leer Juntos, Aprender Juntos* Performance Management Plan (Save the Children 2013b).

D. Types of data collected for the evaluation

We partnered with the *Grupo de Análisis para el Desarrollo* (GRADE) to collect data for the evaluation. We collected data from schools, classrooms, teachers, and students, following what the program's logic framework indicates as the expected intermediate and final outcomes of *Leer Juntos, Aprender Juntos* (Figure II.2). The survey instruments, data documentation, and data files used for this evaluation are available online upon request as restricted use data files at USAID's Development Data Library website (https://data.usaid.gov/). We describe the evaluation's data collection activities in more detail in this section of the report.

1. Data collection in schools and households

The evaluation team collected data at baseline and again at the midline and endline points of program implementation. Data collection for the baseline occurred when the children participating in the evaluation were in 1st grade. The midline (first follow-up) data collection took place during the second year of program implementation for children in both Phase I and II, when most of the children in the evaluation would have progressed to 2nd grade and have had about one year and a half of potential exposure to the intervention. The endline (final follow-up) data collection took place during the third year of program implementation, when most of the children in the evaluation would have progressed to 3rd grade and have had about two to two and a half years of potential exposure to the intervention. See Figure A.1 in Appendix A for a detailed timeline of *Leer Juntos, Aprender Juntos* activities in Peru.

At the baseline, midline, and endline data collections, we observed schools and classrooms and interviewed teachers. The school observation used a checklist that the evaluation team could complete based on an environmental scan of the school premises. In the classroom observation, the evaluation team observed and recorded information on teachers' instructional practices, teachers' and students' language use in the classroom and time on task, and other school and classroom characteristics during a one-hour class period. The evaluation team also administered an in-person survey of teachers about their instructional practices; education and experience; participation in professional development activities; occupational needs; career expectations; and background characteristics, such as Quechua proficiency and income. For more information about the development, administration, and contents of the instruments for the school and classroom observations, and the teacher survey, refer to the *Leer Juntos, Aprender Juntos* baseline report (Lugo-Gil et al. 2016b).

In addition to the observations and teacher surveys administered in schools, the evaluation team administered individual assessments to children in the baseline and endline data collections. During the baseline data collection, when evaluation children were in the 1st grade, the evaluation team assessed children's oral language proficiency and emergent literacy skills (letter identification, emergent writing, emergent reading, phonemic awareness, pseudo-word decoding, and passage comprehension skills) in Spanish and Quechua. The *Leer Juntos, Aprender Juntos* baseline report (Lugo-Gil et al. 2016b) presents a detailed description of the process to develop those assessments and of their contents, and reports on the findings from the examination of the baseline data. In the endline data collection, the individual assessments administered to children focused on reading skills in Spanish. This assessment was administered when most of the children in the evaluation attended the 3rd grade. The endline reading skills assessment was adapted for Peru following the guidelines of the Early Grade Reading Assessment (EGRA) Toolkit (RTI International 2015). The endline assessments were conducted in Spanish because Spanish is the language of instruction in the 3rd grade classrooms in the evaluation (see Table E.10 in Appendix E and the baseline report [Lugo-Gil et al. 2016a])).

In the midline data collection, we observed the evaluation schools' classrooms and administered a teacher survey, but we did not assess children's reading skills. Instead, the evaluation team conducted a household survey. This survey was administered in person to the main caregivers (usually the mother or father) of the children in the evaluation at their homes. The purpose of this survey was to learn about the household composition, family socioeconomic status, household assets, children's schooling background and routines at home, and children's and families' participation in reading activities offered in their communities. Findings from the midline data relevant to understanding intermediate outcomes are also presented in Chapter IV of this report.

2. Response rates

Table II.1 shows that the response rates to each round of data collection were high, mostly more than 95 percent for most data collections. Of the 145 schools that were randomly assigned to treatment groups, one school assigned to Group B closed and one school assigned the same group refused to participate in the baseline and midline data collections. The latter school allowed data collectors to enter the school for the endline data collection. Therefore, the impact analysis presented in this report includes 144 schools (49 in Group A, 47 in Group B, and 48 in

Group C). The number of children in the sample who we randomized into treatment groups is 1,074, and the number who completed a reading skills assessment in the 3rd grade is 1,022. The low levels of attrition across all three groups give us confidence that the evaluation sample continues to be balanced and representative across all treatment groups at endline and that our experimental design has been maintained.

Table II.1. Response rates to data collections in the evaluation

Data collection round	Leer Juntos (A)	Leer Juntos-school only (B)	Prevailing practice (C)	All
Baseline data collection (2013 in Phase I and 2014 in Phase II)				
School infrastructure observation, classroom observation, and teacher survey	100	95.8	100	98.6
Emergent literacy skills assessment	96.3	96.0	96.7	96.4
Midline data collection (2014 in Phase I and 2015 in Phase II)				
School infrastructure observation, classroom observation, and teacher survey	100	95.8	100	98.6
Household survey	96.3	95.5	97.9	96.6
Endline data collection (2015 in Phase I and 2016 in Phase II)				
School infrastructure observation, classroom observation, and teacher survey	100	97.9	100	99.3
Reading skills assessment	94.2	95.5	95.9	95.2
Number of children who were randomized into treatment groups	**380**	**354**	**340**	**1,074**
Number of children who completed endline assessments	**358**	**338**	**326**	**1,022**

Source: *Leer Juntos, Aprender Juntos* School Infrastructure Observation, Classroom Observation, Teacher Survey, Household Survey, Emergent Literacy Skills Assessment, and Reading Skills Assessment—Baseline 2013 and 2014, Midline 2014 and 2015, and Final Follow-ups 2015 and 2016.

3. Qualitative data collection

The evaluation team also collected qualitative data from stakeholders to understand how the school and community components were implemented, the facilitators and barriers to implementation, and teachers' and parents' perceptions of the *Leer Juntos, Aprender Juntos* program. We partnered with GRADE to collect data for the evaluation. Qualitative data collection took place over a two-week period in May 2015— at the end of the second year of program implementation for Phase I and of the first year for Phase II (see Appendix A, Figure A.1). The data are used to understand how program services were delivered, how services were received by stakeholders, and what services were received in each experimental group. They also illustrate some of the challenges to implementation. GRADE, in collaboration with the UGEL, Save the Children and Mathematica, recruited a purposive sample of parents of students in the treatment groups (Groups A and B), 1st through 3rd grade teachers in treatment and control schools, community volunteers, and local and implementation specialists from Save the Children to participate in focus groups and interviews. Using a convenience sampling approach, the team identified and selected participants that were easily accessible and could provide rich information relevant to the goals of the evaluation. Participant inclusion criteria were flexible, and took into account potential constraints and barriers to participation in interviews and focus groups like distance, access to transportation, and work schedules. Participant inclusion criteria were:

- For parents, to have a child enrolled in first, second or third grade, in a school assigned to Group A or B (phase I and phase II schools included)
- For teachers, to teach first, second and third grade, in a school assigned to Group A, B, or C (phase I and phase II schools included)
- For volunteers, to be and active volunteer for the community action component

GRADE staff carried out interviews and focus groups with directors in the provincial education units (UGELs) and education specialists, Save the Children staff, Kallpa staff, community volunteers, parents, and teachers from Phase I and Phase II schools located in the three provincial education units (Andahuaylas, Chincheros, and Huancarama) of the Apurímac region. All interviews and focus groups were audio recorded and transcribed verbatim. Field staff also prepared interpretative summaries synthesizing key themes that emerged during the focus groups, which were later used to triangulate findings from the analysis of verbatim transcripts.

The team faced two main challenges with the recruitment of participants for qualitative data collection in Peru. First, a teacher strike during the time when data collection activities were scheduled made it necessary to shift the timing of data collection, and the teacher strike also made it more difficult to obtain consent from control schools which were already somewhat reluctant to participate in the proposed interviews because they were not receiving program services. Second, the geographic dispersion of the target communities and transportation constraints for parents required some logistical accommodations. Instead of asking parents to travel to a central location for the focus groups, the field staff team travelled to a site in the community, closer to the families' homes, to conduct the focus groups following a small group interview format. (See Appendix B, Table B.1 for a summary of respondent types, methods,

topics of inquiry, and location for all qualitative data collection activities, and Appendix L for the qualitative instruments used in these data collection activities.)

E. Analytic approach

We examined differences between treatment groups in measures at the school level (characteristics of schools, teachers, and classrooms) and at the child level (emergent literacy and reading skills and home literacy environment). To assess the differences between treatment groups in those measures, we conducted regression analyses that accounted for the design of the random assignment of schools and the data cohort (Phases I and II). The design used stratified random assignment, in which we first grouped schools with similar characteristics (within phase) into strata and randomly assigned to the three groups within these strata. This approach increases the likelihood that certain observable and unobservable characteristics are evenly balanced across the three treatment groups. For more details on how we conducted the stratified randomization of schools and selected the sample, refer to the *Leer Juntos, Aprender Juntos* baseline report (Lugo-Gil et al. 2016b).

With those regressions, we computed regression-adjusted means of the relevant measures for each treatment group (A, B, and C) and tested whether the differences in those adjusted means between Groups A and B, and between Groups B and C, are statistically different from zero. We also computed effect sizes, which are the differences in adjusted means between two treatment groups expressed in standard deviation units. We used the *p*-values from the tests of differences in group means to assess statistical significance of the differences in means. We defined the difference in means between treatment groups as statistically significant whenever the *p*-value of the test was lower than 0.05. In determining the statistical significance of mean differences between treatment groups in measures at the child level, we accounted for the clustering of children within schools.

For analyses of children's reading skills measures in the 3rd grade, we defined the analytic sample as the sample of children who completed a reading skills assessment in the final follow-up (endline) data collection (also known as "respondents"). Therefore, our strategy to estimate program impacts follows an intent-to-treat approach.[6]

Our regression analyses of children's reading skills measures in the 3rd grade also control for several variables at the child, household, and school levels measured at the baseline. We included these variables in our analyses to account for any initial, observed differences between treatment groups and to increase the precision of our impact estimates. These control variables include (1) child characteristics such as age, sex, results from the baseline emergent literacy assessments, and language spoken at home at the time of baseline data collection; (2) household characteristics such as mother's education level and household income and assets; and (3) school characteristics at the time of baseline data collection such as participation in other programs, number of physical and health hazards observed in the school, and school infrastructure resources. Table C.1 in Appendix C presents the complete list of control variables included in the

[6] With the intent-to-treat approach, all the evaluation participants in the schools that were randomly assigned to the three treatment groups (Groups A, B, and C) are included in the impact analysis and are analyzed in the groups to which they were randomized.

analyses of children's reading skills measures. We imputed missing values in the control variables using a regression-adjusted average of the nonmissing values for the variable. We describe the process to impute missing values in control variables in more detail in Appendix C.

The approach for the reduction and analysis of qualitative data sought to meet the goals of the implementation research questions efficiently, and in keeping with the resources available for the qualitative component of this evaluation. Mathematica staff reviewed all transcripts, field notes, and interpretative summaries submitted by GRADE's field staff team for quality assurance. Then, we conducted a thematic analysis of the transcripts and other sources of qualitative data in three steps. First, we parsed meaningful segments of transcripts (or field notes) linked to the key implementation research questions. Second, we extracted memos of key findings and illustrative quotes, and organized them in synthesis tables. Finally, we triangulated finding from these tables with field notes, and interpretative summaries submitted by GRADE's field staff team.

F. Characteristics of the sample at endline

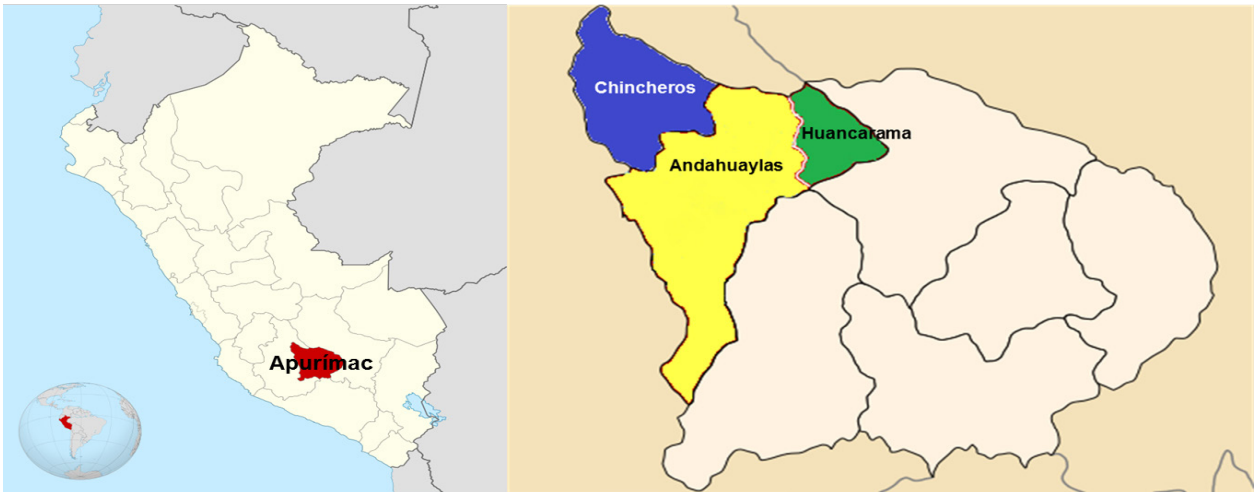
This section provides a snapshot of the characteristics of the schools, teachers, and students in the evaluation sample during the third year of program implementation, when most of the students in the sample attended the 3rd grade.

1. Schools

The schools in the evaluation are located in the Apurímac region, in the Andes of southern-central Peru. Apurímac was selected because its population is linguistically diverse: about 70 percent of residents report that their mother tongue is Quechua (Instituto Nacional de Estadística e Informática [INEI] 2007),[7] which provided the opportunity to examine how the *Leer Juntos, Aprender Juntos* intervention works for that population. The evaluation schools were selected from three provincial education units within Apurímac's two western provinces, Andahuaylas and Chincheros. Figure II.3 presents a map of Peru that highlights the location of the Apurímac region and the provincial education units where the evaluation schools are located.

[7] The other 29 percent of the population in the Apurímac region report their mother tongue is Spanish, and about 1 percent report it is another language, such as Aymara (INEI 2007).

Figure II.3. The Apurímac region in Peru



As shown in Table II.2, most schools in the sample are located in the Andahuaylas school district, followed by the Chincheros and Huancarama districts. The schools in all three intervention groups average approximately six primary classrooms and about nine 3rd grade students. About 50 to 63 percent of the schools in each group have classrooms with more than one grade (multigrade or single-teacher schools[8]), meaning that the children in 3rd grade in these schools are taught in classrooms together with children from other grades. The classrooms in each group have, on average, an equal number of female and male students.

The average school characteristics were similar for each treatment group (Table II.2). Fifty-eight of the 59 differences between treatment groups in the school infrastructure characteristics that we examined were not statistically significant (see Appendix D, Tables D.1 through D.3). Nevertheless, our approach for estimating program impacts controls for baseline characteristics of schools, such as available utilities and facilities (see Appendix C, Table C.1 for the complete list of variables for which we controlled in calculating program impacts. For details on the infrastructure characteristics of evaluation schools, refer to the *Leer Juntos, Aprender Juntos* baseline report (Lugo-Gil et al. 2016b)).

[8] In schools with multigrade classrooms, several grades are taught in the same classroom. In single-teacher schools, one teacher provides instruction to all the primary grades offered in the school, usually in the same classroom. In schools with single-grade classrooms, only one grade is taught in each classroom.

Table II.2. Characteristics of evaluation schools in the final follow-up year

Characteristic	Leer Juntos (A)	Leer Juntos-school only (B)	Prevailing practice (C)	(A–B)	(B–C)
Percentage of evaluation schools in school district (UGEL):					
Andahuaylas	56.5	52.3	54.5	4.2 (0.161)	-2.2 (0.477)
Chincheros	27.3	31.4	30.4	-4.2 (0.268)	1.1 (0.778)
Huancarama	16.2	16.2	15.2	-0.0 (0.994)	1.1 (0.644)
Percentage of schools with multigrade classrooms	50.4	57.6	63.0	-7.2 (0.255)	-5.4 (0.401)
Number of primary grade classrooms in use (average)	5.9	5.7	5.6	0.2 (0.613)	0.1 (0.839)
Number of students enrolled in observed 3rd grade classrooms (average)					
Total	9.2	9.1	9.2	0.1 (0.884)	-0.1 (0.898)
Female	4.5	4.6	4.6	-0.1 (0.811)	0.0 (0.938)
Number of schools	**49**	**47**	**48**		

Source: *Leer Juntos, Aprender Juntos* School Infrastructure Observation Form and Classroom Observation Form—Final Follow-ups 2015 and 2016.

Note: Regression-adjusted means. *P*-values in parentheses. None of the differences between treatment groups presented in this table is statistically significant at the 0.05 level.

2. Teachers

The teachers surveyed in the 3rd grade follow-up have similar background characteristics across the three treatment groups. In particular, we did not find any statistically significant differences between treatment groups in terms of teachers' sex, age, and highest level of education (see Table II.3).

We also did not find any statistically significant differences in the composition of the sample of teachers in the evaluation in terms of years of teaching experience and tenure in the early grades. As shown in Table II.4, there were no statistically significant differences across treatment groups in the teachers' number of years of experience—overall, at the current school, or teaching 3rd grade. About 30 percent of the 3rd grade teachers in each treatment group taught the same evaluation children as they moved through 1st, 2nd, and 3rd grades. Another 32 to 47 percent of the 3rd grade teachers in the evaluation have taught at the current school for less than two years. This is equivalent to five to seven fewer teachers in Group A than in Groups B or C taught at the current school for less than two years. However, these differences between treatment groups are not statistically significant.

Table II.3. Background characteristics of the teachers of the evaluation students in the final follow-up year

Characteristic	*Leer Juntos* (A)	*Leer Juntos*-school only (B)	Prevailing practice (C)	(A–B)	(B–C)
Female (percentage)	48.6	48.9	60.7	-0.3 (0.974)	-11.8 (0.252)
Age (average)	47.9	45.1	43.9	2.8 (0.149)	1.2 (0.535)
Highest level of education (percentage)					
Incomplete associate, technical, or college degree	3.8	2.2	2.2	1.6 (0.658)	0.0 (1.000)
Associate or technical degree	43.5	47.8	39.2	-4.3 (0.688)	8.6 (0.427)
College degree	48.6	37.5	46.1	11.1 (0.260)	-8.6 (0.386)
Graduate degree (master's or doctorate)	4.2	12.5	12.5	-8.3 (0.180)	0.0 (1.000)
Number of teachers	**49**	**47**	**48**		

Source: *Leer Juntos, Aprender Juntos* Teacher Survey—Final Follow-ups 2015 and 2016.

Note: Regression-adjusted means. *P*-values in parentheses. None of the differences between treatment groups presented in this table is statistically significant at the 0.05 level.

Table II.4. Experience and tenure characteristics of the teachers of the evaluation students in the final follow-up year

Characteristic	Leer Juntos (A)	Leer Juntos-school only (B)	Prevailing practice (C)	(A–B)	(B–C)
Years of teaching experience (average)	21.6	17.7	16.5	3.9 (0.063)	1.2 (0.575)
Years of teaching at current school (average)	9.6	6.9	6.5	2.7 (0.097)	0.4 (0.814)
Years teaching 3rd grade (average)	4.9	5.0	4.4	-0.1 (0.923)	0.6 (0.570)
Percentage of teachers who have taught evaluation children for three years (when they were in the 1st, 2nd, and 3rd grades)	30.0	29.0	27.9	1.0 (0.911)	1.1 (0.907)
Percentage of the teachers in 3rd grade in the evaluation who have less than two years of experience at current school	32.1	43.5	46.7	-11.4 (0.236)	-3.2 (0.740)
Number of teachers	**49**	**47**	**48**		

Source: *Leer Juntos, Aprender Juntos* Teacher Survey—Final Follow-ups 2015 and 2016.

Note: Regression-adjusted means. *P*-values in parentheses. None of the differences between treatment groups presented in this table is statistically significant at the 0.05 level.

Finally, we found that although nearly all teachers in all treatment groups reported that they understand Quechua, fewer than 40 percent of the teachers in the sample reported that they speak very good Quechua, and none reported an advanced level of written Quechua (see Table II.5).

However, we did not find any statistically significant difference across treatment groups in teachers' reported language skills.

Table II.5. Teacher-reported language skills in the final follow-up year (percentages of teachers)

Skills	Leer Juntos (A)	Leer Juntos-school only (B)	Prevailing practice (C)	(A–B)	(B–C)
Teacher's mother tongue					
Spanish only	29.0	24.9	20.6	4.1 (0.643)	4.3 (0.630)
Quechua only	27.3	36.2	29.8	-9.0 (0.339)	6.5 (0.495)
Both Spanish and Quechua	43.7	38.9	49.6	4.9 (0.645)	-10.8 (0.315)
Teacher is capable of understanding Quechua	100.0	97.9	97.9	2.1 (0.396)	1.0 (1.000)
Teacher's proficiency level in spoken Quechua					
Very poor to fair	26.5	20.3	21.3	6.3 (0.477)	-1.1 (0.904)
Good	46.8	41.9	54.8	4.9 (0.635)	-12.9 (0.218)
Very good	26.6	37.8	23.8	-11.2 (0.244)	14.0 (0.150)
Teacher's proficiency level in written Quechua					
Very poor to fair	38.6	33.3	40.8	5.3 (0.592)	-7.5 (0.454)
Good	61.4	66.7	59.2	-5.3 (0.592)	7.5 (0.454)
Number of teachers	**49**	**47**	**48**		

Source: *Leer Juntos, Aprender Juntos* Teacher Survey—Final Follow-ups 2015 and 2016.

Note: Regression-adjusted means. *P*-values in parentheses. None of the differences between treatment groups presented in this table is statistically significant at the 0.05 level.

In summary, we did not find noteworthy differences across treatment groups in the terms of teacher characteristics.

3. Students

As shown in Table II.6, there is no significant difference in retention rates between treatment and prevailing practice schools. The majority of students in the evaluation (the students in the two treatment groups, Groups A and B, and the students in the prevailing practice group, Group C) had progressed to the 3rd grade by the time the evaluation team administered the endline (final follow-up) reading skills assessment.[9] Only about 10 to 12 percent of the students

[9] One of the students in the sample (in Group C; this result is not in Table II.6) was not enrolled in school at the time of the endline reading skills assessment.

in each treatment group were retained in 2nd grade when assessed for the final follow-up. That rate is lower than the rate of the country's overall grade repetition in elementary school of 16 percent (Ikeda and Garcia 2014).

We also found that at the time of the endline reading skills assessment, the majority of the children in the sample attended the same school they attended at the time of the baseline data collection. Therefore, the majority of the children in the treatment groups had been enrolled in a school that implemented the in-school component of the intervention for about three years. We did not find any statistically significant differences across treatment groups in the grade or school that children in the evaluation sample attended at the time of the endline data collection.

Table II.6. Grade and school at the time of the final follow-up data collection (percentage of students)

Grade and school	Leer Juntos (A)	Leer Juntos-school only (B)	Prevailing practice (C)	(A–B)	(B–C)
In 3rd grade	88.3	89.5	89.3	-1.2 (0.686)	0.2 (0.947)
Current school is the same as the school attended at the time of the evaluation's baseline data collection	86.7	90.9	90.5	-4.2 (0.207)	0.4 (0.883)
Number of children	**358**	**338**	**326**		

Source: *Leer Juntos, Aprender Juntos* Students' Reading Skills Assessment—Final Follow-ups 2015 and 2016.

Note: Regression-adjusted means. *P*-values in parentheses. None of the differences between treatment groups presented in this table is statistically significant at the 0.05 level.

G. Baseline equivalence of the analysis sample

The random assignment process yielded similar treatment groups in most of the baseline characteristics examined. Because the evaluation is based on an experimental design (schools were randomly assigned to the treatment groups), we did not expect to find systematic differences across all the baseline characteristics of the treatment groups that we measured. However, differences in some characteristics could exist because there might be no way to assign 144 schools to three treatment groups such that the groups are identical. Random assignment facilitates ensuring the three groups are, on average, similar and that any unusual characteristic has an equal chance of representation in any of the three groups.

We examined differences across treatment groups in the characteristics of students in the analytic sample that are unlikely to be influenced by the program and therefore can indicate whether our evaluation design produced similar treatment groups. As shown in Table II.7, the treatment groups are similar in student baseline characteristics, with a few exceptions: children in schools in Group B were marginally older at baseline and had slightly lower scores in the baseline assessments of emergent reading, emergent writing, and pseudo-word reading skills than children in schools in Groups C. To account for these differences across treatment groups, we included the variables presented in Table II.7, among other student- and school-level variables, as controls in the regression models we used to calculate program effects.

Table II.7. Baseline characteristics of children in the evaluation sample

Characteristic	Leer Juntos (A)	Leer Juntos-school only (B)	Prevailing practice (C)	(A–B)	(B–C)
Average age at baseline (in months)	75.4	75.9	75.0	-0.5 (0.135)	-0.9* (0.010)
Female (percentage)	49.7	51.7	51.3	-2.0 (0.503)	0.4 (0.874)
Baseline letter identification score (0 to 24)	14.6	14.2	14.3	0.4 (0.477)	-0.1 (0.926)
Baseline emergent reading score (0 to 9)	1.9	1.7	2.5	0.2 (0.631)	-0.8* (0.010)
Baseline emergent writing score (0 to 22)	10.1	9.5	11.1	0.6 (0.348)	-1.6* (0.014)
Baseline phonemic awareness score (0 to 10)	3.0	2.9	3.1	0.1 (0.775)	-0.2 (0.432)
Baseline number of pseudo-words read in one minute (0 to 50)	1.7	1.6	3.1	0.1 (0.832)	-1.5* (0.007)
Baseline passage comprehension score (0 to 6)	2.0	2.1	2.2	-0.1 (0.719)	-0.1 (0.573)
Child assessed in Spanish only at baseline	89.1	86.6	88.2	2.5 (0.603)	-1.6 (0.744)
Child assessed in both Spanish and in Quechua at baseline	7.0	5.7	5.6	1.4 (0.551)	0.1 (0.952)
Child attended preschool or kindergarten	98.7	99.4	99.5	-0.7 (0.186)	-0.1 (0.913)
Child's mother completed at least one year of formal schooling	87.9	92.0	98.8	-4.1 (0.367)	-6.8 (0.139)
Child's parents are able to read	73.6	73.2	76.9	0.4 (0.918)	-3.7 (0.373)
Language spoken at home is Quechua only	30.8	27.1	27.4	3.7 (0.414)	-0.3 (0.946)
Number of children[a]	**358**	**338**	**326**		

Source: *Leer Juntos, Aprender Juntos* Students' Emergent Literacy Skills Assessment—Baseline 2013 and 2016, and Household Survey—Midline 2014 and 2015.

Note: Regression-adjusted means. *P*-values in parentheses.

[a]This is the number of children who completed an endline reading skills assessment and who have complete data on age and sex. The number of children in the analytic sample who completed a baseline assessment is 989 (349 in Group A, 324 in Group B, and 316 in Group C).

* Difference in group means is statistically significant at the 0.05 level.

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III. WAS *LEER JUNTOS, APRENDER JUNTOS* IMPLEMENTED AS INTENDED?

As described in Chapter I, the Ministry of Education in Peru had been implementing two programs to strengthen children's literacy skills: *Redes Educativas Rurales* (REDES) and the *Programa Estratégico Logros de Aprendizaje* (PELA). In 2015,[10] the Ministry of Education developed two additional initiatives that aim to improve student learning in elementary schools: *Soporte Pedagógico* (Pedagogical Support) and *Soporte Pedagógico Intercultural.* These initiatives aim to improve the quality of education and student achievement through activities and components similar to the activities carried out by *Leer Juntos, Aprender Juntos*. Therefore, the implementation of *Leer Juntos, Aprender Juntos* must be understood in a setting where several practices and programs aiming to improve early-grade literacy coexisted across the treatment groups. This chapter presents findings on how services were delivered, how services were received by participants, and what services were received in each evaluation group. It also presents findings on challenges to implementation. The implementation findings help to contextualize and explain impact findings.

A. School participation in education interventions

The practices and programs that coexisted with *Leer Juntos, Aprender Juntos* were present in equal measure in all three experimental groups. This finding is based on reports by principals (Table III.1) and teachers (Appendix E). Less than a third of the schools in the treatment group (fewer than 16 schools each group) participated in education programs with similar goals to *Leer Juntos, Aprender Juntos* (REDES, PELA and, *Soporte Pedagógico*). The differences in participation between treatment groups were small and not statistically significant.

School principals in both Groups A and B (73 and 69 percent of schools, respectively) reported higher participation in the *Leer Juntos, Aprender Juntos* program. This finding is based on reports by principals (Table III.1) and teachers (Appendix E). However, one quarter of the school leaders in the prevailing practice group reported participating in *Leer Juntos, Aprender Juntos*, whereas none of the teachers in those same prevailing practice schools reported receiving any component of *Leer Juntos, Aprender Juntos*. We believe this reflects differences in respondents' knowledge about the programs that are being implemented in the schools. It is likely that the school leaders are less familiar than teachers about the program activities being rolled out in classrooms. Although school leaders may be more aware of the general activities occurring in the school, they may be less informed about the specific teacher training activities or the identity of the implementer, program name, or funding source for those activities.

[10] In 2015, when the Phase I schools were in the second year of *Leer Juntos Aprender Juntos* implementation and the Phase II schools were in their first year, *Soporte Pedagógico* was implemented in 15 regions of the country (3,180 schools), benefiting 52,563 teachers and 1,144.213 students (Chinen and Bonilla 2017).

Table III.1. School participation in education programs, reported by principals or other school administrators

	Leer Juntos (A)	Leer Juntos School-Only (B)	Prevailing practice (C)	Impact of community action (A–B)	Impact of in-school component (B–C)
Percentage of schools participating in the following education-focused programs					
Leer Juntos, Aprender Juntos	73.2	69.2	25.2	4.0 (0.674)	44.1* (0.000)
National Rural Education Networks Program (REDES)	24.9	29.2	20.6	-4.3 (0.626)	8.6 (0.337)
National Strategic Learning Achievement Program (PELA)	23.8	26.0	18.5	-2.2 (0.731)	7.5 (0.247)
Soporte Pedagógico	26.9	20.5	27.0	6.4 (0.344)	-6.5 (0.342)
One Laptop per Child	63.5	73.6	63.9	-10.0 (0.288)	9.7 (0.312)
Education materials from the Ministry of Education	100.0	97.9	97.9	2.1 (0.396)	0.0 (1.000)
Other school programs	28.6	16.5	22.9	12.1 (0.155)	-6.5 (0.451)
Number of schools	**49**	**47**	**48**		

Source: *Leer Juntos, Aprender Juntos* School Infrastructure Observation Form—Final Follow-ups 2015 and 2016.

Note: Regression-adjusted means. *P*-values in parentheses.

* Difference in group means is statistically significant at the 0.05 level.

B. Implementation challenges in Peru

During the first year of implementation, management and staffing challenges with Kallpa hindered the fidelity of implementation. While new to the education sector, Kallpa had been a strategic partner for Save the Children/Peru for many years before implementing *Leer Juntos, Aprender Juntos*. However, decisions from Kallpa's staff in the field during the first year of implementation resulted in deviations from the Literacy Boost model, hiring of staff who did not meet specified requirements, and frequent disagreements with regional government staff and with personnel from intervention schools. As a course correction measure, one of the field coordinators was replaced for the second year of implementation. According to interviews with Save the Children Kallpa staff, that change in the field leadership team led to improved fidelity to the Literacy Boost model, more frequent and harmonious interactions with regional government representatives, and innovations to the interventions in response to contextual needs (for example, rotating home visits to parents to implement reading corners at home).

The implementation team had to adapt the Literacy Boost methodology to the Peruvian context, taking into account the Ministry of Education's reading curriculum

Rutas del Aprendizaje.[11] Save the Children/Peru and Kallpa worked together to introduce the program to regional educational authorities and to align the program's approach with the regional reading curriculum. After their staff received training on the reading instruction methodology by Save the Children's project director, Save the Children/Peru and Kallpa worked/ together to adapt the methodology to the regional sociocultural context and to integrate it with the national strategy for reading instruction. To align the program's instructional approach with the national curriculum, program coordinators and specialists participated in the training workshops on the learning units of the national curriculum *Rutas del Aprendizaje,* offered by the Ministry of Education. Several teachers had also participated in training workshops for *Rutas del Aprendizaje* in their corresponding school district (UGEL); however, program specialists identified substantial gaps in teachers' knowledge about how to implement *Rutas del Aprendizaje* in the classroom, particularly how to conduct the 'learning projects.'[12]

Qualified project staff could not serve out a full three years. Most of the hired specialists were active teachers or principals who were granted a leave of absence to participate in the project. Because these leaves of absence were typically limited to one or two years, the program experienced substantial turnover of specialists for its second and third years. This generated a need for annual training cycles for program staff who delivered coaching sessions to Group A and Group B intervention schools.

Cooperation and acceptance from the local school districts varied for the three districts where *Leer Juntos, Aprender Juntos* was implemented. The Chincheros UGEL was optimistic about the complementarity of the *Leer Juntos, Aprender Juntos* program with other education programs from the Ministry of Education. In contrast, the Huancarama UGEL was somewhat skeptical about the feasibility of integrating the *Leer Juntos, Aprender Juntos* pedagogical approach with the Ministry of Education's approach to reading instruction. The resistance to the program in the Huancarama UGEL was in part due to changes in management staff and misunderstanding about the program's approach. However, program staff worked closely with the UGEL's leadership to show them that there was no conflict between *Leer Juntos, Aprender Juntos* and the recommended approach of the Ministry of Education. The Andahuaylas UGEL was open to the *Leer Juntos, Aprender Juntos* program, but it faced organizational challenges coordinating different education programs in its area of operation. Effective coordination of program activities with the UGEL was crucial because about one-fourth of intervention schools were also receiving services from other programs. Twenty-three percent of schools in Group A also received services from PELA, and 26 percent received *Soporte Pedagógico*. Similarly, 26 percent of schools in Group B received services from PELA and 20 percent from *Soporte Pedagógico*.

The geography of Andahuaylas and the limited access to public transportation to intervention schools imposed logistical challenges for the teacher coaches, trainers, and volunteer coordinators. Recruitment and transportation of Kallpa team members was difficult

[11] Ensuring teachers' take-up of reading instruction strategies and the sustainability of the program was essential to Save the Children's approach. To that end, it aligned the program framework with the national curriculum *Rutas del Aprendizaje*.

[12] Known as *Proyectos de Aprendizaje.*

due to the geography of the Andahuaylas province with unpaved mountainous roads and long distances between schools. Longer travel times and the overnight stays required to visit some communities made coordination of schedules for coaching and community visits challenging. Additionally, there was limited telephone land-line and cell phone reception in the field.

C. Implementation of the in-school component

According to teachers from intervention schools who participated in focus groups, Kallpa specialists established positive and supportive relationships with them. For the in-school component, Kallpa specialists conducted training workshops and coaching sessions with teachers. Their approach to training and program coordination was cordial, respectful, and democratic. Teachers reported a good working relationship with Kallpa specialists and valued their innovative approach to training and coaching. Teachers highlighted marked differences between Kallpa specialists and their counterparts from other programs. Teachers described coaching visits (*acompañamiento*) from personnel from programs sponsored by the central government as supervisory, whereas they described visits from Kallpa specialists as motivating and supportive.

The teacher who visits came as a friend, gained our trust; supported us ...This helps you perform better in the classroom.

—Andahuaylas teacher focus group participant

Teachers described the program's methodology and training approach as practical and feasible to apply in the classroom, and highlighted advantages of the *Leer Juntos, Aprender Juntos* training compared to trainings imparted by Ministry of Education. Teachers who participated in focus groups stated that they were able to apply the program's teaching strategies with ease, not only in the target classrooms but in other classrooms and subject areas as well. They thought the program's reading instruction strategies were clear and had well-defined guidelines for applying in the classroom. Teachers also shared that the program's approach to reading instruction differed from regional or national approaches, yet was compatible.

About one-third of teachers interviewed at midline in Group A schools and 42 percent of the teachers in Group B schools reported having participated in trainings offered by the Ministry of Education or other institutions that calendar year (2015 for Phase I and 2016 for Phase II). Teachers stated that, compared to the Ministry of Education's teacher training programs, Kallpa's teacher training was less theoretical and included more explicit demonstration of pedagogical strategies and sequential steps for using those strategies in classroom practice. Similarly, control group teachers pointed out that Ministry of Education teacher trainings tend to be too theoretical and lack concrete tools and strategies for classroom practice (52 percent of the teachers interviewed at midline in control schools had participated in trainings imparted by the Ministry of Education or other institutions). Teachers who participated in trainings offered by Kallpa specialists expressed that the demonstration and step-by-step layout of *Leer Juntos, Aprender Juntos* strategies for reading instruction helped them apply with their students what they had learned during Kallpa's trainings.

Before I taught very differently from how I teach now. Kallpa supported me on how I should teach children to write and read, and gave me concrete strategies.

— Chincheros teacher focus group

While the program calls for the implementation of reading instruction in mother tongue and in Spanish, incorporating mother tongue reading instruction was challenging for Kallpa specialists and for teachers in intervention schools. Teachers and school principals were resistant to mother tongue instruction. Some schools displayed explicit signs forbidding the use of Quechua. Program specialists noticed that, even if teachers were proficient in Quechua, they did not have mother tongue instruction skills and did not feel well prepared to use Quechua for instruction in the classroom (73 percent of the teachers interviewed at midline in Group A or B schools reported having good or very good oral language skills in Quechua). Program implementers worked around this challenge by explaining the benefits of mother tongue instruction with students who speak primarily Quechua at home, and by providing specific guidelines and materials to help teachers conduct classroom activities in Quechua. Parents also expressed mixed views about Quechua instruction for their children. Although some parents explicitly opposed it, others stated that their children should learn it and preserve their linguistic heritage (more than 80 percent of the parents interviewed at midline reported speaking Spanish and Quechua or only Quechua most of the time). Parents who participated in focus groups conveyed mixed views on Quechua instruction for their children and expressed the tension between their desire to preserve their cultural and linguistic heritage and the need for Spanish proficiency for opportunities in the labor market.

> *[The Teacher Circles] were not in the model, but they are part of the coaching system which works very well given the context. It also provides a space for feedback; a space where teachers can not only be observed, but also participate actively.*
>
> —Save the Children staff

Teachers in intervention schools used the reading instruction practices they learned from the program in their classrooms, and they reported observing increased student engagement and class participation among their students. Teachers in intervention schools stated that they have changed how they teach reading and have incorporated the reading instruction strategies they learned in the program into their regular classroom practice (more than 60 percent of the teachers interviewed at midline in schools receiving the program reported applying what they learned in training to their classroom practice every day). Teachers value the program materials and learning to prepare their own materials with a specific pedagogical intent. Teachers reported feeling that the instructional practices they have implemented promote student engagement, and they have noticed more active student participation in their classes. However, teachers still struggle with heterogeneity in students' reading skills during the early primary grades.

Coaching visits were key for supporting teachers, but some teachers felt they did not receive enough of these visits. The teacher coaching of *Leer Juntos, Aprender Juntos* (known as *acompañamiento*) consisted of two steps. During the first coaching visit, the program specialist modeled the lesson to demonstrate core reading instruction strategies. During the second coaching visit, the teacher delivered the lesson while the program specialist observed and provided feedback, after which they jointly discussed how the teacher could improve. Specialists from Kallpa visited teachers in intervention schools every two months. Fluctuations in the number of active program specialists resulted in very tight coaching visit schedules; for example, there was

> *Of course I would like [my child] to take Quechua in upper grades as a general culture, to be able to communicate in the region. But [my child] should also [learn in] other languages because when they leave [the school] Quechua will not help much in a job.*
>
> — Chincheros parent focus group

a time during the project when seven specialists had to cover coaching visits for approximately 500 teachers. As a result, some teachers who participated in focus groups felt they did not receive enough coaching visits. Two factors—capacity constraints in the number of coaching visits program specialists could conduct and teachers' interest in participating in and observing other teachers' coaching visits—led the Kallpa to modify the original in-class coaching strategy. Kallpa added three sessions of the Teacher Circles per year (known as *círculos de interaprendizaje colaborativo*) to complement the coaching visits. This addition to the original coaching component was well suited to the local context, creating a space for teachers to discuss what they were practicing in their classrooms, create pedagogical materials with other teachers, and receive targeted assistance from program specialists.

The formative evaluation component of the program was implemented in the teacher trainings but was not always used systematically to track students' progress at the individual level. *Leer Juntos, Aprender Juntos* includes a formative evaluation component that enables teachers to monitor students' acquisition of foundational reading skills and to inform differentiated instruction. Program specialists provided assessment forms for teachers to monitor students' phonemic awareness, reading fluency, vocabulary, and comprehension. They also showed teachers how to display assessment results for students to see their progress. Approximately three-quarters of the teachers interviewed at midline in intervention schools reported being trained on the use of assessments (compared to only 40 percent of teachers in control schools); however, teachers in treatment and control schools reported spending nearly the same number of hours per week (approximately three hours) planning, administering, and grading students' assessments or homework. The implementing team's reflections on the formative assessment component suggested that formative assessments were not used consistently in all intervention schools. As a result, the implementation team developed detailed protocols to facilitate teachers' use of formative assessment. However, as interview respondents indicated, it is possible that this component might have not been implemented with the same thoroughness as the rest of the in-school intervention activities.

> *[The coaching] makes you see where you are failing, what you lack, because when a person is observing your weaknesses; you can improve according to that (feedback).*
>
> —Andahuaylas teacher focus group

High teacher turnover and rotation of teachers to upper grades were barriers to implementation. Teachers who were trained and subsequently left made it necessary to train their replacements or have untrained teachers. Rotating teachers to different grade levels (other than 1st, 2nd, or 3rd) even when they stayed in the same school was a barrier to strengthening new reading instruction strategies in the classroom. Kallpa's team made efforts to engage educational authorities and school principals with the goals of the programs and emphasized the importance of keeping the cohorts of trained teachers assigned to the early elementary grades (1 through 3); however, ultimately grade-level assignments were beyond their control and teacher rotation could not be prevented.

The duration of the nine training modules made implementation difficult. This commitment made it difficult to secure the support of the teachers' union to support teachers' participation in the training. The original training model from Literacy Boost, which called for nine training modules (one day each), was not feasible in the local context. When tailoring the

Literacy Boost training modules for implementation in Peru, Save the Children/Peru and Kallpa adapted the content for delivery in three and a half days, prioritizing the information most relevant for teachers.

Teachers valued the training and coaching they received and reported an increase in student motivation to read. Teachers who participated in focus groups shared that the reading instruction strategies they learned from the program had motivated students in their classes and that the students seemed more engaged and interested in reading activities. Teachers believed the program had provided them with pedagogical materials and with an array of activities to teach reading that are feasible to implement in their classrooms. Also, teachers stated that the one-on-one support they received during coaching sessions has driven them to make specific efforts to improve their teaching practice. The conversations, self-reflection, and agreements that took place during the coaching visits added a layer of accountability to teachers' commitment to improve their practice.

D. Implementation of the community action component

Recruiting and retaining volunteers was a major challenge to implementation. The implementation of community action activities to promote reading relied on the participation of volunteers—known in the program as "reading promoters." Initially, Kallpa recruited literate adults to join the cadre of volunteers (one per community). Illiterate adults who wanted to participate as volunteers were included, but only to help the lead volunteers who had sufficient reading skills. Volunteers were expected to conduct the reading camps, lead the storytelling hour, and manage the book banks.

During the first year, almost half of the volunteers quit the program. According to interviews with Kallpa and Save the Children staff, even though volunteers were motivated to help children practice reading, they struggled to find the time for the community activities and wanted to be paid for their time. In addition, volunteering is not common practice in the region, so the implementation team had difficulties finding candidates who had previous experience leading and/or participating in volunteering activities.

In response to these challenges, the implementing team changed the recruitment profile and sought students in the upper grades to become volunteers. The change in the profile of volunteers was favorable— students participating as community volunteers felt they were making a positive contribution to their school and received recognition by teachers and peers. Young volunteers also felt they gained leadership and communication skills.

Despite these adjustments to the recruitment of volunteers, barriers to implementing the community action component persisted. Turnover of community volunteers was high, and some stakeholders perceived deficiencies in the coordination of community activities. Volunteers felt they needed more training to conduct community activities and more support from program specialists. Some parents also shared concerns about the skill level of volunteers. Although Kallpa specialists excelled in their work with teachers, parents expressed that Kallpa specialists seemed to be less equipped to work successfully with parents and volunteers.

The reading buddies activity, which as part of the community action component was designed to be implemented outside of school hours, did not work as expected and was

instead adapted for implementation during regular school hours. The reading buddies activity (known as *Amigos de la Lectura*) was originally part of the community action component that volunteers would implement outside the regular school schedule. The implementing team noticed that the after-school activity was not working well in the community—volunteers had difficulty managing reading banks, planning reading camps, and simultaneously coordinating the reading buddies. As a result, the implementation team modified the delivery format of the reading buddies activity, while preserving its pedagogical intent. This activity was shifted to the school context and organized by teachers in their classrooms during school once a week. It was implemented only in group A schools (schools implementing the community action component).

Despite challenges recruiting and retaining volunteers, children in the evaluation were offered the activities that corresponded to the group to which they were assigned. Parents/caregivers of at least 60 percent of the children in Group A reported that they were indeed invited to participate in reading camps, story hour, reading buddies activities, and reading fairs. In comparison, parents/caregivers of a smaller percentage of children in Groups B and C reported their children were invited to participate in those community activities. In addition, the parents/caregivers of 46 percent of children in Group A reported their children were invited to borrow books from a book bank or library, but more than 50 percent said that children in that group actually borrowed books or printed materials.[13]

Children in Group A were exposed to the community reading activities of the intervention, and most of the children in Groups B and C were not. In the month before the household survey was administered, 56 to 64 percent of the children in Group A participated in reading camps outside school hours, story time activities in which volunteers read aloud to the children, activities in which older children provided tutoring and played reading games with the evaluation children (reading buddies), and reading fairs/festivals in which they read with other children in the community. Six to 11 percent of the children in Groups B and C reported participation in reading activities and games in their communities in the previous month.

Table III.2. Parents' reports on children's exposure to and participation in reading activities in the community

	Leer Juntos (A)	*Leer Juntos*-school only (B)	Prevailing practice (C)	A–B	B–C
Percentage of children invited to participate in:					
Reading camps	61.9	10.7	13.6	51.1* (0.000)	-2.9 (0.499)
Story time with community volunteers	59.5	10.4	11.8	49.1* (0.000)	-1.4 (0.737)
Tutoring and reading games with older children (reading buddies)	64.6	8.6	13.1	56.0* (0.000)	-4.5 (0.238)

[13] In all groups, the percentage of households that reported they borrowed a book is larger than the percentage of households that reported they were "invited" to borrow a book. It is likely that families borrow books if they are available without waiting to receive a formal invitation to do so. The survey questions were not structured in such a way as to be able to determine this, however.

	Leer Juntos (A)	*Leer Juntos*-school only (B)	Prevailing practice (C)	A–B	B–C
Reading fairs	67.0	11.1	11.2	55.9* (0.000)	-0.2 (0.962)
Borrowing books from a book bank or a library	45.5	22.3	15.5	23.2* (0.000)	6.7 (0.133)
Percentage of children who participated in:					
Reading camps	58.2	8.7	11.4	49.5* (0.000)	-2.7 (0.505)
Story time with community volunteers	55.6	8.6	10.1	47.1* (0.000)	-1.5 (0.690)
Tutoring and reading games with older children (reading buddies)	60.9	6.4	11.2	54.4* (0.000)	-4.8 (0.185)
Reading fairs	63.5	9.4	9.5	54.1* (0.000)	-0.2 (0.967)
Borrowing books from a book bank or a library	55.3	36.1	25.2	19.3* (0.001)	10.9 (0.055)
Number of children[a]	**366**	**338**	**333**		

Source: *Leer Juntos, Aprender Juntos* Household Survey—Midline 2014 and 2015.

Note: Column A–B presents differences in the regression-adjusted group means between the *Leer Juntos* group and the *Leer Juntos*-school only group, and Column B–C presents differences in the regression-adjusted group means between the *Leer Juntos*-school only group and the prevailing practice group. The *p*-values from tests of differences between group means are presented in parentheses.

[a] Number of children for whom a household survey was completed.

* Difference in group means is statistically significant at the 0.05 level.

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IV. WHAT ARE THE IMPACTS ON INSTRUCTIONAL PRACTICES AND LITERACY ENVIRONMENT?

As indicated in the program's logic framework presented in Chapter II (Figure II.2), we expected that participation in the in-school component of the program would result in trained teachers who use the strategies learned in the training effectively, track children's reading achievement with formative assessments, and create a print-rich classroom environment where reading materials are available in mother tongue and Spanish. We also expected that the community action component of the program would provide children with more opportunities to practice reading outside of school hours and help parents support their children's reading.

The teacher survey and classroom observation data provided evidence that the children in the schools implementing the in-school component of the intervention (Group B) experienced improved classroom environments when compared with the children in the schools implementing the prevailing practice (Group C). This is consistent with reports from intervention teachers in focus groups (see Chapter III): that the *Leer Juntos, Aprender Juntos* training and coaching provided them with concrete instructional strategies that they could apply in their teaching practice, as well as with tools to create pedagogical materials. Regarding children's activities outside of school hours, our findings from the analysis of household survey data are consistent too with the findings from the analysis of qualitative information collected. In particular, we did not find impacts of the community action component of the intervention on the reading activities that children do at home. This finding reflects the challenges experienced in implementing this component of the intervention and the difficulties that parents in the evaluation faced to attend intervention workshops and creating reading spaces at home.

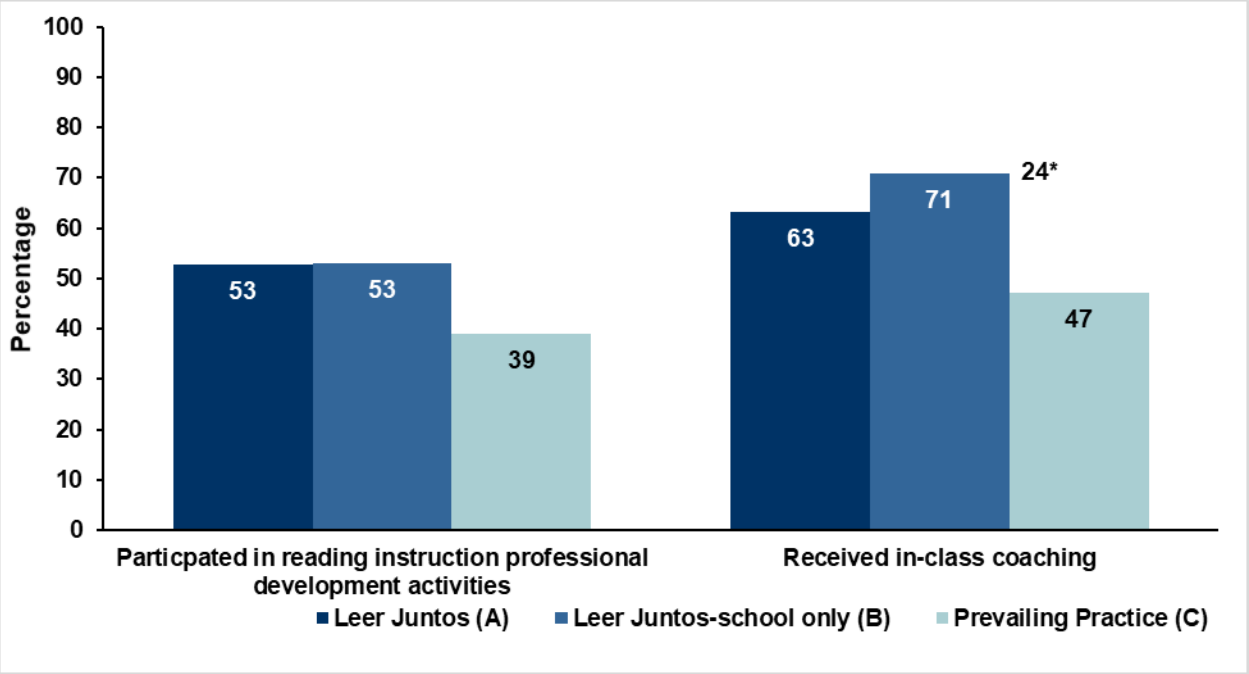
A. Classroom instruction

1. Teacher participation in professional development activities

The *Leer Juntos, Aprender Juntos* intervention significantly increased the percentage of teachers receiving coaching. Both in the focus groups conducted in the qualitative evaluation (see Chapter III) and in the teacher survey, teachers in the treatment groups (Groups A and B) reported they actively participated in professional development activities focused on reading instruction. More teachers in the *Leer Juntos, Aprender Juntos* intervention groups reported receiving training and coaching than did teachers in the prevailing practice group (Group C) during the calendar year when the teacher survey was administered (2015 for Phase I teachers and 2016 for Phase II teachers). We expected this finding, given that one of the components of the intervention focused on providing teachers with training and coaching. The differences in training rates (53 percent in Groups A and B versus 39 percent in Group C) were not large enough to be statistically significant, but the differences in coaching between Groups B and C (71 versus 47 percent, respectively) were (see Figure IV.1).

In terms of the sources for training and coaching, essentially all Group C teachers reported that the Ministry of Education provided their training and coaching. Teachers in Groups A and B reported that their training and coaching were provided by a combination of Save the Children (for *Leer Juntos, Aprender Juntos*) and the Ministry of Education (see Tables E.1 through E.3 and Figure E.1 in Appendix E).

Figure IV.1. Teacher-reported participation in reading instruction training and coaching in the endline year



2. Teacher-reported and observed practices

We measured classroom practices using both teacher reports and live classroom observations. In the endline teacher survey, the evaluation team asked teachers about the methods, strategies, materials, and allocation of instruction time they use to teach reading, and about the needs and challenges they face in teaching their students to read. The evaluation team also conducted structured observations of 3rd grade classrooms during a typical language or reading class to measure the proportion of observed instruction time that teachers allocated to literacy instruction activities. Observers noted features of the print environment and recorded teachers and students use of mother tongue and Spanish language in the classroom. Observers also completed a checklist on teachers' use of instructional practices focused on teaching the five foundational reading skills targeted in the program's training (alphabet knowledge, phonological awareness, vocabulary, fluency, and comprehension) and of general practices such as providing feedback to students.

We found no meaningful pattern of statistically significant program effects on instructional practices as reported by teachers or observed by evaluators. One possible reason for this finding is teacher exits. As presented in Chapter III, the implementation team did not control grade-level assignments, so it was impossible to prevent school leaders from reassigning *Leer Juntos, Aprender Juntos*-trained teachers to grades 4 to 6, which were not part of the evaluation. (See Appendix E, Tables E.4 through E.10 and Figure E.2 for the full set of detailed findings on teacher-reported and observed practices.)

Another possible explanation for the lack of impacts on classroom practices is that training time was compressed to adapt to the teachers' busy schedules and the regulations of local

teachers' unions (see Chapter III), and may have been insufficient. If teachers did not have enough time to process and practice what they learned from the training, they might not have been able to internalize and practice what they had learned and fully incorporate those new strategies into their instruction practices.

B. Reading environment and behaviors

1. Environment in the classroom

Classroom observers recorded the presence of a reading area in the classrooms, the location and accessibility of books, and the availability of physical print resources for students, noting their language and physical condition.

Intervention schools provided greater exposure to print materials than schools assigned to implement prevailing practice. As shown in Table IV.1, more classrooms in Group A than in Group B had books placed in multiple locations within the classroom. Also, more classrooms in Group B than in Group C had complete alphabets in Spanish and in Quechua that were visible to students. Finally, the percentage of classrooms that displayed familiar words written in Quechua was higher in classrooms in Group A than in classrooms in Group B (74 and 54 percent, respectively). The differences mentioned here were all statistically significant.

Table IV.1. Materials to facilitate early reading instruction that are visible to students in the classroom (percentage of classrooms)

Materials	Leer Juntos (A)	Leer Juntos-school only (B)	Prevailing practice (C)	Impact of community action (A–B)	Impact of in-school component (B–C)
Reading area equipped with reading materials for students	41.0	43.6	44.7	-2.6 (0.809)	-1.1 (0.921)
Classroom with books located in areas that are accessible to students	97.9	90.5	95.9	7.4 (0.100)	-5.4 (0.234)
Classroom with books placed in a number of locations	57.5	37.1	43.5	20.4* (0.042)	-6.5 (0.521)
Materials to facilitate early reading instruction					
Complete alphabet in Spanish visible to students	87.3	72.1	44.1	15.2 (0.081)	28.0* (0.002)
Complete alphabet in Quechua visible to students	56.9	46.4	22.7	10.6 (0.259)	23.7* (0.014)
Familiar words written in Spanish visible to students	100.0	95.7	100.0	4.2 (0.081)	-4.3 (0.080)
Familiar words written in Quechua visible to students	73.7	53.9	56.0	19.8* (0.030)	-2.2 (0.813)
Number of classrooms	**49**	**47**	**48**		

Source: *Leer Juntos, Aprender Juntos* Classroom Observation Form—Final Follow-ups 2015 and 2016.

Note: Regression-adjusted means. *P*-values in parentheses.

* Difference in group means is statistically significant at the 0.05 level.

In terms of the type of books observed in the classrooms (Table IV.2), we found one statistically significant difference between treatment groups: more classrooms in Group C (29

percent) had picture books without text than in Group B (10 percent). This result is consistent with teachers' reports on the type of texts their students use (Table E.5 in Appendix E): more teachers in Group C (32 percent) than in Group B (10 percent) reported their students use picture or art books every day.

Table IV.2. Characteristics of the books observed in the classrooms (percentage of classrooms)

Difficulty and genre	Leer Juntos (A)	Leer Juntos-school only (B)	Prevailing practice (C)	Impact of community action (A–B)	Impact of in-school component (B–C)
Difficulty level of books					
Simple books with figures or the alphabet	9.7	14.3	15.4	-4.7 (0.512)	-1.1 (0.881)
Picture books	19.6	10.4	28.7	9.1 (0.201)	-18.3* (0.013)
Picture books with some text	73.5	74.1	68.7	-0.6 (0.950)	5.4 (0.582)
Simple books (*obras sencillas)*	34.5	28.7	29.8	5.7 (0.564)	-1.1 (0.915)
Textbooks	97.9	97.9	100.0	0.0 (0.989)	-2.2 (0.386)
Other books	17.9	20.9	29.5	-3.0 (0.726)	-8.6 (0.320)
Book genre					
Reference books	49.3	37.8	38.9	11.5 (0.250)	-1.1 (0.915)
Narrative books	75.2	77.4	68.8	-2.2 (0.812)	8.6 (0.363)
Workbooks	97.9	91.5	98.0	6.4 (0.132)	-6.5 (0.131)
Number of classrooms	**49**	**47**	**48**		

Source: *Leer Juntos, Aprender Juntos* Classroom Observation Form—Final Follow-ups 2015 and 2016.

Note: Regression-adjusted means. *P*-values in parentheses.

* Difference in group means is statistically significant at the 0.05 level.

Observers also recorded the number of books and other instructional texts in Spanish and Quechua that they observed in the classroom, but we did not find any statistically significant difference between treatment groups in the availability of those materials in the classroom. We present these results in Table E.12 in Appendix E.

The findings presented in Tables IV.1 and IV.2 are consistent with the teacher reports we received during the focus groups conducted for the qualitative evaluation (Chapter III): teachers in the treatment groups were enthusiastic about using what they learned in the intervention training and creating a print-rich environment in their classrooms.

2. Environment in the home

As explained in Chapter II, we conducted a household survey to obtain information on the characteristics of the literacy environment in the homes of the children participating in the evaluation. The evaluation team collected information on the availability of books for children in the household, the frequency with which the children use those books, the family members who read with the child, the existence of dedicated time for reading at home for children, and the activities—related to reading and not—that children do when they are at home.

a. Availability of reading materials at home

We found no statistically significant differences between treatment groups in the availability of books for children at home. However, as shown in Table IV.3, books for children were available in most of the households in the evaluation (97 to 99 percent in each treatment group). Also, households in each treatment group had, on average, six to seven books for children. In 50 to 57 percent of the households in each treatment group, books were available only in Spanish, and about 40 percent of the households in each treatment group reported the availability of children's books written in either Spanish or in Quechua. Those differences between treatment groups were not statistically significant (Table IV.3).

Table IV.3. Availability of books for children at home

	Leer Juntos (A)	Leer Juntos-school only (B)	Prevailing practice (C)	Impact of community action (A–B)	Impact of in-school component (B–C)
Percentage of households in which books for children are available	99.2	98.6	97.0	0.6 (0.482)	1.5 (0.192)
Number of books for children in the household (average)	6.3	5.5	6.5	0.8 (0.093)	-1.0 (0.067)
Percentage of households with books for children in the following languages:					
Spanish only	56.0	56.5	49.8	−0.5 (0.916)	6.7 (0.190)
Quechua only	0.2	0.4	0.3	-0.2 (0.603)	0.1 (0.887)
Spanish and Quechua	43.0	41.8	47.0	1.3 (0.755)	−5.2 (0.265)
Percentage of children using the books for children in the household with the following frequency:					
Never	1.4	1.8	3.1	−0.4 (0.673)	−1.3 (0.295)
One or two times per week	31.0	32.2	21.8	-1.2 (0.776)	10.4* (0.012)
Three or four times per week	38.1	40.8	41.8	−2.7 (0.490)	-0.9 (0.824)
Every day	29.5	25.2	33.3	4.4 (0.313)	-8.2 (0.057)
Number of children	**358**	**338**	**326**		

Source: *Leer Juntos, Aprender Juntos* Household Survey—Midline 2014 and 2015.

Note: Regression-adjusted means. *P*-values in parentheses.

* Difference in group means is statistically significant at the 0.05 level.

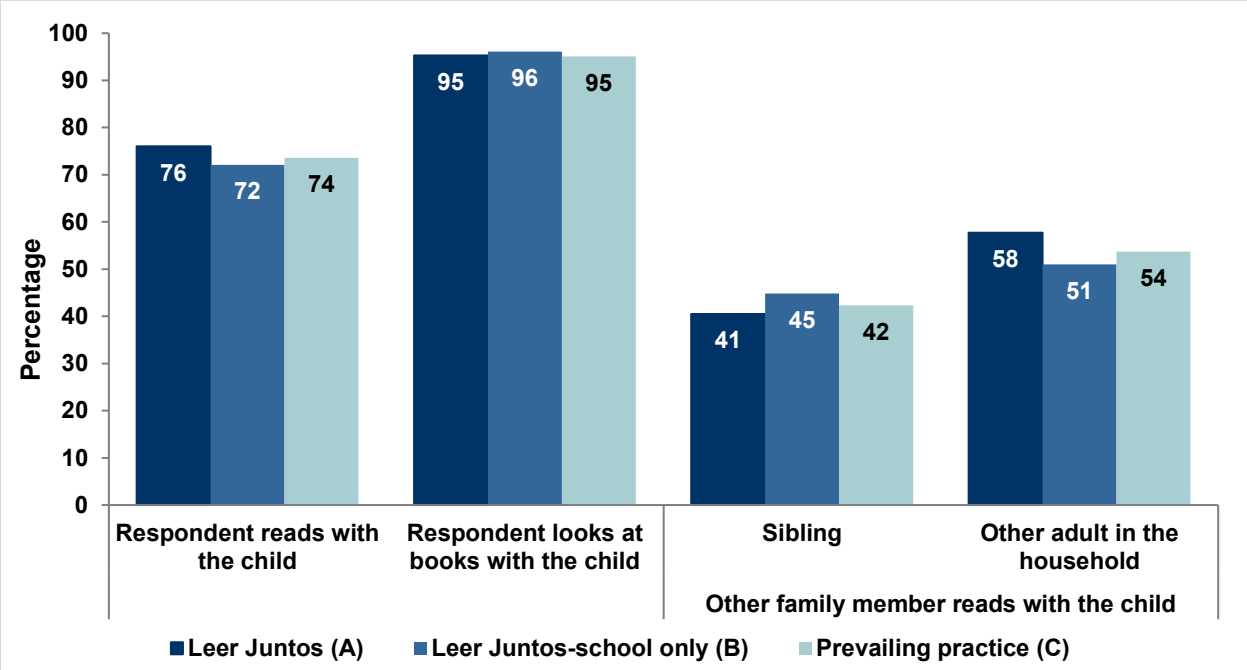
We also found that in each treatment group, 22 to 32 percent of the children use the children's books one or two times per week, and 25 to 30 percent of the children in each

treatment group use the children's books every day. Across all the comparisons presented in Table IV.3, we found one statistically significant difference between treatment groups in frequency of use of the books for children available in the home: more children in Group B than C use the children's books one or two times per week. More children in Group C than in Group B use the children's books every day, but this difference is not statistically significant at the 0.05 level (it is statistically significant at the 0.10 level; $p = 0.057$).

b. Reading at home

Most children in the evaluation communities already read at home with a parent or other family members. There was little room for the intervention to make a difference, because most children attending schools in the prevailing practice group already have someone who looks at books with them (95 percent) or reads books to them (74 percent), as shown in Figure IV.2. This finding is consistent with the household survey respondents' reports about their literacy skills: about three-quarters of survey respondents (76 percent in Groups A and C, and 73 percent in Group B) reported they can read (data not shown).

Figure IV.2. Percentages of evaluation children whose parents or other household members read with them



Source: *Leer Juntos, Aprender Juntos* Household Survey—Midline 2014 and 2015.

Note: None of the differences between treatment groups presented in this table is statistically significant at the 0.05 level.

***Leer Juntos, Aprender Juntos* aimed to increase the time scheduled for reading in the home, but the effects were not apparent by the time we conducted the household survey.** For most children in each treatment group (73 percent in Group A, 68 percent in Group B, and 70 percent in Group C), parents or caregivers schedule a time for their children to dedicate to reading activities at home (Table IV.4). On average, the dedicated time for reading at home is

three hours per week in each treatment group. We found no statistically significant differences between treatment qgroups in the scheduled time for reading at home.

Table IV.4. Dedicated time for reading at home

	Leer Juntos (A)	Leer Juntos-school only (B)	Prevailing practice (C)	Impact of community action (A–B)	Impact of in-school component (B–C)
Percentage of children who have dedicated time for reading at home	72.7	68.3	70.1	4.4 (0.324)	-1.8 (0.699)
Hours per week scheduled for reading at home (average)	3.2	3.3	3.0	−0.1 (0.752)	0.3 (0.337)
Number of children	**358**	**338**	**326**		

Source: *Leer Juntos, Aprender Juntos* Household Survey—Midline 2014 and 2015.

Note: Regression-adjusted means. *P*-values in parentheses.

* Difference in group means is statistically significant at the 0.05 level.

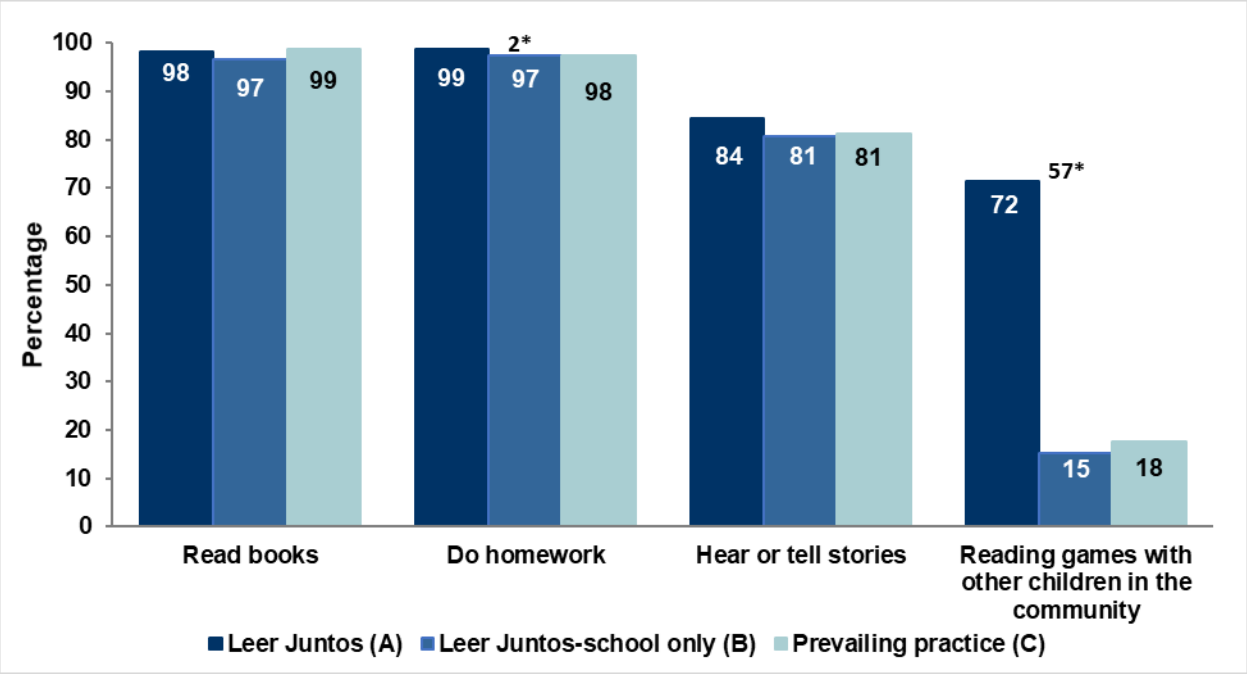
We did not find any statistically significant differences between treatment groups in the percentage of children who read with their parents or other family members at home, or in the dedicated times at home for reading activities, despite the intention of the reading buddies programs and parent workshops offered in Group A communities to encourage more siblings and other volunteers to read to children and create spaces at home for reading. The other family members who read with the children in all treatment groups are siblings or other adults living in the household, such as aunts, uncles, and grandparents (Figure IV.2).

Children in all three treatment groups engaged in reading activities outside of school hours. At home or in the community, most children in the evaluation (at least 81 percent in each treatment group) participated in reading activities such as reading books, doing homework, and hearing or telling stories. Slightly more children in Group A (99 percent) than in Group B (97 percent) spent time doing homework (Figure IV.3). In addition, more children in Group A (72 percent) than in Groups B and C (15 and 18 percent, respectively) played reading games with other children in their community. This finding is not surprising, because children in Group A were receiving the community reading activities of the *Leer Juntos, Aprender Juntos* intervention that children in Groups B and C were not.

We also asked parents about the amount of time children spent in the week preceding the household survey on reading activities.[14] Children in the three treatment groups did homework on three to four days of the week preceding the household survey and heard or told stories on two days of that week. Children in Group A played reading games with other children in the communities one day of that week, whereas children in Groups B and C did not spend time on that activity in that week. Again, this is consistent with children in the communities in Group A having access to the community action component activities of the intervention, whereas children in communities in Group B and C did not.

[14] These results are not presented in the report but are available from authors upon request.

Figure IV.3. Reading-related activities at home (percentage of children)



Source: *Leer Juntos, Aprender Juntos* Household Survey—Midline 2014 and 2015.

* Difference in group means is statistically significant at the 0.05 level.

c. Activities at home other than reading

Children in the group receiving the community action component of the intervention spent less time at home helping with household chores. As we show in Table IV.5, in the week before administration of the household survey, more children in Group B (95 percent) than in Group A (91 percent) helped with housework, and children in Group B did that activity on more days (more than four days, on average) than children in Group A (fewer than four days, on average). This statistically significant difference suggests that the community component intervention activities to which the children in Group A had access might have led them to replace time on household chores with time spent participating in the reading activities offered by the program in their community.

We also found another statistically significant difference between treatment groups in the activities not related to children reading at home: a smaller percentage of children in Group B (92 percent) than in Group C (97 percent) listened to the radio or watched television while at home in the week before the household survey was administered, and children in Group B did that activity on fewer days (five days), on average, than children in Group C (six days). Finally, all children in each treatment group played inside or outside of their homes, and did so almost every day of that week.

Table IV.5. Children's activities at home that are not related to reading

	Leer Juntos (A)	Leer Juntos-school only (B)	Prevailing practice (C)	Impact of community action (A–B)	Impact of in-school component (B–C)
Percentage of children who in the week before the administration of the household survey:					
Played inside or outside the house	99.8	100.0	100.0	−0.2 (0.192)	0.0 (0.983)
Listened to the radio or watched television	94.7	91.5	96.9	3.2 (0.109)	−5.3* (0.003)
Helped with housework	91.2	94.6	94.5	−3.4* (0.049)	0.1 (0.949)
Helped with vegetable garden/corn field and/or with livestock	79.3	77.1	77.4	2.1 (0.541)	−0.2 (0.953)
Cared for younger siblings	53.5	50.1	52.5	3.4 (0.358)	-2.4 (0.557)
Worked for pay or wage	7.2	7.1	6.5	0.1 (0.961)	0.6 (0.828)
Number of days (average) in the week before the administration of the household survey in which children:					
Played inside or outside the house	6.4	6.5	6.5	−0.1 (0.465)	0.0 (0.926)
Listened to the radio or watched television	5.5	5.4	5.8	0.1 (0.577)	−0.4* (0.024)
Helped with housework	3.6	4.2	4.2	−0.6* (0.002)	0.1 (0.787)
Helped with vegetable garden and/or with livestock	3.1	3.2	3.2	-0.1 (0.540)	0.1 (0.775)
Cared for younger siblings	2.8	2.8	3.0	0.0 (0.930)	-0.2 (0.493)
Worked for pay or wage	0.1	0.1	0.1	0.1 (0.065)	−0.0 (0.212)
Number of children	**358**	**338**	**326**		

Source: *Leer Juntos, Aprender Juntos* Household Survey—Midline 2014 and 2015.

Note: Regression-adjusted means. *P*-values in parentheses.

* Difference in group means is statistically significant at the 0.05 level.

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V. WHAT ARE THE IMPACTS ON CHILDREN'S EARLY-GRADE READING SKILLS?

In this chapter, we present evidence that the *Leer Juntos, Aprender Juntos* program in Peru accomplished one of its main goals: to have a favorable impact on the reading comprehension of the children in the schools that implemented the program. Specifically, we found that for both the full sample and the subgroup of girls, the percentage of children in the 3rd grade with a basic level of competency in reading comprehension was larger in schools implementing the in-school component (Group B) than in the prevailing practice schools (Group C). We also found that children in the schools that implemented the in-school component of the intervention had, on average, higher decoding and fluency accuracy scores than the children in schools assigned to the prevailing practice group.[15] The magnitude of the impacts is 0.19 standard deviations for the decoding accuracy score and 0.21 standard deviations for the fluency accuracy score. Impacts on decoding and fluency were also positive when we measured those constructs by the number of words (or invented words) read correctly per minute, but those impacts were not large enough to be statistically significant. We did not find impacts of the community component on any literacy skills. We discuss these findings in more detail below.

A. How we measured early-grade reading skills

We assessed the reading skills in Spanish of the 3rd grade children in the evaluation with three tasks: (1) pseudo-word reading (decoding), (2) reading fluency, and (3) reading comprehension. These three tasks were adapted for Peru following the guidelines of the EGRA Toolkit (RTI International 2015). Passages for the fluency and reading comprehension tasks were drawn from the *Young Lives* study (*Niños del Milenio*; Guerrero et al. 2012) in Peru and from the *Evaluaciones Censales de Estudiantes* (ECE; Ministerio de Educación 2009). All children were assessed in Spanish, as every school in the evaluation used Spanish as the language of instruction. We measured decoding and fluency skills because they are precursors to reading comprehension; that is, children must have the abilities to translate a printed word into sound (decoding skills) and to read connected text with speed, accuracy, and expression (fluency skills) before they can achieve reading comprehension (Kim et al. 2016; National Reading Panel 2000).

In the pseudo-word decoding task, children read aloud as many pseudo-words as they can within 60 seconds, with a maximum of 50 pseudo-words. Pseudo-words are vowel-consonant combinations that follow Spanish phonological and spelling rules but are not actual meaningful words (for example, *garo* and *tabra*). To administer this task, examiners were instructed to stop (discontinue) the task and move onto the next task (the fluency task) if the child answered the first five items in the task incorrectly or could not complete the first five items in 60 seconds. We used the number of pseudo-words read or decoded correctly to examine program effects.

[15] Although not the main focus of our evaluation, we did examine the impacts of the full intervention. That is, we examined the contrast between Group A (receiving both the in-school and the community action components) and Group C (implementing the prevailing practice in Peru). From that analysis, we found a similar pattern of differences in children's reading skills to those we found when we compared Group B with Group C. See Table G.4 in the Appendix for more details on the impacts of the full intervention on children's reading skills.

In the reading fluency task, children read aloud as many words as they can within 60 seconds from a short story with a total of 154 words (11 sentences). This task has a time limit so that we can obtain a measure of children's ability to read text quickly and accurately. We used the number of words read correctly in 60 seconds to examine the effects of the program. Examiners were instructed to stop the task if the child could not read correctly any of the 20 words included in the first two lines of text within 60 seconds. In addition, examiners did not administer the subsequent reading comprehension task to the children whose fluency task was stopped in order to avoid causing them excessive stress.

From the decoding and reading fluency tasks, we also constructed "accuracy" scores. We calculated these accuracy scores by dividing the number of correctly read words by the total number of words that the child read (correctly or incorrectly). We also used the decoding and fluency accuracy scores to examine program effects. Higher decoding and fluency accuracy scores suggest that children are more deliberate in translating print into sound (decoding or reading pseudo-words) and in reading words with fluency with a time limit, respectively.

The reading comprehension task in the evaluation's 3rd grade assessment consists of three passages that children are asked to read quietly to themselves. Children received up to four minutes to finish reading a passage. Lookbacks were not allowed. After a child finished reading each passage, the examiner asked him or her to answer five questions about that passage. We constructed two variables from this task to examine program impacts on reading comprehension achievement: (1) the total number of correct answers in the task (up to 15), and (2) an indicator for whether the child correctly answered at least one of the questions in the task. The second construct is a dichotomous measure indicating whether the child demonstrates any emergent reading comprehension skills.

We present standard deviations of all reading measures in Table F.1 in Appendix F.

B. Impacts on reading skills

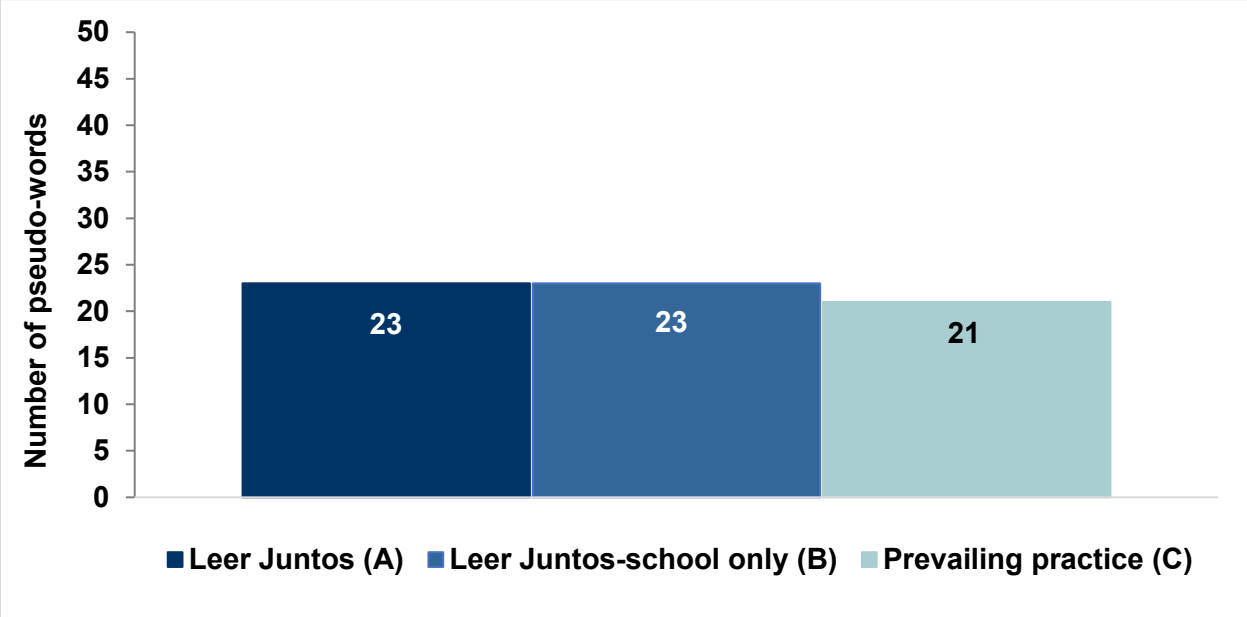
The in-school component of the intervention had positive, statistically significant impacts on some of the literacy outcomes of the evaluation's children in the 3rd grade. However, we did not find statistically significant effects of the community component on the literacy outcomes of the children in the evaluation sample. The positive impact finding is consistent with the reports from teachers described in Chapter III. In focus groups, teachers from the schools that received the in-school component of the intervention reported feeling motivated by the training and coaching because they established good relationships with the program specialists from Kallpa and because they received concrete guidance that they could incorporate into their regular practice. The finding of no impacts of the community action component of the intervention is also consistent with what we learned from the focus groups conducted in the analysis of qualitative information: implementing the community component activities was challenging because recruiting and retaining volunteers for the community activities was difficult in Peru. In addition, attendance at intervention activities such as parent workshops was lower than expected, and some parents reported difficulty creating spaces dedicated to reading activities at the home.

1. Impacts on decoding and fluency

The impacts of *Leer Juntos, Aprender Juntos* on decoding and reading fluency skills measured in terms of correctly read words per minute were not large enough to be statistically significant. As mentioned earlier, we assessed the decoding and reading fluency skills of the children in the evaluation as they completed the 3rd grade to examine whether the intervention had an impact on those foundational reading skills. Decoding and reading fluency skills are essential elements in achieving reading comprehension (Fuchs et al. 2001). Decoding skills—the ability to translate a printed word into sound—encompass alphabet knowledge (ability to recognize and link written letters to their sound) and phonological awareness (ability to focus on, manipulate, break apart, and put together sounds orally). Reading fluency is the ability to read with speed, accuracy, and expression.

For each of the treatment groups, Figure V.1 presents the average number of pseudo-words read correctly in the decoding task and Figure V.2 presents the average number of words read correctly in the fluency task. On average, the children in the schools that implemented the *Leer Juntos, Aprender Juntos* program (Groups A and B) read correctly in one minute more pseudo-words in the decoding task (about 46 percent of the 50 pseudo-words included in the task) and more words in the fluency task (about 27 percent of the words included in the task) than children in the schools assigned to the prevailing practice group (about 42 percent of the words in the decoding task and 25 percent of the words in the fluency task). However, we did not find any statistically significant differences between treatment groups in the sum of correct answers in the decoding and reading fluency tasks that the children in the evaluation sample completed when they attended the 3rd grade (Figures V.1 and V.2).

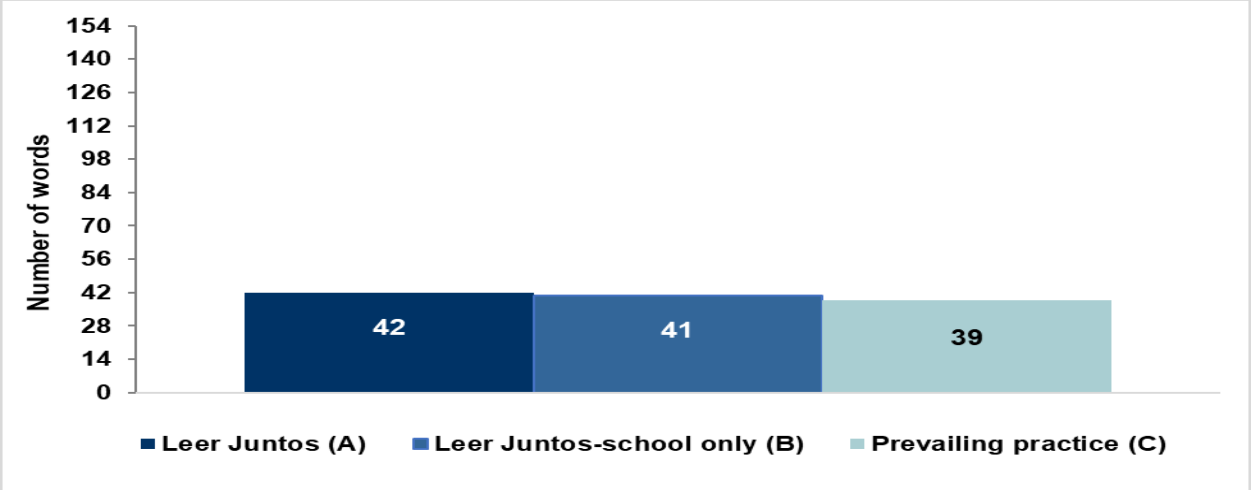
Figure V.1. Similar number of pseudo-words read correctly in the decoding task (of 50) for each treatment group



Source: *Leer Juntos, Aprender Juntos* Students' Reading Skills Assessment—Final Follow-ups 2015 and 2016.

Note: None of the differences between treatment groups presented in this figure is statistically significant at the 0.05 level.

Figure V.2. Similar number of words read correctly in the fluency task (of 154) for each treatment group

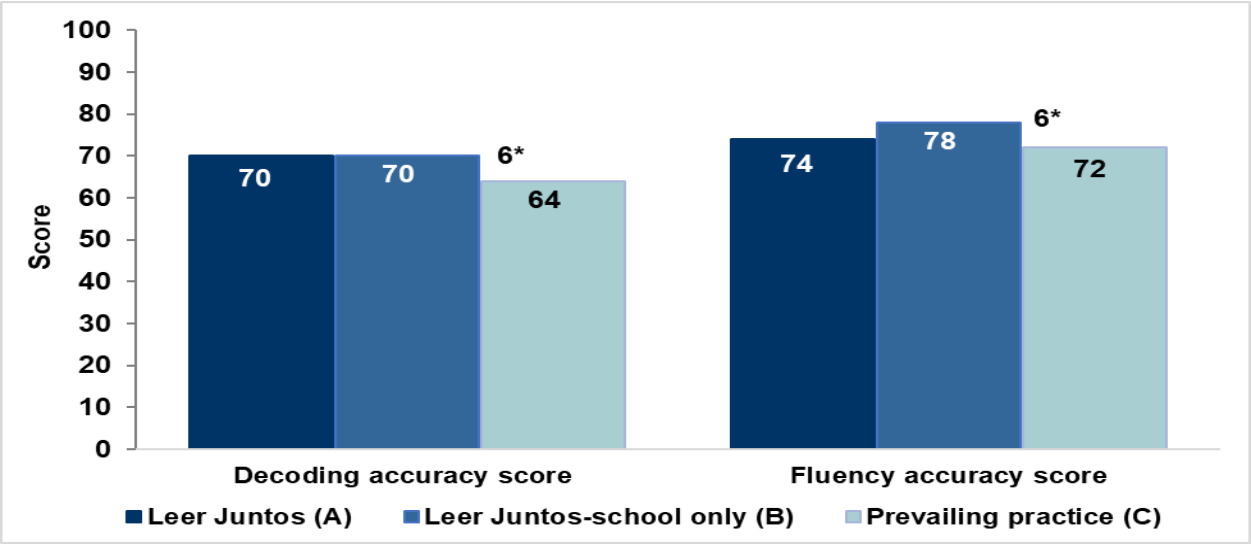


Source: *Leer Juntos, Aprender Juntos* Students' Reading Skills Assessment—Final Follow-ups 2015 and 2016.

Note: None of the differences between treatment groups presented in this figure is statistically significant at the 0.05 level.

The in-school component of *Leer Juntos, Aprender Juntos* had positive impacts on some of the indicators of decoding and fluency. Figure V.3 presents children's decoding and fluency accuracy scores on a scale of 0 to 100. As shown in that figure, we found statistically significant differences between Groups B and C in the accuracy scores of the children participating in the evaluation: the children in the schools implementing the in-school component (Group B) obtained, on average, higher decoding and fluency accuracy scores than the children in schools implementing the prevailing practice approach (Group C).

Figure V.3. Positive program impacts on decoding and fluency accuracy scores



Source: *Leer Juntos, Aprender Juntos* Students' Reading Skills Assessment—Final Follow-ups 2015 and 2016.

* Difference in group means is statistically significant at the 0.05 level.

This finding suggests that the children who had teachers who were trained and coached by the intervention, when compared with children who did not, were more deliberate in translating print into sound (decode or read pseudo-words) and in reading words with fluency with a time limit. This result is not surprising, because teachers in the schools that implemented the in-school component of the program were trained to provide instruction focused on improving foundational skills like alphabet knowledge and phonemic awareness that in turn help build decoding skills; these teachers were also trained on improving children's reading fluency.

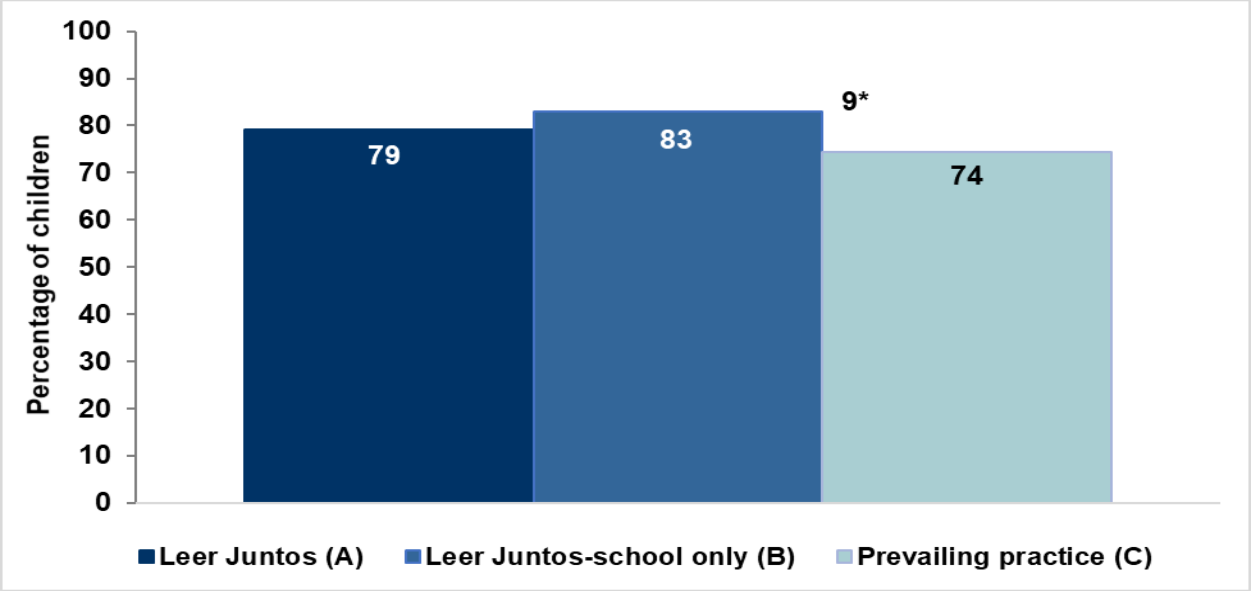
We found no impacts of the community action component on fluency accuracy score. The difference on fluency accuracy score between Groups A and B, which would reflect any additional effects of the community action component was not statistically significant at the 0.05 level. However, the difference in the mean fluency accuracy scores between children in Groups A (74 percent) and B (78 percent), shown in Figure V.3, is statistically significant at the 0.10 level ($p = 0.058$).

2. Impacts on reading comprehension

The *Leer Juntos, Aprender Juntos* program had favorable impacts on the reading comprehension outcomes of children in the evaluation in Peru. The program targeted foundational reading skills with the objective of helping children in a multilingual context achieve reading comprehension in Spanish by the time they attended the 3rd grade. Children need to understand what they read so they can learn. Children who do not learn to read with comprehension in the earlier grades face greater difficulties in learning in later grades, as they have limited ability to understand information presented in print form, do not develop proper writing skills, and cannot evaluation materials in other subject areas by themselves (Gove and Cvelich 2011).

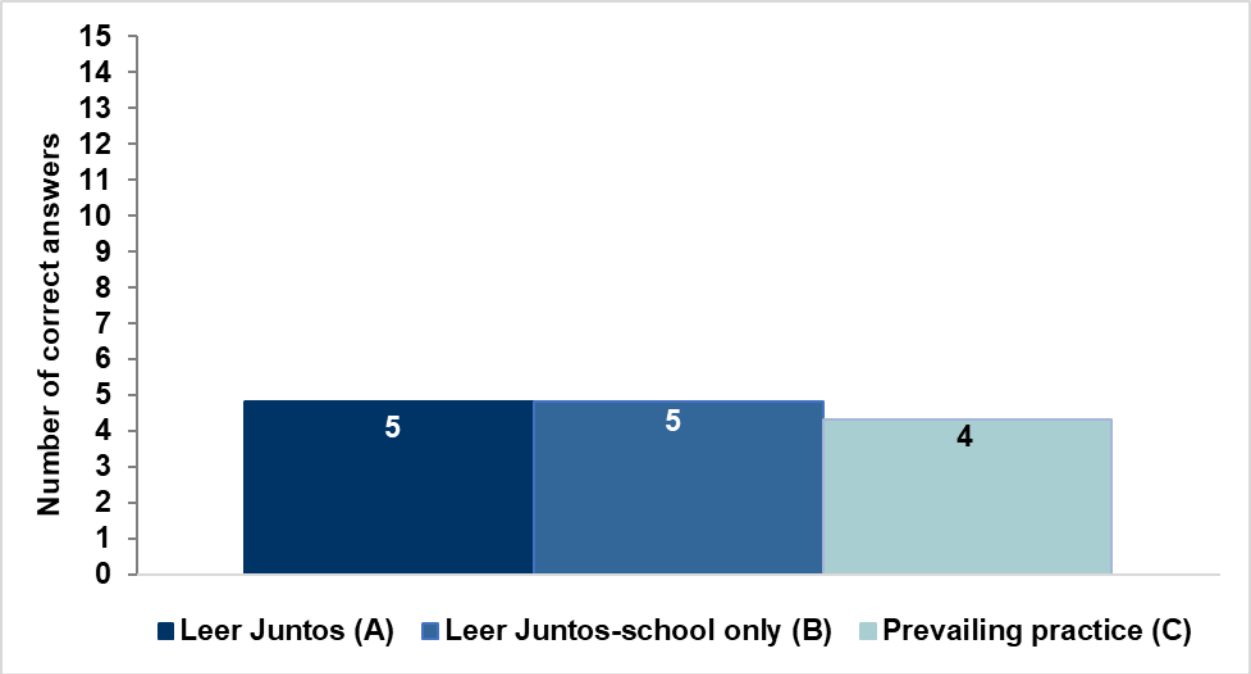
We found that more children in schools that implemented the in-school component compared to children in schools in the prevailing practice group achieved basic reading comprehension. As presented in Figure V.4, the percentage of children who achieved basic reading comprehension skills (children who were able to complete both the decoding and fluency tasks and answer at least one question correctly in the reading comprehension task) is larger by a statistically significant margin in schools that implemented the in-school component of the intervention (Group B) than in schools that did not (schools in the prevailing practice group, or Group C). The children in the schools in Group B also answered correctly more questions in the reading comprehension task of the evaluation's assessment, on average, than children in the schools in the prevailing practice group (see Figure V.5). However, the difference between Groups B and C in the number of questions answered correctly in the reading comprehension task is statistically significant only at the 0.10 level ($p = 0.077$). We did not find any statistically significant difference between Groups A and B in the reading comprehension outcomes of students.

Figure V.4. Positive program impacts on the percentage of children who achieved a basic level of reading comprehension skills



Source: *Leer Juntos, Aprender Juntos* Students' Reading Skills Assessment—Final Follow-ups 2015 and 2016.
* Difference in group means is statistically significant at the 0.05 level.

Figure V.5. Similar number of questions answered correctly in the reading comprehension task (of 15) for each treatment group



Source: *Leer Juntos, Aprender Juntos* Students' Reading Skills Assessment—Final Follow-ups 2015 and 2016.
Note: None of the differences between treatment groups presented in this figure is statistically significant at the 0.05 level.

3. Program impacts in effect sizes

The size of the impacts we found in Peru is comparable to the impacts of other interventions targeting reading outcomes of children in the early grades. In our evaluation of *Leer Juntos, Aprender Juntos*, the statistically significant impacts on the in-school component of the intervention in terms of effect sizes[16] (or standardized mean difference between Groups A and B) range from 0.19 to 0.32 standard deviations, as shown in Table V.1. A recent systematic review of evaluations studies on reading interventions in the developing world (Kim et al. 2016) found that the impacts in effect sizes of reading interventions in the studies they reviewed ranged from 0.14 to 0.73 for reading fluency outcome measures, and from 0.05 to 0.58 for reading comprehension outcome measures.

Table V.1. In-school component effects on literacy outcomes in standard deviation units

Literacy outcome	Effect size
Decoding	
Number of pseudo-words read correctly in one minute	0.13
Accuracy score	0.19*
Fluency	
Number of words read correctly in one minute	0.09
Accuracy score	0.21*
Reading comprehension	
Number of questions answered correctly	0.13
Percentage of children who achieved basic reading comprehension skills	0.32*

Source: *Leer Juntos, Aprender Juntos* Students' Literacy Skills Assessment—Final Follow-ups 2015 and 2016.

* Effect is statistically significant at the 0.05 level.

4. Sensitivity analysis

The findings are not sensitive to changes in assumptions for the impact estimation model. We conducted robustness checks on two important assumptions we made in the estimation of program impacts. First, we reweighted the data to account for children's nonresponse to the 3rd grade assessment. Second, we estimated program impacts based on a regression model that included control variables without imputations, which reduced the size of the analytic sample in about 15 percent. The results from these alternative specifications are the same as those presented in this chapter. In particular, based on the two alternative specifications, we found that the in-school component of the program had a favorable effect on the percentage of children who have basic reading comprehension skills in the 3rd grade. We present the findings from these sensitivity analyses in more detail in Appendix G (in Tables G.1 and G.2).

[16] Effect sizes are calculated as the difference in adjusted means between two treatment groups (A and B, or B and C) divided by the pooled and weighted standard deviation of the two groups (Hedges' *g*) for continuous outcome measures, and as the log odds ratio divided by 1.65 (Cox index) for dichotomous outcome measures.

We also examined program impacts on literacy outcomes for subgroups of students defined by phase (cohort). We found that the impacts of the in-school component for the overall sample are due to impacts for students in Phase II schools only (see Table G.3 in Appendix G). That is, in Phase II, children in schools in Group B had significantly better decoding and fluency accuracy scores than their counterparts in Group C. Also, the percentage of children in Phase II schools who have a basic level of competency in reading comprehension was larger in Group B than in Group C. We did not find any pattern of statistically significant impacts of the community action component for children in schools in either Phase I or Phase II. These findings are consistent with programmatic reports from the implementers (Save the Children and Kallpa 2013, 2014, 2015). The challenges of delivering the in-school component of the intervention—such as acquiring buy-in from local stakeholders to ensure participation in the teachers' training, providing the training early enough in the school year, and meeting the demand for coaching visits with teachers—were felt more strongly during the first year of implementation of the program, when the evaluation included Phase I schools only (Phase II schools entered the evaluation in the second year of program implementation).

Finally, we examined the contrast between Group A and Group C to assess the effect of the full intervention (the community action component and the teacher training and coaching component) on children's reading outcomes (see Table G.4 in Appendix G). We found that the full intervention had positive, statistically significant impacts at the 0.05 level on children's decoding skills. In particular, we found that children in Group A read more pseudo-words per minute and had higher decoding accuracy scores than children in Group C (Table G.4 in Appendix G). We also found that children in Group A read correctly more words in the fluency task and answered correctly more questions in the reading comprehension task than children in Group C, and those differences were statistically significant at the 0.10 level. These findings are consistent with the findings we presented earlier in this chapter regarding the effects of the in-school component of the program.

C. Impacts by gender

The effects of the in-school component of the program on literacy outcomes were due to impacts for girls and not boys. We examined the program effects for subgroups defined by sex to explore whether the components of the program work for girls and boys in different ways. As shown in Table V.2, we found statistically significant effects of the in-school component, as contrasted with the prevailing practice approach, for the girls in the sample. In particular, the in-school component had a statistically significant effect on girls' decoding skills (number of pseudo-words read correctly in one minute and decoding accuracy score) and fluency accuracy scores, as well as on the percentage of girls who have achieved basic reading comprehension skills in the 3rd grade.

We did not find statistically significant differences between treatment groups for the boys in the sample. Furthermore, we found that the difference between girls and boys on the effect of the in-school component on the indicator of basic reading comprehension skills is statistically significant (the *p*-value of this difference is 0.025; this result is not presented in Table V.2), providing more evidence that the in-school component might have been more successful in creating fluent readers for girls than for boys.

Table V.2. Impacts on the literacy outcomes of girls and boys in the evaluation

Literacy outcome	Leer Juntos (A)	Leer Juntos-school only (B)	Prevailing practice (C)	Impact of community action (A–B)	Impact of in-school component (B–C)
Girls					
Decoding					
Number of pseudo-words read correctly in one minute (of 50)	23.3	24.0	20.8	-0.7 (0.564)	3.2* (0.007)
Accuracy score (0 to 100)	70.8	73.6	64.3	-2.8 (0.379)	9.3* (0.001)
Fluency					
Number of words read correctly in one minute (of 154)	42.6	43.4	38.2	-0.8 (0.800)	5.2* (0.040)
Accuracy score (0 to 100)	76.6	82.1	71.4	-5.5 (0.082)	10.7* (0.001)
Reading comprehension					
Number of questions answered correctly (of 15)	4.9	4.8	4.3	0.1 (0.766)	0.5 (0.099)
Percentage of girls who achieved basic reading comprehension skills	78.6	87.3	72.0	-8.7 (0.080)	15.3* (0.001)
Boys					
Decoding					
Number of pseudo-words read correctly in one minute (of 50)	23.2	21.3	21.0	1.9 (0.188)	0.3 (0.832)
Accuracy score (0 to 100)	68.0	66.2	64.0	1.8 (0.599)	2.2 (0.544)
Fluency					
Number of words read correctly in one minute (of 154)	41.2	38.7	39.0	2.5 (0.393)	-0.3 (0.917)
Accuracy score (0 to 100)	70.9	74.2	72.0	-3.3 (0.352)	2.2 (0.581)
Reading comprehension					
Number of questions answered correctly (of 15)	4.7	4.7	4.3	0.0 (0.938)	0.4 (0.244)
Percentage of boys who achieved basic reading comprehension skills	79.3	78.7	76.7	0.6 (0.910)	2.0 (0.680)
Number of girls	**178**	**175**	**167**		
Number of boys	**180**	**163**	**159**		

Source: *Leer Juntos, Aprender Juntos* Students' Reading Skills Assessment—Final Follow-ups 2015 and 2016.

Note: Regression-adjusted means. *P*-values in parentheses.

* Difference in group means is statistically significant at the 0.05 level.

Impacts on reading outcomes for girls were considerable. Table V.3 show the effects of the in-school component for girls and boys in terms of standard deviation units (effect sizes). They range from 0.15 to 0.60 standard deviations. In particular, the effect of the in-school

component on the percentage of girls who have basic skills in reading comprehension in 3rd grade is larger than half of a standard deviation (60 percent). We present the effects of the community action component for girls and boys in terms of standard deviation units in Table H.1 in Appendix H.

Table V.3. In-school component effects on literacy outcomes for girls and boys, in standard deviation units

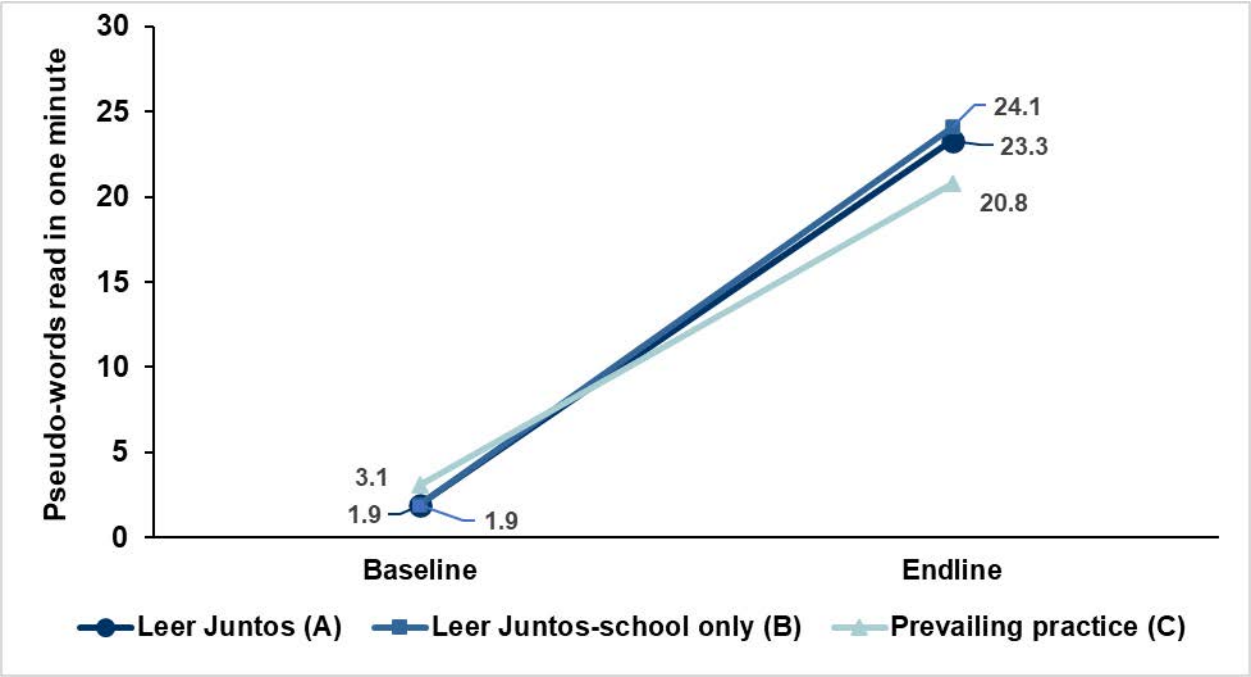
Literacy outcome	Effect size for girls	Effect size for boys
Decoding		
Number of pseudo-words read correctly in one minute	0.24*	0.02
Accuracy score (0 to 1)	0.32*	0.07
Fluency		
Number of words read correctly in one minute	0.20	-0.01
Accuracy score (0 to 1)	0.36*	0.06
Reading comprehension		
Number of questions answered correctly	0.15	0.11
Percentage of children achieved basic reading comprehension skills	0.60*	0.07

Source: *Leer Juntos, Aprender Juntos* Students' Literacy Skills Assessment—Final Follow-ups 2015 and 2016.

* Effect is statistically significant at the 0.05 level.

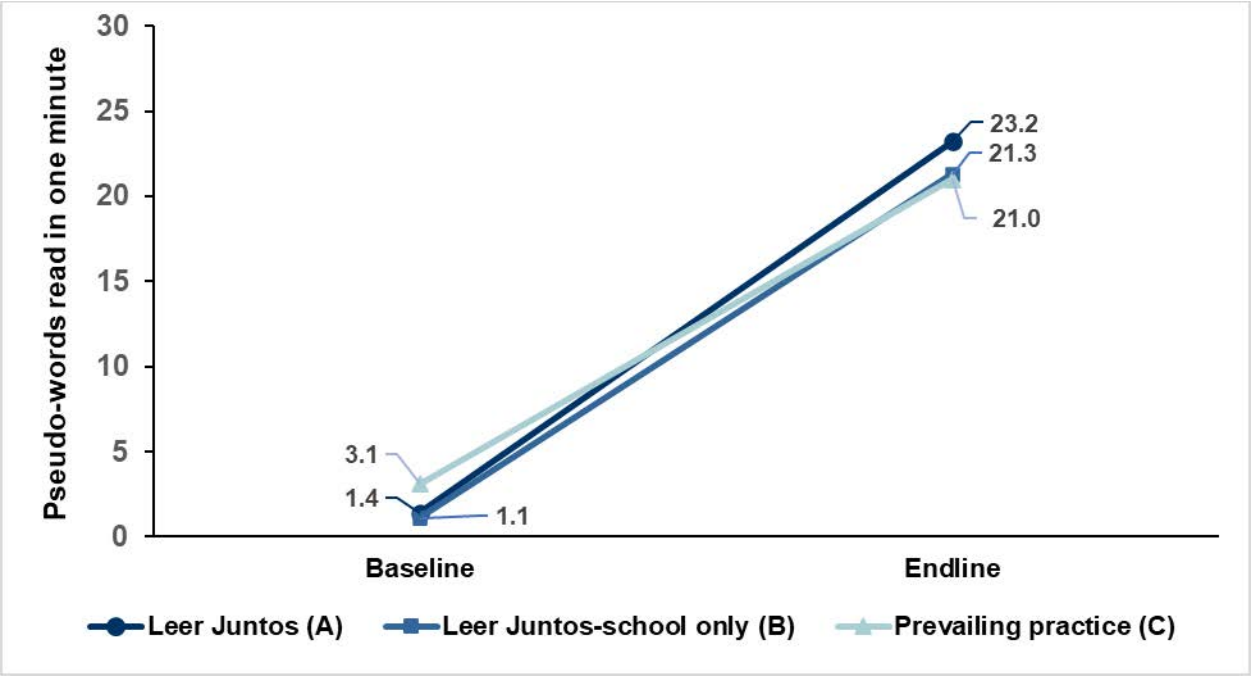
The finding that the program had impacts for girls but not for boys does not mean that the boys did not learn. Figures V.6 and V.7 illustrate the change in the literacy skills over the evaluation period for girls (Figure V.6) and separately for boys (Figure V.7). In all treatment groups, girls and boys, essentially had no decoding skills at baseline (when they were in 1st grade), but at the endline assessment (at the end of the school year when they were supposed to be in 3rd grade) they had an average of 21 to 24 words per minute.

Figure V.6. Growth in girls decoding skills



Source: *Leer Juntos, Aprender Juntos* Students' Reading Skills Assessment—Baselines 2013 and 2014, and Final Follow-ups 2015 and 2016.

Figure V.7. Growth in boys decoding skills



Source: *Leer Juntos, Aprender Juntos* Students' Reading Skills Assessment—Baselines 2013 and 2014, and Final Follow-ups 2015 and 2016.

At baseline, we found differences among the randomly assigned groups for boys and for girls (Figures V.6 and V.7 and Table J.1 in Appendix J), which were likely due to pure chance. Girls in the two treatment groups (Groups A and B) read about one fewer word per minute at baseline than the girls in the prevailing practice group (Group C), but the *Leer Juntos, Aprender Juntos* program helped them close the gap by the endline (Figure V.6). For boys, there were small baseline differences among all three groups, and the program helped them close the gap with the students in Group C, but not all the way and not enough to be statistically significant (Figure V.7).

To better understand the finding that the program had impacts for girls but not for boys, we explored whether certain aspects of the learning environment in the classroom or some family characteristics could explain these results. For instance, we looked at whether the seating arrangements in the 3rd grade classrooms could be favoring girls in Group B, but we did not find any statistically significant differences in classroom seating arrangements for girls or boys between Groups B and C.[17] We also examined, for the subgroups of boys and girls, differences between treatment groups in baseline characteristics such as age, preschool attendance, and socioeconomic characteristics (parents' education, household income, and household assets); and characteristics of the literacy environment at home (number of books available in the home, reading activities with adults and siblings, and reading activities in the community).[19]

We did not find any statistically significant differences in preschool attendance, socioeconomic characteristics, or characteristics of the literacy environment at home for girls or boys between Groups B and C, with two exceptions. First, at baseline, the girls in Group B were about one month older, on average, than the girls in Group C. There were no differences in age at baseline between Groups B and C for boys. Second, fewer girls in Group B (87 percent) than in Group C (97 percent) spent time at home watching television or listening to the radio. We found no differences between boys in Group B and boys in Group C in the amount of time spent watching television or listening to the radio. These differences provide context to the finding of favorable impacts of the in-school component for girls. However, they do not explain why there were no statistically significant program impacts for boys.

Because these differences do not explain the results, we looked at differences between girls and boys in literacy skills at baseline. At baseline (see Table J.1 in Appendix J), the girls in the treatment groups (Groups A and B) had slightly higher scores in assessments of emergent literacy skills (letter identification, emergent reading, emergent writing, phonemic awareness, pseudo-word decoding, and listening comprehension skills), on average, than the boys in the treatment groups. It is possible that the program enhanced these differences between girls and boys, resulting in statistically significant program impacts at the end of 3rd grade for girls but not for boys. Our finding of different levels of literacy skills in the early grades between girls and boys at baseline is consistent with the results for 2016 of the Ministry of Education's annual reading and mathematics skills national evaluations (*Evaluación Censal de Estudiantes* [ECE]) for students in 2nd and 4th grade. The Ministry of Education (Ministerio de Educación 2017) reported that in 2016, a higher percentage of girls in 2nd (49 percent) and 4th grade (33 percent) than boys (44 percent in 2nd grade and 30 percent in 4th grade) performed at the level expected

[17] These findings are not presented in this report but are available from the authors upon request.

for their grade in a reading test. In addition, scores on the reading test were higher, on average, for girls than for boys (Ministerio de Educación 2017). Our findings on the differences between boys and girls in reading skills are also consistent with the findings from other recent studies (Deasley et al. 2016; Friedlander and Goldenberg 2016, Loveless 2015; Loveless 2015; Price-Mohr and Price 2017). In particular, a recent evaluation in Rwanda of Literacy Boost, the program model on which *Leer Juntos, Aprender Juntos* is based (Friedlander and Goldenberg 2016), found significantly larger effects of the program on reading fluency and comprehension scores for girls than for boys.

Finally, we examined in more detail the data from the focus groups and interviews with stakeholders conducted during our qualitative evaluation (Chapter III) and from the quarterly reports conducted by the program implementation team (Save the Children and Kallpa 2013, 2014, 2015). Those examinations did not reveal any particular aspect of the program in its design or implementation that might have favored girls. However, during a site visit conducted in November 2017, program implementation staff commented that in small, rural communities in Peru, there is a tendency for teachers to engage boys more than girls during their classroom practice. A program like *Leer Juntos, Aprender Juntos*, which emphasizes training teachers to engage and encourage participation of all students, could have opened opportunities for girls to engage more with their teacher and other students during the reading/literacy lessons, which in turn could have resulted in more benefits from the program for girls than boys.

D. Cost-effectiveness

The in-school component of *Leer Juntos, Aprender Juntos* generated impacts of effect sizes that ranged from 0.09 to 0.32 standard deviations (as shown in Table V.1), depending on which reading skill is being measured. This pattern of positive impacts in Peru suggests the in-school component of the program could be a cost-effective way to improve early grade reading, depending on the best alternative uses of the funding for the program.

We estimated the cost per child of *Leer Juntos, Aprender Juntos* in Peru to be approximately $527 for the full *Leer Juntos, Aprender Juntos* program and $434 for the in-school component only. The exact cost of each of the program's components may be lower, as we assumed that there were no savings from reduced use of services offered by the national and regional education authorities to all schools. We had to make several other assumptions, documented in the Appendix I.

Despite the uncertainty about the costs of the program and the likelihood of there being unmeasured benefits of the program, the cost of generating the impacts presented in Table V.1 lie in between what Evans and Ghosh (2008) refer to as the high cost interventions and what they call low cost interventions, described below. Their global review of education interventions of all kinds, where the authors arrayed the interventions by the cost of generating a 0.10 standard deviation impact, provide several points of comparison. We can divide the cost per child of the in-school component by its impact per child in standard deviation units to obtain a cost effectiveness of $136 per 0.10 standard deviation increase in the basic reading comprehension rate. This cost of a positive impact equal to an improvement of 0.10 standard deviations in the basic reading comprehension rate is higher than some of the cost estimates for the same size impact reported by Evans and Ghosh (2008), which included $19 for preschool programs in the

Philippines, $23 for class size reduction in Honduras, and $47 for school vouchers in Colombia. It is not surprising that to improve reading comprehension in multilingual populations that are geographically harder to reach would be at the higher end of the range of cost-effective interventions. A few other programs examined by Evans and Ghosh (2008) had higher costs than what we calculated for the in-school component of *Leer Juntos, Aprender Juntos*. Those programs included a psychosocial and nutrition program for stunted children in Jamaica ($296 for an impact of 0.10 standard deviations of test scores) and student subsidies in Chile ($465 for the same size impact on test scores).

Finally, based on the evidence presented in this report, the community action component of the program is not likely a good investment—at least in the context of this particular implementation and evaluation effort—given that it did not generate impacts beyond those of the in-school component. It is difficult to pinpoint why a program with many literacy-supporting activities, such as reading fairs, reading buddies, and book banks, would have no measurable impacts on children beyond the in-school component. However, the challenges in implementing the community action component we documented in Chapter III can provide additional information to interpret that finding. For instance, it was challenging to recruit and retain volunteers, which had resulted in delayed implementation of the community action component relative to the implementation of the in-school component. In addition, the reading buddies activity was eventually folded into the in-school component, with teachers delivering the activity in their classrooms during school hours once a week instead of volunteers conducting the activity in the community outside of school hours. Another challenge was to fully involve parents in the community action component activities. For example, it was difficult to get parents to attend the workshops aimed at supporting them in providing an enriched print environment for their children at home.

VI. CONCLUSIONS, LIMITATIONS, LESSONS LEARNED, AND RECOMMENDATIONS

This evaluation sought to answer three questions. In this chapter, we present conclusions corresponding to each of those questions and discuss lessons learned and recommendations.

A. Conclusions

1. Were the program components implemented as intended?

Teachers received the training and individualized coaching largely as intended, but with some challenges. More teachers in the *Leer Juntos, Aprender Juntos* intervention groups reported receiving training and coaching than did teachers in the prevailing practice group (Group C). However, the differences in training rates (53 percent in Groups A and B versus 39 percent in Group C) were not large enough to be statistically significant, but the differences in coaching between Groups B and C (71 versus 47 percent, respectively) were. Challenges in the implementation of this component included difficulty retaining qualified program staff for training and coaching in the in-school component, difficulty recruiting and retaining staff to lead the activities of the community action component, and logistical challenges for teachers, coaches, trainers, and volunteer coordinators due to the geography of the region and the limited access to public transportation.

2. What is the impact of the teacher training and support component of *Leer Juntos, Aprender Juntos* on early-grade reading and other intermediate outcomes relative to prevailing practice?

Schools implementing only the in-school component of *Leer Juntos, Aprender Juntos* showed favorable changes in the classroom literacy environment. For example, teachers in these schools participated in the training and coaching activities offered by the program. In addition, more classrooms in these schools than in prevailing practice schools had a complete alphabet in Spanish and Quechua that was visible to students and more books with text. Our findings also show that teachers in schools implementing only the in-school component of *Leer Juntos, Aprender Juntos* established positive and supportive relationships with the program specialists who conducted training workshops and coaching sessions with them. In addition, teachers in schools implementing *Leer Juntos, Aprender Juntos* did use the reading instruction practices they learned from the program, and teachers reported observing increased student engagement.

In Peru, we also found that the program's in-school component (teacher training and coaching) had favorable impacts on some, but not all, of the children's reading skills we measured, and the size of those impacts is comparable to the size of the impacts other evaluations of reading interventions in developing countries have found. For example, three years after the program started, about 83 percent of the children in schools assigned to the in-school intervention component only could read a simple passage and answer at least one question correctly—an indication of basic reading comprehension—compared with only 74 percent of children in schools using prevailing practices. This was a statistically significant positive impact. We also found positive, statistically significant impacts of the in-school component on decoding and fluency accuracy. The sizes of some of the impacts were substantial, equivalent to effect

sizes of 0.19, 0.21, and 0.13 for decoding accuracy, fluency accuracy, and reading comprehension, respectively. However, we found no impacts on non-accuracy reading measures, such as reading fluency (and decoding) measured by number of correct words read per minute and reading comprehension measured by number of questions answered correctly. The evidence of favorable impacts of the in-school component is consistent with our findings from classroom observations and teacher survey data: as discussed earlier in this report, the schools that implemented only the in-school component provided a more print-rich environment in their classrooms than did schools that did not implement any of the components of the intervention.

The positive effects of the in-school component on reading skills were larger for girls than for boys. This does not mean that boys in Peru did not advance their reading skills or that they did not benefit from the program. A good example of how all the children in the evaluation acquired literacy skills is the change in decoding skills from the baseline to the final follow-up: In all three treatment groups, boys and girls went from having essentially no decoding skills at baseline (when children in the evaluation started the 1st grade) to decoding an average of more than 22 words per minute by the final follow-up assessment (at the end of the school year when they were in 3rd grade). At baseline, we found differences in emergent literacy skills among the randomly assigned groups, which were likely due to pure chance: girls in the two *Leer Juntos* groups were behind, reading about one fewer word per minute than the prevailing practice group. However, the program helped them close the gap by the final follow-up. For boys, there were small differences among all three groups at baseline, and the full *Leer Juntos, Aprender Juntos* program helped them close the gap with the students in prevailing practice schools, but not all the way and not enough to be statistically significant.

One possible explanation for the finding that the positive effects of the in-school component were larger for girls than for boys could be that the learning environment in the prevailing practice schools might not be gender-neutral; girls might not be encouraged to engage actively in reading activities to the same extent as boys. Introducing the in-school component of *Leer Juntos, Aprender Juntos* in Group B schools might have eliminated such barriers for girls, allowing them to surpass the performance of girls in the prevailing practice group (Group C). Another possible explanation could be that girls in Group B had more room to improve their reading skills than girls in Group C, and introducing the *Leer Juntos, Aprender Juntos* program (Groups A and B) helped the girls in the two treatment groups catch up with the girls in Group C.

Finally, the finding of positive impacts in Peru suggests that the in-school component of the program could be a cost-effective way to improve early-grade reading, depending on the best alternative uses of the funding for the program. We estimated the cost of the in-school component of *Leer Juntos, Aprender Juntos* in Peru to be approximately $434 per child. The exact cost of the in-school component might be lower, as we assumed there were no savings from reduced use of services offered by the national and regional education authorities to all schools. As described in Chapter V, we can also calculate the cost of the program's in-school component in terms of units of improvement in children's reading outcomes, which would reflect the cost effectiveness of the component. For example, we can divide the cost per child of the in-school component ($434) by its impact per child in standard deviation units (0.32) to obtain a cost effectiveness of $136 per 0.10 standard deviation increase in the basic reading comprehension rate.

3. What is the impact of the community action component of *Leer Juntos, Aprender Juntos* on early-grade reading and other intermediate outcomes relative to an intervention that does not have the community action component?

The community action component had some of the intermediate impacts predicted by the program logic model on the literacy environment in the classrooms and at home, but these intermediate results did not translate into impacts on students' reading outcomes. We found that teachers in schools implementing the community action and the in-school components of *Leer Juntos, Aprender Juntos* participated in the training and coaching activities offered by the program, and reported they used what they learned from the program in their teaching practices. We also found that most children in the evaluation communities read at home with a parent or other family members. However, these positive aspects of the classroom and home environments did not translate into impacts of the community action component on students' reading outcomes. That is, we did not find evidence that students in schools implementing both *Leer Juntos, Aprender Juntos* components had better reading skills or spent more time on reading activities at home than students in schools that implemented only the *Leer Juntos, Aprender Juntos* in-school component.

Two possible explanations for the lack of impacts relate to challenges with the implementation of the community action activities and to the local context. First, the implementation of the community action component was delayed and modified in response to challenges. Program staff reported recruiting and retaining volunteers was challenging, which resulted in delayed implementation of the community action component relative to the implementation of the in-school component in Peru. In addition, the reading buddies activity was eventually folded into the in-school component, with teachers delivering the activity in their classrooms during regular school hours once a week instead of volunteers conducting the activity in the community outside of school hours. Second, the program was operating in a context where most parents in all treatment groups reported being literate (about three-quarters of the household survey respondents in each treatment group) and reading and looking at books with the children. Therefore, it probably was more challenging for the community action component to create an effect in a context where parents w ere already engaging in reading-related activities with their children.

Finding no impacts of the community action component does not mean that children in schools offering both components of *Leer Juntos, Aprender Juntos* did not advance their reading skills. Children in schools offering both components of the program did acquire literacy skills: on average, children in these schools read correctly 23 pseudo-words (out of 50) in the decoding task and 42 words (out of 154) in the fluency task, and answered correctly 5 questions (out of 15) in the reading comprehension task. However, the progress of children in schools implementing both components of *Leer Juntos, Aprender Juntos* was not significantly different from the progress of children in schools implementing only the in-school component.

B. Limitations

This evaluation of *Leer Juntos, Aprender Juntos* has some limitations to bear in mind. The first refer to the evaluation design, specifically the timing of the baseline data collection and the use of a three-armed randomized design, and the last is about generalizability of the findings.

The baseline of the evaluation was not a "true" baseline. The evaluation team administered the baseline assessment of students' early literacy skills about three months after random assignment, which was about two months after the rollout of the program's teacher training activities. It was not feasible to measure baseline student outcomes before random assignment because several evaluation activities needed to be completed before data collectors could begin baseline data collection; these included identifying a local partner that could assist in recruiting and training field workers, implementing the data collection plan, and supervising data collection activities. As a result of the late baseline, the children's skills that we captured in the baseline assessment (when students in the evaluation were in first grade) reflect the ability of the students after up to three months of potential exposure to different conditions caused by assignment of schools to different intervention groups.

Despite this limitation, it is still appropriate to consider the evaluation's baseline assessment as the reference point for the evaluation. Under most circumstances, a late baseline will still be useful for estimating the impact of that intervention as long as the impact on skill development is slow in the early period of program implementation (Schochet 2010). That is the case in the current evaluation because the teachers in the groups receiving the program (Groups A and B) had only been practicing their newly acquired skills for at most two months when the baseline data collection took place, and literacy acquisition in children is a process that happens gradually over many months or even years.

The evaluation design assumes that the impacts of in-school and community action components of the intervention are additive. Specifically, the evaluation design assumes that the effect of the community action component on its own relative to prevailing practice is equal to the sum of the impact of the combined in-school and community action components relative to the in-school component on its own. This assumption could be violated if implementing the in-school component makes it easier or harder to simultaneously do community activities. We did not find clear evidence of such a violation, but it should be taken into account by any policymakers who wish to apply the lessons of this evaluation to a future implementation of community action on its own.

Findings from this evaluation may not necessarily apply to other regions. It is always tempting to generalize from the experience of one or two evaluations to other contexts, but caution is warranted. The evaluation included schools from just 3 of 7 provinces Apurímac, which is just one of 24 departments in Peru. While we also conducted the evaluation in the El Quiche region of Guatemala (Lugo-Gil et al. 2021b; Lugo-Gil et al. 2021), these communities were selected with the following criteria in mind: the locations had to be within reasonable driving distance from each other to facilitate intervention and evaluation activities. They had to contain a high percentage of families that spoke one language besides Spanish, in this case K'iche' (in Guatemala) or Quechua (in Peru). Thus, results could differ if an approach like *Leer Juntos, Aprender Juntos* was taken in other communities with different characteristics and challenges than those communities included in this evaluation.

C. Lessons learned

Teacher training and coaching on how to teach literacy skills and guidance for applying it in their classrooms can be effective when it is distinct from other teaching

approaches already in use. In Peru, we found positive impacts of the in-school component on some student reading skills. Furthermore, during the qualitative evaluation, teachers mentioned they valued receiving training on how to provide reading instruction and prepare their own reading instruction materials. Teachers also expressed that the demonstration and step-by-step layout of *Leer Juntos, Aprender Juntos* strategies for reading instruction helped them apply in the classroom what they had learned during the program's trainings. As discussed earlier, the prevailing practice approach in Peru advocates a communicative and textual approach which is very different from the approach of the *Leer Juntos, Aprender Juntos* program. In Guatemala, the prevailing practice approach to early reading instruction emphasizes children's alphabet knowledge, phonological awareness, vocabulary, and decoding skills, and seeks to gradually improve children's reading fluency and reading comprehension skills, similarly to the *Leer Juntos, Aprender Juntos* approach. Therefore, the stronger contrast between the *Leer Juntos, Aprender Juntos* approach and the prevailing practice in Peru than in Guatemala can explain why the in-school component of Leer Juntos, Aprender Juntos program had some impacts in Peru but not in Guatemala.

Relying on volunteer work has substantial risks for fidelity of implementation. We learned that implementing and evaluating a program component that relies on volunteers has substantial risks. In the Apurímac region where the program and evaluation took place, doing volunteer work related to children's schooling or learning is not common practice. In the communities where the program was implemented, people expect payment for work; therefore, recruiting and retaining volunteers was challenging. The discrepancy between the program requirements for volunteer participation and the cultural expectations in the communities caused delays and disruptions in implementing the community action component and required some course corrections.

D. Recommendations

Program implementers, regional and national education authorities, and donors should continue implementing the in-school component of *Leer Juntos, Aprender Juntos* and possibly expand to other schools in the Apurímac region if they wish to improve literacy skills and do not have an alternative intervention that can deliver these impacts for this cost. The in-school component showed evidence of positive impacts on some reading outcomes, so sustaining and possibly expanding this component of the program might help further the region's progress in reading achievement. In addition, the region already has the capacity and experience to support the sustainability of the in-school component, and teachers who participated in the program and the evaluation found the *Leer Juntos, Aprender Juntos* methodology and training approach to be practical and feasible to apply in Peruvian classrooms.

Nevertheless, the costs of the program and the best alternative uses of available funds are important to consider when thinking about continuing and expanding the program. As discussed earlier in this report, we estimated that the cost of the in-school component of the program in Peru was approximately $434 per child. In addition, to estimate the cost of the component in terms of improvement in children's reading outcomes, we divided the cost per child of the component by its impact per child in standard deviation units to obtain a cost effectiveness of $136 per child per 0.10 standard deviation increase in the basic reading comprehension rate.

Program implementers, regional and national education authorities, and donors should consider alternative ways to conduct activities that increase the time children spend reading outside of school hours. If there is a desire to continue testing activities that aim to increase time-on-task (reading) outside of school hours—such as the book banks, reading camps, story hour, and reading festivals that were part of the community component of *Leer Juntos, Aprender Juntos*—we recommend exploring an alternative way to implement the activities that does not rely primarily on volunteer work. We also recommend assessing the feasibility and potential take-up of the alternative approach to ensure it suits the context of the communities for which it is intended.

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APPENDIX A:
TIMELINE OF EVALUATION ACTIVITIES IN PERU, 2013–2016

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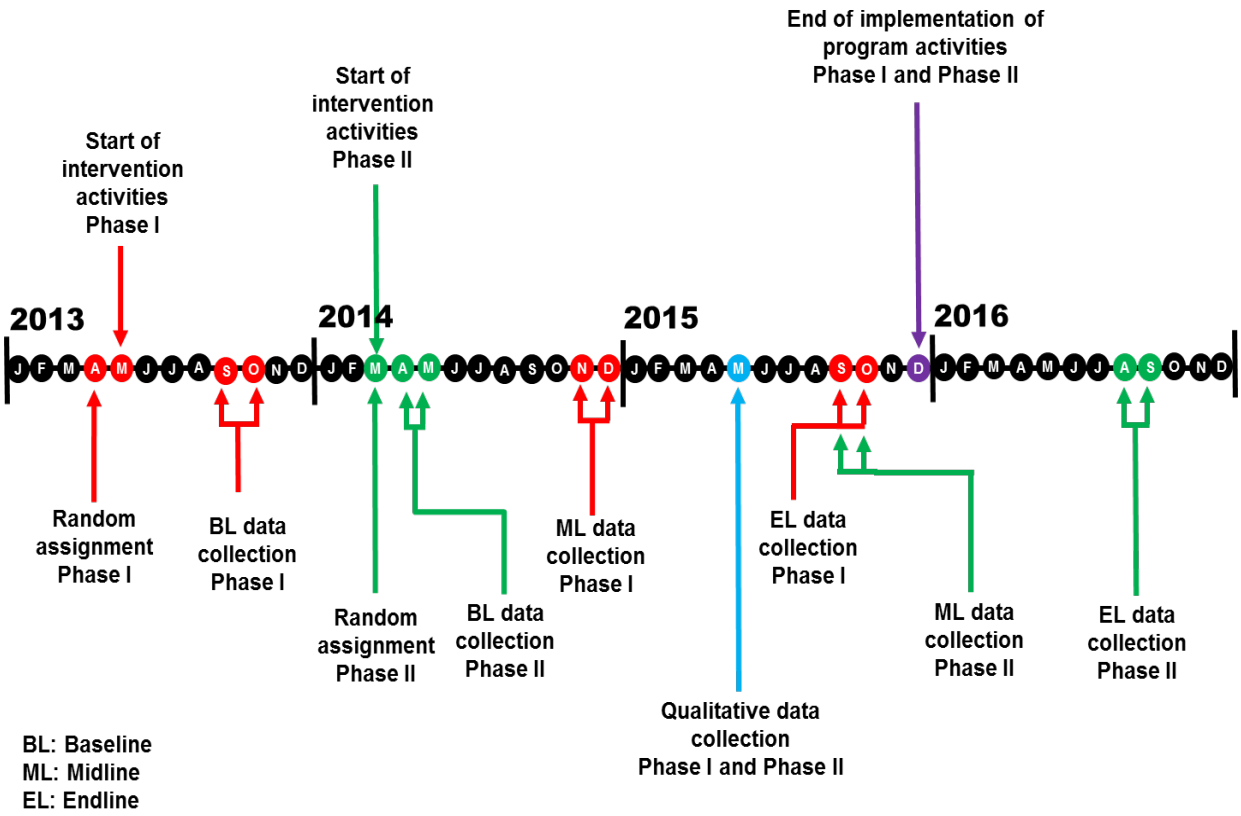
Timeline of evaluation activities in Peru

Planning for the start of implementation of the *Leer Juntos, Aprender Juntos* program activities in Groups A and B in Peru began in fall 2012 with the development of a work plan and project strategy, hiring of program implementation staff, a training workshop for key implementation staff from Save the Children, and meetings of key stakeholders, such as U.S. Agency for International Development, local education authorities, and relevant local government entities (Save the Children and Kallpa 2012, 2013). Preparing for rolling out the program in Peru continued in winter and early spring 2013 with activities that included recruiting and orienting technical and project administration staff, developing an implementation monitoring and evaluation system, mapping elements of the teacher training with the national curriculum, translating project materials to Quechua, producing reading materials for local book banks, and recruiting schools to participate in the evaluation.

Figure A.1 shows the timeline of *Leer Juntos, Aprender Juntos* activities in Peru from 2013 to 2016. The school year in Peru begins in March and ends in December. Random assignment for the Phase I cohort took place in April 2013. The *Leer Juntos, Aprender Juntos* intervention rolled out in Peru in May 2013 with the first teacher training sessions for Phase I teachers in Groups A and B.

Figure A.1. Timeline of *Leer Juntos, Aprender Juntos* activities 2012–2016 in Peru



The teacher training in Phase I schools continued in 2013 with sessions conducted in July, October, and December. Data collection for the baseline of the Phase I cohort occurred in September and October 2013, about two to three months after teacher training began.[18] Recruitment and training of the community volunteers took place in August 2013 in Group A Phase I communities, and implementation of the community-based intervention activities such as reading banks, story hour, reading buddies, and reading camps began in September 2013.

For the Phase II cohort, random assignment occurred in March 2014. The first teacher training sessions for Phase II teachers in the treatment groups also took place in March 2014 (Phase I teachers also participated in this training session), and teacher training for Phase II teachers continued with sessions in April, July, and December. Data collection for the baseline of the Phase II cohort took place in April and May 2014.The first training of community volunteers for Phase II took place in May 2014, as did the start of implementation of the community action components in Group A. Data collection for the midline of the Phase I cohort took place in November and December 2014. The midline data collection for the Phase II cohort occurred from August through October 2015.

The teacher training and support (coaching) activities, as well as training of teacher leaders and principals, continued throughout 2014 and 2015 for the Phase I and II cohorts in the treatment groups (A and B). Recruitment and training of community volunteers and community reading activities also continued in 2014 and 2015 for the Phase I and II communities in Group A. The implementation of the teacher training and support and community components of the intervention (Groups A and B) ended in December 2015 for the Phase I and II cohorts. The final data collection (endline) took place in September and October 2015 for the Phase I cohort and in August and September 2016 for the Phase II cohort.

[18] Although it would have been ideal to have the baseline data collected before the rollout of teacher training in Phase I schools, it was not possible to procure a local data collection firm in the time between reaching an agreement with stakeholders on the evaluation design (April 2013) and the rollout of the teacher training (May 2013). We submitted and agreed upon the evaluation design with stakeholders in April 2013, and only after that we were able to share the evaluation design in the terms of reference in the request for proposals from prospective data collectors. We also had to allow time to prepare and review proposals and, after securing a data collection partner, GRADE, time for them to recruit and train interviewers. For Phase II schools we were able to accomplish baseline data collection closer to the time of teacher training rollout.

APPENDIX B:
QUALITATIVE DATA COLLECTION

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Qualitative data collection

Table B.1 provides detailed information on the respondent types, methods, topics of inquiry, and location for all qualitative data collection activities.

Table B.1. Respondents, methods, topics of inquiry, and location in the qualitative data collection

Respondents	Number of focus groups / interviews (number of participants)	Topics of inquiry	Location
Provincial education unit (UGEL) directors and education specialists	3 interviews with directors and 4 interviews with specialists	• Challenges in reading instruction • Knowledge about *Leer Juntos, Aprender Juntos* and other education interventions in the region	Lima
Save the Children staff	2 interviews (Project manager; Monitoring and Evaluation Coordinator)	• Program leadership and management • Literacy Boost adaptation to Peruvian context • Program implementation strategy • Facilitators and barriers to implementation	Lima
Kallpa program implementation specialists	1 focus group (4 female; 4 male participants)	• The role and activities of specialists • Rollout of program components • Facilitators and barriers to implementation • Perception of program participation and take-up	Andahuaylas
Community volunteers	4 focus groups and 3 interviews (12 female; 2 male participants)	• The role and activities of volunteers • Motivation and barriers to volunteer • Perception of program participation and take-up	Andahuaylas
Program teachers (in schools in Groups A and B)	4 focus groups (23 female; 13 male participants)	• Program knowledge and expectations • Program participation and take-up • Barriers to implementation of program activities • Changes in reading instruction practices • Perception of program activities • Perception of program outcomes	Andahuaylas, Chincheros, Huancarama
Prevailing practice teachers (in schools in Group C)	1 focus group (5 female participants)	• Reading instruction practices and challenges • In-service training • Participation in reading instruction programs	Chincheros
Parents of children in schools implementing the program	8 focus groups (38 female; 9 male participants)	• Program knowledge and expectations • Program participation and take-up • Barriers to participation • Perceived benefits of program services	Andahuaylas, Chincheros, Huancarama
Observations of community activities	6 observations	• Context of community activities (location, leaders, volunteers, and participants) • Types of activities • Participant engagement	Andahuaylas, Huancarama

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APPENDIX C:
CONTROL VARIABLES IN CHILD-LEVEL REGRESSION ANALYSES

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Control variables in child-level regression analyses

Table C.1 lists the control variables included in the regression models we used to estimate program impacts on the reading skills in the 3rd grade of the children in the evaluation. The table also indicates whether the variable is dichotomous or continuous, as well as the source of the variable. All the variables in this list are unlikely to be affected by the intervention, and they were measured at baseline or at the midline data collections in the evaluation.

Table C.1. Control variables included in the analyses of the reading skills of 3rd grade children in the evaluation

Level	Variables	Type	Source
Student	● Child age at final follow-up assessment (in months) ● Child sex	Continuous	Classroom rosters
Student	● Baseline letter identification score ● Baseline emergent reading score ● Baseline emergent writing score ● Baseline phonemic awareness score ● Baseline number of pseudo-words read in one minute ● Baseline passage comprehension score	Continuous	*Leer Juntos, Aprender Juntos* (LJAJ) Emergent Literacy Skills Assessment, Baseline 2013 and 2014
Student	● Child was assessed in Spanish only at baseline ● Child assessed in both Spanish and in mother tongue at baseline	Binary	LJAJ Emergent Literacy Skills Assessment, Baseline 2013 and 2014
Student	● Child attended preschool or kindergarten ● Child's mother completed at least one year of formal schooling ● Child's parents are able to read ● Language spoken at home is mother tongue only	Binary	LJAJ Household Survey, Midline 2014 and 2015
Student	● Number of people living in the household ● Number of rooms in the household ● Family monthly income in dollars	Continuous	LJAJ Household Survey, Midline 2014 and 2015
Student	● Family owns land ● Household has floor built with finished materials ● Household has roof built with finished materials ● Household has electricity ● Household has phone service ● Household has a radio ● Household has a television ● Household has a refrigerator ● Household has a computer ● Household has a bicycle ● Household has a motorcycle ● Household has a car or truck	Binary	LJAJ Household Survey, Midline 2014 and 2015
School	● At baseline, school participated in the One Laptop per Child program ● At baseline, school participated in the National Strategic Learning Achievement Program (PELA) ● At baseline, school participated in the National Rural Education Networks Program (REDES) ● At baseline, school received education materials from the Ministry of Education	Binary	LJAJ School Infrastructure Observation, Baseline 2013 and 2014

Level	Variables	Type	Source
	● At baseline, school participated in the National School Nutrition Program (*Qali Warma*) ● School has multi-grade classrooms ● School has library or resource room ● School has computers for students ● School has computers for teachers ● School has Internet connectivity ● School has phone service ● School has piped water supply ● School has unpiped water supply ● School has potable drinking water ● School has electricity ● School is a permanent building ● School has painted interior walls ● School has painted exterior walls ● School classrooms have ceilings ● School has perimeter fence ● School has working restroom facilities for children ● School has latrines or urinals ● School has functional toilets ● School has separate facilities for boys and girls ● School has hand-washing facilities ● School has working waste disposal ● School has plumbing waste disposal ● School has septic or similar disposal ● School has other waste disposal ● School has kitchen ● School has vegetable garden ● School has teachers' lounge ● School has outdoors recreational space ● School has gymnasium or sports facilities ● School has infirmary		
School	● Number of physical hazards observed in school ● Number of health hazards observed in school	Continuous	LJAJ School Infrastructure Observation, Baseline 2013 and 2014

For details on the construction of variables from baseline and midline data sources, refer to the *Leer Juntos, Aprender Juntos* baseline (Lugo-Gil et al. 2016a) and midline (Lugo-Gil et al. 2017a) reports, respectively. All the variables listed in Table C.1 *except* age at baseline and sex, had missing values. One hundred and fifty six observations were missing data in control variables, which reduces the size of the analytic sample from 1,022 children to 866 children. To retain in the analysis all the observations that have reading outcome data (1,022 children), we imputed the missing values in control variables. To do imputations, we conducted regressions using each of the variables in the list (nonmissing data) as the dependent variable. In the regressions for the baseline literacy skills and child socioeconomic characteristics variables, we used baseline age and baseline age squared as the independent variables. In the regressions for the rest of the variables (household assets and school characteristics and resources), we used as independent variables the subgroup of other variables from that list that contained the least amount of missing data. All of the regression models we used to estimate program impacts on

children's reading outcomes included a binary variable indicating, for each child in the sample, whether imputations were done on any of the control variables.

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APPENDIX D:
SCHOOL INFRASTRUCTURE CHARACTERISTICS

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School infrastructure characteristics

The utilities and facilities in evaluation schools are basic (Tables D.1), but most schools have running water, electricity, and painted interior walls. For example, although all of the schools have classrooms covered with roofs (result not in tables), only about half of the schools in each treatment group are located in a permanent building.

Table D.1. Available utilities in evaluation schools (percentages of schools)

Utilities	Leer Juntos (A)	Leer Juntos-school only (B)	Prevailing practice (C)	(A–B)	(B–C)
Permanent building	46.9	46.9	49.0	0.0 (0.997)	-2.2 (0.826)
Painted interior walls	96.6	99.8	95.5	-3.2 (0.323)	4.3 (0.189)
Painted exterior walls	38.6	47.0	48.0	-8.3 (0.383)	-1.1 (0.911)
Perimeter fence	63.4	57.5	68.2	5.9 (0.524)	-10.8 (0.252)
Finished (cement, wood, etc.) classroom floors	95.9	100.0	100.0	-4.2 (0.086)	0.0 (1.000)
Electricity	96.2	97.8	97.8	-1.6 (0.658)	0.0 (1.000)
Piped water supply	79.3	79.2	85.6	0.1 (0.989)	-6.5 (0.386)
Potable drinking water supply	57.2	57.3	56.2	-0.0 (0.999)	1.1 (0.914)
Unpiped water supply	22.8	23.0	12.2	-0.2 (0.983)	10.8 (0.179)
Plumbing waste disposal	26.6	31.4	24.9	-4.8 (0.566)	6.5 (0.445)
Septic (or similar) disposal	71.3	62.4	66.7	8.9 (0.324)	-4.3 (0.637)
Number of schools	**49**	**47**	**48**		

Source: *Leer Juntos, Aprender Juntos* School Infrastructure Observation Form—Final Follow-ups 2015 and 2016.

Note: Regression-adjusted means. *P*-values in parentheses. None of the differences between treatment groups presented in this table is statistically significant at the 0.05 level.

Almost all of the schools in each treatment group have working restroom facilities for children (Table D.2). However, few schools have amenities such as sports facilities, a music room, infirmary, or teachers' lounge. Importantly, we found one difference between treatment groups in the schools' available utilities and facilities: more schools in Group B than in Group A have a vegetable garden.

Table D.2. Other facilities available in schools

Facilities	Leer Juntos (A)	Leer Juntos-school only (B)	Prevailing practice (C)	(A–B)	(B–C)
Working restroom facilities for children	97.9	97.9	100.0	0.0 (0.989)	-2.2 (0.386)
Separate restroom facilities for boys and girls	67.3	71.4	70.4	-4.2 (0.669)	1.1 (0.914)
Latrines or urinals	83.7	74.7	83.3	9.0 (0.222)	-8.6 (0.248)
Functional toilets	73.1	83.1	79.9	-9.9 (0.209)	3.2 (0.686)
Hand-washing facilities	87.6	91.8	89.7	-4.2 (0.533)	2.2 (0.752)
Kitchen	97.9	91.5	98.0	6.4 (0.132)	-6.5 (0.131)
Vegetable garden	59.4	80.3	76.0	-20.9* (0.021)	4.3 (0.634)
Teachers' lounge	6.2	10.4	10.4	-4.2 (0.488)	0.0 (1.000)
Outdoor recreational space	94.2	97.9	91.5	-3.7 (0.416)	6.5 (0.168)
Gymnasium or sports facilities	0.0	2.2	0.0	-2.1 (0.221)	2.2 (0.219)
Infirmary	0.0	2.2	0.0	-2.1 (0.221)	2.2 (0.219)
Computers for students	80.1	87.5	79.9	-7.4 (0.336)	7.5 (0.334)
Computers for teachers	65.5	68.1	69.2	-2.6 (0.782)	-1.1 (0.909)
Internet connectivity	20.4	28.3	20.8	-7.9 (0.265)	7.5 (0.295)
Library or resource room	15.1	8.7	19.4	6.4 (0.366)	-10.8 (0.136)
Music room	2.1	2.1	2.1	-0.0 (1.000)	0.0 (1.000)
Number of schools	**49**	**47**	**48**		

Source: *Leer Juntos, Aprender Juntos* School Infrastructure Observation Form—Final Follow-ups 2015 and 2016.

Note: Regression-adjusted means. *P*-values in parentheses.

* Difference in group means is statistically significant at the 0.05 level.

As presented in Table D.3, on average, there were no statistically significant differences between treatment groups in the number of hazards—related to either physical (such as broken glass or furniture, dangerous materials, and unsafe building structures) or health (such as stagnant water reservoirs) factors—observed in the schools.

Table D.3. Physical and health hazards observed in schools

Hazards	Leer Juntos (A)	Leer Juntos-school only (B)	Prevailing practice (C)	(A–B)	(B–C)
Number of physical hazards observed (average)	3.3	2.8	3.0	0.5 (0.169)	-0.2 (0.514)
Number of health hazards observed (average)	2.2	2.0	2.0	0.2 (0.414)	-0.1 (0.774)
Number of schools	**49**	**47**	**48**		

Source: *Leer Juntos, Aprender Juntos* School Infrastructure Observation Form—Final Follow-ups 2015 and 2016.

Note: Regression-adjusted means. *P*-values in parentheses. None of the differences between treatment groups presented in this table is statistically significant at the 0.05 level.

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APPENDIX E:
CLASSROOM AND HOUSEHOLD ENVIRONMENTS

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Classroom and household environments

In this section, we present additional information on school, classrooms, and households in Peru that supports the findings presented in Chapter IV.

1. Schools' participation in programs different to *Leer Juntos, Aprender Juntos*

We measured school participation in other programs besides *Leer Juntos, Aprender Juntos* to help explore the setting in which these schools operate and gather information on what the prevailing practice offers. Schools in the evaluation participate in a number of education and nutrition programs. In particular, we gathered information about school participation in the following programs:

- *Una Laptop por Niño* (One Laptop per Child), an initiative of the Ministry of Education in Peru that aims to integrate the use of technological resources in the education process by providing a laptop to every student.
- *Programa Estratégico Logros de Aprendizaje al finalizar el III ciclo de la Educación Básica Regular*, or *PELA* (Strategic Learning Outcomes Program), a national program that aims to improve reading and mathematics achievement of students in preschool and grades 1 and 2. The program provides resources to improve school governance efficacy, increase teachers' participation in professional development activities, improve schools' infrastructure, and increase access to high quality early education programs for all children.
- *Programa Nacional de Redes Educativas Rurales*, or *REDES* (National Rural Education Network Program), a national program that focuses on improving the academic achievement of students in rural schools by incorporating computer use in the classroom and by providing resources to enhance teachers' performance.
- Educational materials provided by the Ministry of Education in Peru. The materials include any type of educational or instructional material, and they may or may not be provided in relation to any of the three programs described earlier in this list.
    - *Programa Nacional de Alimentación Escolar*, also known as *Qali Warma* (National School Nutrition Program), an initiative of the Ministry of Social Development (Ministerio de Desarrollo e Inclusión Social) in Peru. This program provides a free breakfast to students in preschool and elementary public schools. In addition, students attending schools in the most disadvantaged districts receive breakfast and lunch. This program is not included in the programs listed in Table III.1 in Chapter III, but we included participation in this program at baseline to control for the reading outcomes impact analysis.
    - *Soporte Pedagógico* (Pedagogical Support), one of two initiatives that the Ministry of Education launched in 2015. *Soporte Pedagógico* targets urban areas, and the other initiative, *Soporte Pedagógico Intercultural* (Intercultural Pedagogical Support), aims to serve bilingual schools located primarily in rural areas. The goal of these two initiatives is to improve student learning in elementary schools by (1) providing supports to teachers; (2) developing students' communication, math, and social studies skills that require additional support; (3) improving allocation and use of appropriate teaching materials and educational resources; and (4) building capacity of principals, teachers, and parents to ensure that students learn. These initiatives also employ teachers who work

after regular school hours (*docentes fortaleza*) to provide remedial support to students who are falling behind.

2. Participation in professional development activities

Table E.1. Teacher-reported participation in reading instruction professional development (PD) activities in the endline year (percentages of teachers)

	Leer Juntos (A)	Leer Juntos school-only (B)	Prevailing practice (C)	Impact of community action (A–B)	Impact of in-school component (B–C)
Teachers who participated in reading instruction professional development activities[a]	52.8	53.0	39.0	-0.2 (0.981)	14.0 (0.128)
Teachers who reported they received reading instruction professional development from:					
Ministry of Education or other institution	27.9	36.2	39.5	-8.3 (0.371)	-3.2 (0.730)
Save the Children through *Leer Juntos, Aprender Juntos*	38.4	36.4	0.0	2.0 (0.759)	36.4* (0.000)
Teachers who reported they received coaching	63.2	70.9	47.2	-7.7 (0.384)	23.7* (0.009)
Teachers who reported they received in-class coaching from:					
Ministry of Education or other institution	46.6	54.9	47.5	-8.3 (0.383)	7.4 (0.443)
Save the Children through *Leer Juntos, Aprender Juntos*	38.4	40.6	0.0	-2.2 (0.742)	40.6* (0.000)
Total number of teachers	**49**	**47**	**48**		

Source: *Leer Juntos, Aprender Juntos* Teacher Survey—Final Follow-ups 2015 and 2016.

Note: Regression-adjusted means. *P*-values in parentheses.

[a] The percentages shown refers to the participation during the year when the endline survey was administered (2015 for Phase I teachers and 2016 for Phase II teachers).

* Difference in group means is statistically significant at the 0.05 level.

Considering the entire period of program implementation, the participation of intervention teachers (Groups A and B) in PD activities was considerable. For instance, in the midline data collection (November–December 2014 in Phase I and September–October 2015 in Phase II), more than 80 percent of the intervention teachers (89 percent in Group A and 84 percent in Group B) reported they participated in PD activities in the 12 months before the midline survey administration (Lugo-Gil et al. 2017a). Also, during the year before the endline survey administration (2014 for Phase I and 2015 for Phase II teachers), the percentage of teachers in the intervention groups who reported participating in PD activities was close to 80 percent, and the difference in the participation rate with teachers in Group C was 51 percentage points, which is statistically significant. We present the findings on teachers' reports of participation in PD activities in the year before the endline teacher survey in Table E.2.

Table E.2. Teacher-reported participation in reading instruction professional development (PD) activities in the year before endline survey administration (percentages of teachers)

	Leer Juntos (A)	Leer Juntos-school only (B)	Prevailing practice (C)	Impact of community action (A–B)	Impact of in-school component (B–C)
Teachers who participated in reading instruction PD activities	79.2	84.6	34.1	-5.5 (0.522)	50.5* (0.000)
Teachers who reported they received coaching	76.0	82.6	55.8	-6.7 (0.439)	26.9* (0.003)
Number of teachers	**49**	**47**	**48**		

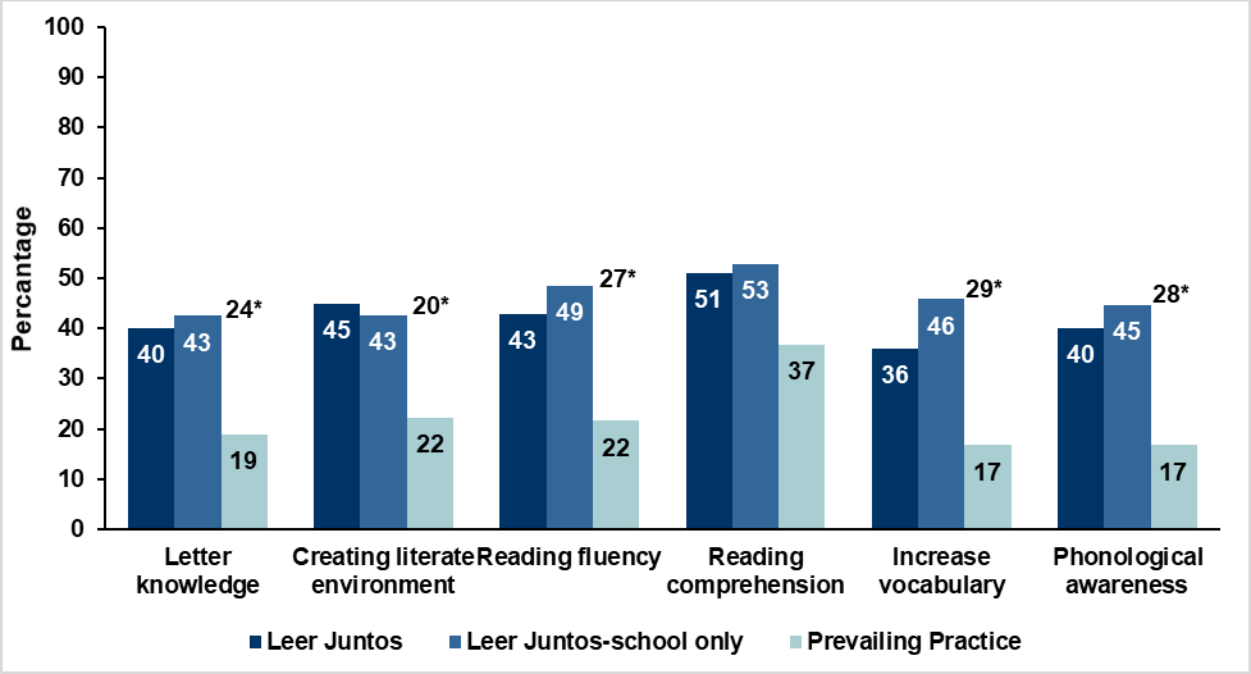
Source: *Leer Juntos, Aprender Juntos* Teacher Survey—Final Follow-ups 2015 and 2016.

Note: Regression-adjusted means. *P*-values in parentheses.

* Difference in group means is statistically significant at the 0.05 level.

At the endline or final follow-up, teachers in the intervention groups (Groups A and B) also reported higher rates of participation in reading instruction PD activities focused on topics that are specifically addressed in the *Leer Juntos, Aprender Juntos* training. As we show in Figure E.1, more than 40 percent of the teachers in Groups A and B reported receiving training on teaching letter knowledge, reading fluency, reading comprehension, vocabulary, and phonological awareness. In contrast, only 19 to 37 percent of the teachers in the prevailing practice group reported participating in PD focused on teaching specific literacy skills. The difference between Groups B and C is statistically significant for all types of PD focused on teaching specific literacy skills, except for reading comprehension for which the differences between groups range from 2 to 16 percentage points but were not statistically significant.

Figure E.1. Teachers in intervention groups reported higher rates of participation in professional development (PD) activities focused on specific literacy skills



Source: *Leer Juntos, Aprender Juntos* Teacher Survey— Final Follow-ups 2015 and 2016.

* Difference in group means is statistically significant at the 0.05 level.

Teachers also reported participation in PD activities focused on other topics related to reading instruction in the endline or final follow-up year: as shown in Table E.3, approximately one-third of teachers in each of the intervention groups reported participation in PD focused on teaching reading in Quechua or teaching bilingual students. In contrast, only 13 percent of teachers in the prevailing practice group reported participating in training focused on reading in Quechua or teaching bilingual children. At least 40 percent of teachers in each of the intervention groups reported participating in PD focused on making or adapting materials to teach reading, and on creating a suitable classroom environment for learning to read. None of these differences between treatment groups was statistically significant (see Table E.3).

Table E.3. Teacher-reported participation in reading instruction professional development (PD) activities focused on specific topics in the endline year

	Leer Juntos (A)	Leer Juntos-school only (B)	Prevailing practice (C)	Impact of community action (A–B)	Impact of in-school component (B–C)
Percentage of teachers who participated in other PD focused on:					
Teaching reading in Quechua or teaching bilingual students	35.5	28.5	13.4	7.1 (0.406)	15.1 (0.081)
Support for literacy activities at home	38.7	35.3	20.2	3.4 (0.707)	15.1 (0.104)
Classroom management	31.4	28.9	23.5	2.5 (0.797)	5.4 (0.588)
Making or adapting materials to teach reading	40.4	40.7	24.5	-0.3 (0.979)	16.1 (0.094)
Creating a suitable classroom environment for learning reading	40.3	33.1	27.8	7.2 (0.448)	5.4 (0.575)
Use of regular evaluations	42.7	27.3	16.5	15.5 (0.084)	10.8 (0.233)
Parent/community participation in reading activities	32.8	23.0	12.3	9.7 (0.262)	10.8 (0.220)
Other curricular areas	30.7	30.0	36.5	0.6 (0.947)	-6.5 (0.496)
Management of multiple-grade classrooms	11.4	8.2	9.3	3.1 (0.606)	-1.1 (0.861)
Other related to literacy instruction	5.5	10.2	11.3	-4.7 (0.434)	-1.1 (0.859)
Total number of teachers	**49**	**47**	**48**		

Source: *Leer Juntos, Aprender Juntos* Teacher Survey—Final Follow-ups 2015 and 2016.

Note: Regression-adjusted means. *P*-values in parentheses.

* Difference in group means is statistically significant at the 0.05 level.

3. Teacher-reported practices

At the endline data collection in Peru, we surveyed teachers about the methods, strategies, materials, and allocation of instruction time they use to teach reading, and about the needs and challenges they face in teaching their students to read.

In that teacher survey, we asked open-ended questions to teachers about the methods they used more frequently to teach reading to their students in 3rd grade. In the survey, teachers also reported on the strategies they usually use when they teach reading fluency, new words, and reading comprehension. Table E.4 shows the methods and strategies that teachers mentioned most frequently in their answers to the survey.

Table E.4. Teacher-reported methods and strategies to teach reading

	Leer Juntos (A)	Leer Juntos-school only (B)	Prevailing practice (C)	Impact of community action (A–B)	Impact of in-school component (B–C)
Percentage of teachers who reported using the following methods to teach reading:					
Syllabic	14.4	9.2	14.5	5.3 (0.411)	-5.4 (0.409)
Communicative-textual	36.9	35.3	37.4	1.6 (0.877)	-2.2 (0.837)
Phonological/global	16.5	12.3	14.5	4.2 (0.569)	-2.2 (0.773)
Guided reading	32.4	17.2	19.4	15.1 (0.064)	-2.2 (0.793)
Strategies for reading comprehension	16.3	22.1	14.6	-5.8 (0.471)	7.5 (0.359)
Percentage of teachers who reported using the following strategies to teach					
Reading fluency					
Reading with chronometer	40.7	30.4	22.9	10.3 (0.230)	7.5 (0.385)
Reading aloud in groups or pairs	44.9	56.4	52.1	-11.5 (0.251)	4.3 (0.671)
Guided oral reading	33.1	26.3	28.4	6.8 (0.472)	-2.2 (0.822)
Reading in chain	30.4	35.5	37.7	-5.2 (0.589)	-2.2 (0.824)
Silent reading	18.7	23.0	14.4	-4.3 (0.612)	8.6 (0.317)
Strategies for reading comprehension	12.1	7.9	4.7	4.1 (0.445)	3.2 (0.554)
New words					
Discover the name of things using the dictionary	81.0	85.2	88.4	-4.1 (0.573)	-3.2 (0.662)
Synonyms and antonyms	28.3	32.1	25.6	-3.7 (0.697)	6.5 (0.507)
Build sentences and phrases with word lists	1.7	1.7	2.8	0.0 (0.995)	-1.1 (0.712)
Reading comprehension					
Ask questions about the reading	67.6	68.5	77.1	-0.9 (0.926)	-8.6 (0.382)
Identify the sequence of events	22.0	1.6	7.0	20.4* (0.001)	-5.4 (0.384)
Predictions about history or pre-reading reflections	6.3	16.7	14.6	-10.5 (0.118)	2.2 (0.749)
Abstracts, paraphrasing, or storytelling	22.5	39.0	18.6	-16.5 (0.072)	20.4* (0.028)
Identify characters, problems, and solutions	7.6	13.3	17.6	-5.7 (0.406)	-4.3 (0.532)
Number of teachers	**49**	**47**	**48**		

Source: *Leer Juntos, Aprender Juntos* Teacher Survey—Final Follow-ups 2015 and 2016.

Note: Regression-adjusted means. *P*-values in parentheses.

* Difference in group means is statistically significant at the 0.05 level.

More than 30 percent teachers in all treatment groups reported using the communicative-textual method to teach reading, whereas less than 20 percent of teachers in all treatment groups reported using the phonological/global approach. We found no statistically differences between treatment groups in the methods teachers reported using to teach reading. However, we found statistically significant differences between treatment groups in two of the strategies teachers use to teach reading comprehension. As shown in Table E.4, more teachers in Group A than in Group B reported they identify the sequence of events while teaching reading comprehension (22 and 2 percent, respectively). Additionally, more teachers in Group B than teachers in Group C reported using abstracts, paraphrasing, or storytelling to teach reading comprehension.

We also asked teachers about other literacy-related practices they use in their classrooms, such as the types of reading materials students use and the frequency with which they assess their students' literacy skills. More teachers in Group C than in Group B reported their students use picture books every day (Table E.5). That difference (22 percentage points) is statistically significant. In contrast, a higher percentage of teachers in the intervention groups than in the prevailing practice group reported their students use books that provide reading opportunities, such as simple reading books and workbooks or exercises guides. Although these differences are not statistically significant, these results are encouraging because the use of reading books strengthens the development of decoding, fluency, and reading comprehension skills of 3rd grade students.

Table E.5. Students' use of different types of text, as reported by teachers

	Leer Juntos (A)	Leer Juntos-school only (B)	Prevailing practice (C)	Impact of community action (A–B)	Impact of in-school component (B–C)
Percentage of teachers who reported their students use the following types of text every day:					
School textbooks	45.8	43.2	44.3	2.6 (0.799)	-1.1 (0.918)
Workbooks or exercise guides	28.7	37.8	22.7	-9.1 (0.344)	15.1 (0.123)
Picture or artwork books	24.4	10.0	31.5	14.4 (0.097)	-21.5* (0.015)
Books to name objects or letters of the alphabet	14.5	23.8	28.1	-9.3 (0.243)	-4.3 (0.593)
Simple reading books	24.2	23.2	16.8	0.9 (0.916)	6.5 (0.475)
Cards with syllables or words	13.1	13.2	8.9	-0.1 (0.991)	4.3 (0.497)
Instructional materials issued by the Ministry of Education	3.8	16.8	19.0	-13.0 (0.058)	-2.2 (0.754)
Books with chapters	2.0	0	4.2	2.0 (0.375)	-4.3 (0.082)
Number of teachers	**49**	**47**	**48**		

Source: *Leer Juntos, Aprender Juntos* Teacher Survey—Final Follow-ups 2015 and 2016.

Note: Regression-adjusted means. *P*-values in parentheses.

* Difference in group means is statistically significant at the 0.05 level.

Teachers also reported on the time their students spend on reading-related activities during a typical language class (Table E.6). Those in Group B reported their students spent 8 more minutes (on average) narrating familiar stories than students in Group C, and that they spent more time, on average, on motivational activities than students in Group A. These differences are statistically significant. According to their teachers, students in the intervention groups (Groups A and B) spent a similar amount of time (on average) in other activities related to reading during communication class such as learning to identify the letters of the alphabet, phonemic awareness, reading aloud, building vocabulary, and taking dictation.

Table E.6. Number of minutes students spend on the following activities during a typical language and reading class, as reported by teachers

Activity	Leer Juntos (A)	Leer Juntos-school only (B)	Prevailing practice (C)	Impact of community action (A–B)	Impact of in-school component (B–C)
Learning to identify the letters of the alphabet	16.7	17.2	17.5	-0.5 (0.848)	-0.2 (0.937)
Practicing phonemic awareness activities	17.1	19.3	16.6	-2.3 (0.348)	2.7 (0.275)
Practicing reading fluency	26.6	30.1	28.7	-3.5 (0.201)	1.4 (0.614)
Practicing reading comprehension	35.7	37.9	36.6	-2.2 (0.527)	1.3 (0.714)
Building vocabulary and learning new words	25.1	24.8	24.8	0.3 (0.920)	0.0 (1.000)
Narrating familiar stories without reference to text	29.0	30.2	22.4	-1.2 (0.721)	7.8* (0.024)
Copying letters or words	22.4	25.8	23.3	-3.4 (0.173)	2.5 (0.330)
Taking dictation	20.9	21.7	20.7	-0.8 (0.694)	1.0 (0.638)
Motivational activities	10.9	14.9	11.9	-4.1* (0.038)	3.0 (0.123)
Number of teachers	**49**	**47**	**48**		

Source: *Leer Juntos, Aprender Juntos* Teacher Survey—Final Follow-ups 2015 and 2016.

Note: Regression-adjusted means. *P*-values in parentheses.

* Difference in group means is statistically significant at the 0.05 level.

Interviewers also asked teachers about the needs and challenges they face in teaching reading. The most mentioned barrier by teachers in intervention groups (Groups A and B) was lack of support from parents. However, there were no statistically significant differences between treatment groups in that report. In contrast, between teachers in Groups B and C, the difference in the reports of lack of training in methods to teach literacy as a barrier to teach (a difference of 19 percentage points) was statistically significant. Table E.7 shows the teachers' reports on the resources that they perceive as lacking when they teach reading to their students and the issues they reported as challenges to teach reading.

Table E.7. Teacher-reported needs and challenges (percentages of teachers)

Needs and challenges	Leer Juntos (A)	Leer Juntos-school only (B)	Prevailing practice (C)	Impact of community action (A–B)	Impact of in-school component (B–C)
Lack of supports and resources for teaching reading and writing					
Lack of books	41.4	56.4	66.0	-15.0 (0.152)	-9.7 (0.358)
Lack of teaching resources	67.2	62.3	76.2	4.9 (0.596)	-14.0 (0.137)
Lack of sufficient instructional or class time	32.4	31.5	27.1	1.0 (0.919)	4.3 (0.658)
Lack of training in methods to teach literacy	71.3	64.2	83.6	7.1 (0.424)	-19.4* (0.033)
Lack of other types of training	64.1	62.5	63.6	1.6 (0.876)	-1.1 (0.916)
Lack of support from parents	81.7	76.5	74.4	5.2 (0.570)	2.2 (0.815)
Lack of training in bilingual intercultural education	76.8	59.1	61.2	17.7 (0.079)	-2.2 (0.832)
Lack of classroom equipment or material	67.2	58.7	67.3	8.5 (0.429)	-8.6 (0.427)
Lack of Quechua language teaching skills	20.7	18.6	16.5	2.0 (0.792)	2.2 (0.784)
Other	-0.0	-0.1	6.3	0.1 (0.972)	-6.5* (0.031)
Challenges to teaching reading					
Students' absenteeism	41.5	56.6	27.5	-15.0 (0.113)	29.0* (0.003)
Students' lack of motivation	49.9	40.8	54.8	9.1 (0.400)	-14.0 (0.201)
Students' lack of Spanish-language knowledge	24.8	16.3	22.8	8.4 (0.321)	-6.5 (0.453)
Lack of parents' involvement in school activities	81.8	90.3	80.6	-8.5 (0.244)	9.7 (0.189)
Students' malnutrition or poor health of students	81.8	88.2	78.5	-6.4 (0.405)	9.7 (0.214)
Students' vision problems	41.8	50.9	33.7	-9.1 (0.356)	17.2 (0.087)
Number of teachers	**49**	**47**	**48**		

Source: *Leer Juntos, Aprender Juntos* Teacher Survey—Final Follow-ups 2015 and 2016.

Note: Regression-adjusted means. *P*-values in parentheses.

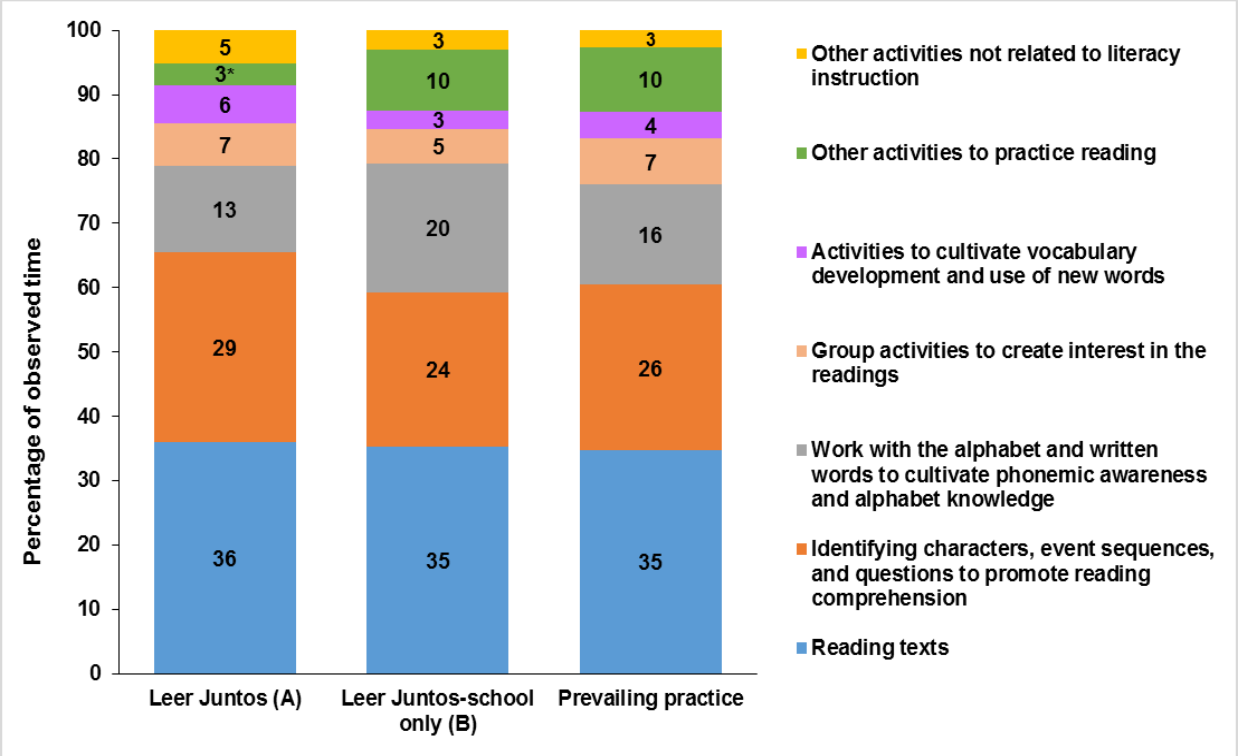
* Difference in group means is statistically significant at the 0.05 level.

4. Observed practices

To measure observed teaching practice, the evaluation team observed the instruction in the 3rd grade classrooms during a typical language or reading class. On average, teachers in the three treatment groups were observed for 39 minutes (there were no statistically significant differences between treatment groups in the average time of the classroom observations).

Across all treatment groups, teachers spent a majority of the observed literacy instruction time on two activities: reading texts and reading comprehension. Figure E.2 shows that teachers in all treatment groups spent about 35 percent of the observed time in activities that involved reading text such as reading aloud or in groups or individually in a silent manner. The observed teachers also spent 24 to 29 percent of the observed time identifying characters and event sequences and posing questions about the text contents to students with the goal of promoting reading comprehension. We did not find statistically significant differences between treatment groups on how teachers spent the time during the language or reading lesson that we observed, with one exception: teachers in classrooms in Group B spent a larger proportion of the observed time (10 percent) than teachers from Group A (3 percent) on other activities to practice reading such as drawing, playing, and showing visual representations of a text.

Figure E.2. Observed allocation of instruction time in a typical language or reading class



Source: *Leer Juntos, Aprender Juntos* Classroom Observation Form—Final Follow-ups 2015 and 2016.

* Difference in group means between Groups A and B is statistically significant at the 0.05 level.

Teachers in the three treatment groups were similar in terms of their use of instructional practices focused on teaching the five foundational literacy skills. In the evaluation's classroom observations, observers recorded whether teachers used instructional practices focused on teaching the five foundational literacy skills that were the focus of the teacher training provided by *Leer Juntos, Aprender Juntos*: (1) alphabet/letter knowledge, (2) vocabulary, (3) phonemics and phonological knowledge, (4) fluency, and (5) reading comprehension. As expected, most teachers in all treatment groups were observed providing instruction on reading fluency and activities to guide students in using reading comprehension strategies, such as helping students understand the text by making predictions and asking questions about events and encouraging predictions or inferences. In contrast, the percentage of teachers observed providing instruction on letter knowledge, phonemic awareness, pronunciation, and segment of words was less than 15 percent in all treatment groups.

We found only one statistically significant difference between treatment groups in teachers' use of vocabulary-building activities, as shown in Table E.8: the percentage of classrooms in which teachers introduced or rehearsed vocabulary words and explained their meaning was higher in Group A than in Group B (68 and 38 percent, respectively).

Teachers' use of general teaching practices such as providing verbal reinforcement and feedback to students was similar across treatment groups. We found two statistically significant differences between treatment groups in the teachers' use of general instructional practices: more teachers in Group A and Group C than teachers in Group B asked open-ended questions to students with the goal of stimulating oral language, as presented in Table E.9.

Table E.8. Observed instructional practices to teach foundational literacy skills

Practice	Leer Juntos (A)	Leer Juntos-school only (B)	Prevailing practice (C)	Impact of community action (A–B)	Impact of in-school component (B–C)
Percentage of classrooms where teachers used the following practices to teach:					
Vocabulary					
Introduced or rehearsed vocabulary words and explained word meaning or elaborated on new concepts	67.4	37.6	48.3	29.9* (0.002)	-10.8 (0.269)
Fluency	96.2	87.7	95.2	8.5 (0.097)	-7.5 (0.144)
Letter knowledge					
Encouraged students to recognize letters, identify the names of letters, or distinguish upper and lower case	8.3	15.7	12.4	-7.3 (0.235)	3.2 (0.605)
Phonemics and phonological awareness					
Provided instruction on phonemic awareness	10.0	15.3	13.1	-5.2 (0.443)	2.2 (0.756)
Provided instruction on the correct pronunciation of words in Quechua or Spanish	11.0	8.9	8.9	2.1 (0.729)	0.0 (1.000)
Prompted students to segment words into specific units (syllables or phonemes)	1.8	10.1	6.9	-8.4 (0.081)	3.2 (0.504)
Provided instruction on grammar, mechanics, or spelling	45.9	38.2	29.6	7.7 (0.423)	8.6 (0.375)
Provided instruction on word writing	64.9	78.7	63.7	-13.8 (0.161)	15.1 (0.130)
Book reading and reading comprehension					
Pre-reading or book-preview	64.9	69.6	67.4	-4.7 (0.658)	2.2 (0.842)
Encouraged predictions	36.5	31.2	35.5	5.3 (0.605)	-4.3 (0.677)
Explored children's interest in the story and facilitated connections with their lives	56.9	51.7	48.5	5.2 (0.600)	3.2 (0.746)
Explained the uses of different types of texts and written materials	10.0	17.9	12.6	-7.9 (0.281)	5.4 (0.468)
Encouraged students to use context clues for reading comprehension	36.2	33.2	27.8	3.0 (0.750)	5.4 (0.577)
Discussed text structure	12.4	14.5	14.5	-2.1 (0.765)	0.0 (1.000)
Discussed the characters in the text, who they are, their motivation and/or goals	54.9	49.8	38.0	5.0 (0.641)	11.8 (0.279)
Asked questions about events in history, encourages predictions or inferences	87.2	76.6	86.3	10.6 (0.169)	-9.7 (0.212)
Helped students understand the text by making predictions, applying prior knowledge	85.5	77.6	81.9	7.9 (0.293)	-4.3 (0.569)
Used other tools in addition to books for the practice of reading skills	34.5	29.4	20.8	5.1 (0.478)	8.6 (0.235)
Reinforced the pedagogical objective with playful or motivational activities	30.7	25.0	20.7	5.7 (0.514)	4.3 (0.624)
Number of classrooms	**49**	**47**	**48**		

Source: *Leer Juntos, Aprender Juntos* Classroom Observation Form—Final Follow-ups 2015 and 2016.

Note: Regression-adjusted means. *P*-values in parentheses.

* Difference in group means is statistically significant at the 0.05 level.

Table E.9. Observed general instructional practices

	Leer Juntos (A)	Leer Juntos-school only (B)	Prevailing practice (C)	Impact of community action (A–B)	Impact of in-school component (B–C)
Percentage of classrooms in which teachers used the following practices to:					
Stimulate oral language					
Gave students opportunities to respond to the print/text materials	53.1	50.0	50.0	3.1 (0.766)	0.0 (1.000)
Asked open-ended questions	71.9	48.1	70.7	23.8* (0.010)	-22.6* (0.016)
Provide verbal reinforcement to students	94.1	85.2	89.5	8.9 (0.139)	-4.3 (0.478)
Provide appropriate feedback to students	97.9	95.8	95.8	2.1 (0.549)	0.0 (1.000)
Number of classrooms	**49**	**47**	**48**		

Source: *Leer Juntos, Aprender Juntos* Classroom Observation Form—Final Follow-ups 2015 and 2016.

Note: Regression-adjusted means. *P*-values in parentheses.

* Difference in group means is statistically significant at the 0.05 level.

5. Language use in the classroom

Spanish was the spoken language that teachers used most often to communicate with their students, but we did not find statistically significant differences in teachers' language use between treatment groups. As shown in Table E.10, teachers in at least 85 percent of the classrooms in each treatment group were observed using only Spanish or mostly Spanish to discipline and manage students' behavior, and most of the observed teachers in all treatment groups used Spanish to provide literacy instruction. In contrast, teachers were observed using only Quechua or mostly Quechua to communicate with their students in only 2 to 6 percent of the classrooms in each treatment group.

Table E.10. Observed teachers' use of language in the classroom

	Leer Juntos (A)	Leer Juntos-school only (B)	Prevailing practice (C)	Impact of community action (A–B)	Impact of in-school component (B–C)
Classrooms in which teachers were observed using only Spanish or mostly Spanish to:					
Discipline and manage students' behavior	91.7	85.1	93.9	6.5 (0.285)	-8.8 (0.156)
Provide literacy instruction	93.8	91.7	93.8	2.1 (0.685)	-2.2 (0.684)
Classrooms in which teachers were observed using only Quechua or mostly Quechua to:					
Discipline and manage students' behavior	4.1	2.0	2.0	2.1 (0.489)	0.0 (1.000)
Provide literacy instruction	6.2	2.0	2.0	4.2 (0.228)	0.0 (1.000)
Number of classrooms	**49**	**47**	**48**		

Source: *Leer Juntos, Aprender Juntos* Classroom Observation Form—Final Follow-ups 2015 and 2016.

Note: Regression-adjusted means. *P*-values in parentheses. None of the differences between evaluation means presented in this table is statistically significant.

In most of the observed classrooms, at least half of the students used Spanish to communicate with their teacher, but we found no statistically significant differences between treatment groups in the language use of students in the classroom (Table E.11).

Table E.11. Observed students' use of language in the classroom

	Leer Juntos (A)	Leer Juntos-school only (B)	Prevailing practice (C)	Impact of community action (A–B)	Impact of in-school component (B–C)
Classrooms in which half or more of the students speak to the teacher in:					
Spanish	93.8	93.7	98.0	0.1 (0.987)	-4.3 (0.316)
Quechua	12.4	16.6	14.5	-4.2 (0.579)	2.2 (0.779)
Number of classrooms	**49**	**47**	**48**		

Source: *Leer Juntos, Aprender Juntos* Classroom Observation Form—Final Follow-ups 2015 and 2016.

Note: Regression-adjusted means. *P*-values in parentheses. None of the differences between evaluation means presented in this table is statistically significant.

6. Classroom environment

Table E.12 shows the books and materials in Spanish and Quechua observed in the 3rd grade classrooms in the evaluation.

Table E.12. Books and materials observed in the classroom

Books and materials	Leer Juntos (A)	Leer Juntos-school only (B)	Prevailing practice (C)	Impact of community action (A–B)	Impact of in-school component (B–C)
Percentage of classrooms in which:					
More than 25 books in Spanish were observed	92.0	80.5	82.7	11.5 (0.122)	-2.2 (0.773)
More than 25 books in Quechua were observed	79.6	72.4	68.1	7.2 (0.449)	4.3 (0.656)
10 or more of the following were observed:					
In Spanish					
Printed materials	30.0	19.0	21.1	11.0 (0.167)	-2.2 (0.788)
Handmade materials prepared by the teacher	79.6	65.4	70.8	14.1 (0.134)	-5.4 (0.572)
Handmade materials prepared by the students	45.2	50.0	43.5	-4.8 (0.621)	6.5 (0.511)
In Quechua					
Printed materials	0.0	2.1	2.1	-2.1 (0.396)	0.0 (1.000)
Handmade materials prepared by the teacher	10.3	6.2	4.1	4.1 (0.425)	2.2 (0.682)
Handmade materials prepared by the students	6.2	4.2	0.0	2.0 (0.599)	4.2 (0.269)
Number of classrooms	**49**	**47**	**48**		

Source: *Leer Juntos, Aprender Juntos* Classroom Observation Form—Final Follow-ups 2015 and 2016.

Note: Regression-adjusted means. *P*-values in parentheses. None of the differences between evaluation means presented in this table is statistically significant.

APPENDIX F:
STANDARD DEVIATIONS OF CHILDREN'S READING SKILLS MEASURES

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Standard deviations of children's reading skills measures

Table F.1 presents the standard deviations of the reading skills measures (Chapter V) we used to examine the impacts of the components of *Leer Juntos, Aprender Juntos*.

Table F.1. Standard deviations of children's reading skills outcome measures

Outcome	Leer Juntos (A)	Leer Juntos-school only (B)	Prevailing practice (C)
Decoding			
Number of pseudo-words read correctly in one minute (of 50)	13.49	13.63	13.70
Accuracy score (0 to 1)	0.30	0.31	0.31
Fluency			
Number of words read correctly in one minute (of 154)	28.36	26.15	27.71
Accuracy score (0 to 1)	0.31	0.31	0.32
Reading comprehension			
Number of questions answered correctly (of 15)	3.71	3.60	3.71
Percentage of children who answered at least one question in the comprehension task correctly (achieved basic reading comprehension capabilities)	0.40	0.41	0.41
Number of children	**358**	**338**	**326**

Source: *Leer Juntos, Aprender Juntos* Students' Literacy Skills Assessment—Final Follow-ups 2015 and 2016.

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APPENDIX G:
SENSITIVITY ANALYSES

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Sensitivity analyses

As mentioned in Chapter V, we conducted robustness checks on two important assumptions we made in the estimation of program impacts. First, we re-weighted the data to account for differences in the number of children who completed the 3rd grade literacy skills assessment (also called "respondents") and avoid underweighting students whose classmates were absent. We reweighted the data of each child *i* in the 3rd grade in school *s* using the following formula:

$$weight_{is} = \frac{Number\ of\ students\ in\ the\ sample\ in\ school\ s}{Number\ of\ respondents\ to\ the\ assessment\ in\ school\ s}$$

By reweighting data that way, our results on regression-adjusted mean differences between treatment groups will correspond to the mean reading outcomes of the average respondent in the schools in the sample. The results do not vary when we estimate program effects based on the reweighted data. Table G.1 presents the regression-adjusted means of the literacy assessment skills we assessed in 3rd grade, by treatment group. As the table shows, we found that the main result presented in Chapter V still holds when we account for students' nonresponse: the percentage of children who have basic reading comprehension skills in the 3rd grade is larger in Group B (the schools that implemented the in-school component of the *Leer Juntos, Aprender Juntos* program) than in Group C (the schools in the prevailing practice group that did not implement any of the program components).

Table G.1. Differences between treatment groups in children's literacy outcomes, accounting for nonresponse to the 3rd grade assessment

Outcome	Leer Juntos (A)	Leer Juntos-school only (B)	Prevailing practice (C)	Impact of community action (A–B)	Impact of in-school component (B–C)
Decoding					
Number of pseudo-words read correctly in one minute (of 50)	23.1	22.9	21.0	0.2 (0.836)	1.9 (0.067)
Accuracy score (0 to 100)	69.3	70.3	64.3	-1.0 (0.665)	6.0* (0.020)
Fluency					
Number of words read correctly in one minute (of 154)	41.6	41.4	38.7	0.2 (0.915)	2.7 (0.225)
Accuracy score (0 to 100)	73.6	78.5	71.7	-4.9* (0.035)	6.8* (0.014)
Reading comprehension					
Number of questions answered correctly (of 15)	4.7	4.8	4.3	0.1 (0.874)	0.5 (0.088)
Percentage of children who answered at least one question in the comprehension task correctly (achieved basic reading comprehension capabilities)	78.6	83.4	74.3	-4.8 (0.213)	9.1* (0.014)
Number of children	**358**	**338**	**326**		

Source: *Leer Juntos, Aprender Juntos* Students' Literacy Skills Assessment—Final Follow-ups 2015 and 2016.

Note: Regression-adjusted means. *P*-values in parentheses.

* Difference in group means is statistically significant at the 0.05 level.

For a second check on the robustness of our assumptions, we also calculated differences between treatment groups in mean literacy outcomes in the 3rd grade based on the sample of children that has complete data for all the control variables included in the regression model. The sample with complete data in literacy outcome variables and control variables includes 866 children. In comparison, the sample that has complete data on literacy outcome variables but has incomplete data in control variables (for which we imputed in the analyses presented in Chapter V) includes 1,022 children. Using complete data reduces the sample size by about 15 percent. As Table G.2 shows, the findings do not change when we use a sample with complete data. In particular, under this alternative assumption we also found that the percentage of children who acquired basic reading comprehension skills in the 3rd grade is larger in the schools that implemented the in-school component of the program than in the schools that did not receive the program.

Table G.2. Differences between treatment groups in children's literacy outcomes, based on sample with complete data

Outcome	Leer Juntos (A)	Leer Juntos-school only (B)	Prevailing practice (C)	Impact of community action (A–B)	Impact of in-school component (B–C)
Decoding					
Number of pseudo-words read correctly in one minute (of 50)	23.3	23.7	20.8	-0.4 (0.692)	2.9* (0.002)
Accuracy score (0 to 100)	68.8	72.5	63.5	-3.7 (0.097)	9.0* (0.002)
Fluency					
Number of words read correctly in one minute (of 154)	42.3	41.9	38.5	0.4 (0.837)	3.4 (0.101)
Accuracy score (0 to 100)	73.9	79.4	71.0	-5.5* (0.030)	8.4* (0.002)
Reading comprehension					
Number of questions answered correctly (of 15)	4.7	4.7	4.4	0.0 (0.996)	0.3 (0.248)
Percentage of children who answered at least one question in the comprehension task correctly (achieved basic reading comprehension capabilities)	79.8	84.2	72.5	-4.4 (0.275)	11.7* (0.002)
Number of children	**301**	**283**	**282**		

Source: *Leer Juntos, Aprender Juntos* Students' Literacy Skills Assessment—Final Follow-ups 2015 and 2016.

Note: Regression-adjusted means. *P*-values in parentheses.

* Difference in group means is statistically significant at the 0.05 level.

We also examined program impacts on literacy outcomes for subgroups of students defined by phase (cohort). Table G.3 presents the findings from that analysis. In Phase II, children in Group B had better decoding and fluency accuracy scores than their counterparts in Group C. Also, in Phase II, the percentage of children who have a basic level of competency in reading comprehension was larger than in Group C. We did not find any pattern of statistically significant impacts of the community action component for either Phase I or Phase II children. Finally, we did not find any statistically significant differences in the program impacts on children's reading outcomes between Phase I and Phase II.

Table G.3. Impacts on the literacy outcomes of children in Phase I and Phase II schools

Outcome	Leer Juntos (A)	Leer Juntos-school only (B)	Prevailing practice (C)	Impact of community action[a] (A–B)	Impact of in-school component[b] (B–C)
Children in Phase I schools					
Decoding					
Number of pseudo-words read correctly in one minute (of 50)	24.5	22.1	21.9	2.46 (0.119)	0.2 (0.896)
Accuracy score (0 to 100)	71.0	68.8	65.5	2.2 (0.501)	3.3 (0.346)
Fluency					
Number of words read correctly in one minute (of 154)	45.2	38.8	39.3	6.4 (0.051)	-0.5 (0.869)
Accuracy score (0 to 1)	76.0	75.9	71.5	0.1 (0.971)	4.4 (0.269)
Reading comprehension					
Number of questions answered correctly (of 15)	5.1	4.6	4.4	0.4 (0.239)	0.3 (0.453)
Percentage of girls who achieved basic reading comprehension skills	79.6	78.9	74.4	0.7 (0.905)	4.5 (0.412)
Children in Phase II schools					
Decoding					
Number of pseudo-words read correctly in one minute (of 50)	22.2	22.9	19.8	-0.7 (0.580)	3.1* (0.027)
Accuracy score (0 to 100)	68.3	70.6	62.7	-2.3 (0.474)	7.9* (0.010)
Fluency					
Number of words read correctly in one minute (of 154)	39.5	42.4	37.8	-2.9 (0.264)	4.6 (0.123)
Accuracy score (0 to 1)	72.3	79.8	72.0	-7.6* (0.012)	7.8* (0.021)
Reading comprehension					
Number of questions answered correctly (of 15)	4.6	4.8	4.2	-0.2 (0.518)	0.6 (0.120)
Percentage of boys who achieved basic reading comprehension skills	79.3	86.6	74.3	-7.3 (0.105)	12.3* (0.009)
Number of children in Phase I schools	**185**	**178**	**183**		
Number of children in Phase II schools	**173**	**160**	**143**		

Source: *Leer Juntos, Aprender Juntos* Students' Reading Skills Assessment—Final Follow-ups 2015 and 2016.

Note: Regression-adjusted means. *P*-values in parentheses.

[a]The differences between Phase I and Phase II in impacts of the community of action component were not statistically significant for any reading outcomes.

[b]The differences between Phase I and Phase II in impacts of the in-school component were not statistically significant for any reading outcomes.

* Difference in group means is statistically significant at the 0.05 level.

Finally, Table G.4 presents our findings on the effects of the full intervention (the community action component and the teacher training and coaching component) on children's reading outcomes. We found statistically significant differences between children in schools implementing the full intervention (Group A) and children in schools implementing the prevailing practice (Group C): children in Group A read more pseudo-words per minute and had higher decoding accuracy scores than children in Group C. The percentage of children who achieved a basic level of reading comprehension was higher in Group A than in Group C, but this difference is not statistically significant. Also, children in Group A read correctly more words in the fluency task and answered correctly more questions in the reading comprehension task than children in Group C, and those differences are statistically significant at the 0.10 level ($p = 0.086$ for the difference in the fluency task and $p = 0.055$ for the difference in the reading comprehension task).

Table G.4. Impacts of the full intervention

Outcome	Leer Juntos (A)	Prevailing practice (C)	Impact of full intervention (A–C)
Decoding			
Number of pseudo-words read correctly in one minute (of 50)	23.2	20.9	2.3* (0.019)
Accuracy score (0 to 100)	69.5	64.1	5.4* (0.016)
Fluency			
Number of words read correctly in one minute (of 154)	42.0	38.6	3.4 (0.086)
Accuracy score (0 to 100)	73.8	71.7	2.1 (0.362)
Reading comprehension			
Number of questions answered correctly (of 15)	4.8	4.3	0.5 (0.055)
Percentage of children who answered at least one question in the comprehension task correctly (achieved basic reading comprehension capabilities)	79.0	74.3	4.8 (0.162)
Number of children	**358**	**326**	

Source: *Leer Juntos, Aprender Juntos* Students' Literacy Skills Assessment—Final Follow-ups 2015 and 2016.

Note: Regression-adjusted means. *P*-values in parentheses.

* Difference in group means is statistically significant at the 0.05 level.

APPENDIX H:
EFFECTS OF THE COMMUNITY COMPONENT FOR BOYS AND GIRLS

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Effects of the community component for boys and girls

As described in Chapter V, we did not find any statistically significant differences between Groups A and B (effect of the community component) in the literacy outcomes of the evaluation's girls and boys in the 3rd grade. Table H.1 presents the differences between Groups A and B in the means of the literacy outcomes of the evaluation's boys and girls, expressed in standard deviation units (effect sizes).

Table H.1. Community component effects on literacy outcomes for girls and boys, in standard deviation units

Outcome	Effect size for girls	Effect size for boys
Decoding		
Number of pseudo-words read correctly in one minute	-0.06	0.13
Accuracy score (0 to 1)	-0.09	0.06
Fluency		
Number of words read correctly in one minute	-0.03	0.09
Accuracy score (0 to 1)	-0.19	-0.10
Reading comprehension		
Number of questions answered correctly	0.03	-0.01
Percentage of children achieved basic reading comprehension skills	-0.38	0.02

Source: *Leer Juntos, Aprender Juntos* Students' Literacy Skills Assessment—Final Follow-ups 2015 and 2016.

Note: Effect sizes are calculated as the difference in adjusted means between two treatment groups (in this table, Groups A and B) divided by the pooled and weighted standard deviation of the two groups (Hedges' *g*) for continuous outcome measures, and as the log odds ratio divided by 1.65 (Cox index) for dichotomous outcome measures. None of the effect sizes presented in this table is statistically significant at the 0.05 level.

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APPENDIX I:
THE COSTS OF *LEER JUNTOS, APRENDER JUNTOS*

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The costs of *Leer Juntos, Aprender Juntos*

We estimated the cost per child of *Leer Juntos, Aprender Juntos* in Peru to be approximately $527 for the full *Leer Juntos, Aprender Juntos* program and $434 for the in-school component only. We estimated these values using a combination of expenditure data and program implementation records supplied by Save the Children, the implementer of the program. The approach was to begin with the total cost of the program based on the size of the grant awarded to Save the Children and allocate those costs to the two countries in which the program operated (Peru and Guatemala), the two types of activities (in-school and community), and finally, to the correct number of children who were served. We tried to account for fixed costs that were specific to operating the program at this particular scale of 197 schools across the two countries. The goal was to estimate a marginal cost per child that would be comparable to the impact per child that we estimated using the evaluation sample of children who were in the 1st grade at the point of random assignment. Marginal cost is the cost to provide services to one additional child if the program is operational. This contrasts with average cost, which spreads the cost of central office staff and program start-up over the number of children being served. We had to make several assumptions, as follows.

- The only difference in costs between Group C schools and the intervention schools (Groups A and B) were those associated with the *Leer Juntos, Aprender Juntos* program. For example, any routine teacher training provided by the Ministry of Education was offered to all three groups equally and participation in *Leer Juntos* did not offset any of these costs. This assumption may overstate the costs of *Leer Juntos* if there were such offsets.
- All of the costs of *Leer Juntos, Aprender Juntos* were accounted for in the Save the Children budget. Specifically, no donated goods or services enhanced the program offerings. In fact, the program as implemented in Group A (which included the community component) relied on community volunteers. When we attempted to estimate the dollar value of time for program volunteers, even generous estimates resulted in trivial amounts when divided by the number of children. Many of the volunteers were parents or older siblings, whose time was difficult to quantify using a shadow price. To the extent that such volunteer hours were in fact taken away from productive activities, this assumption may understate the full cost of *Leer Junto, Aprender Juntos*.
- The ratio of costs of the program as offered to Group A versus Group B (with or without the community component) was the same for Guatemala as it was for Peru. We had to make this assumption because the expenditure data were sufficiently detailed for Guatemala to make distinctions between the in-school and community components, whereas for Peru they were not. In Peru, many services were subcontracted with an organization whose costs appeared as a line item for which we could not determine the nature of the activities. The ratio of Group A to Group B costs that we estimated using Guatemala expenditure data was 1.87. We applied this ratio to the total costs in Peru.
- The duration of treatment for all children is the same as the duration of treatment for children in the evaluation's impact analysis sample.

- To calculate the number of participants for the program in its steady state, we first calculated the maximum enrollment in each year and then averaged across the two years of observation. We did this for Phase I and II of the program and then calculated the final number by summing across both phases. It was important to calculate the number of children participating in each component of the program in order to generate a cost per child. Some children in Group A were also counted as enrolled even if they were not in grades 1 to 3 because the reading buddies community activity took place in schools. The number of participants calculated for Group A only includes students enrolled in grades 1 to 3.
- We converted costs to constant 2014 dollars using the Consumer Price Index – Urban.
- The marginal cost calculation assumed that 9 percent of the total costs were fixed and the rest were variable (by child). This number came from the amount spent by Save the Children as a fraction of the total grant. In reality, the costs per child of implementing a program like *Leer Juntos, Aprender Juntos* will depend on the number of children per school, the distance of the schools from the program office, the number of schools, and other factors. Readers interested in using our estimate of costs to plan future implementation should examine the conditions described in Chapter I and consider the local context before extrapolating from the Peru experience.

Costs were mostly made up of personnel salaries and benefits, followed by travel costs associated with sending technical staff into the field to conduct trainings and coaching. Other costs included educational materials and supplies.

APPENDIX J:
EMERGENT LITERACY SKILLS OF GIRLS AND BOYS IN THE EVALUATION AT BASELINE

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Emergent literacy skills of girls and boys in the evaluation at baseline

To provide more context to the impact findings for subgroups of girls and boys, we looked at the results for girls and boys on the emergent literacy skills assessments we conducted during the baseline data collection (in 2013 for Phase I and 2014 for Phase II). In terms of levels, the girls in the schools in the treatment groups (Groups A and B) had, on average, slightly higher scores in the six assessments than the boys in the treatment groups (Table J.1). For example, girls in Groups A and B scored, on average, 14.9 and 14.3 points, respectively, in the letter identification assessment, while boys in Groups A and B scored, on average, 14.4 and 14.1 points, respectively, in the same assessment.

Table J.1. Baseline emergent literacy skills of girls and boys in the evaluation

Literacy outcome	Leer Juntos (A)	Leer Juntos-school only (B)	Prevailing practice (C)	(A–B)	(B–C)
Girls					
Letter identification (average score out of 24 possible points)	14.9	14.3	14.5	0.6 (0.364)	-0.2 (0.805)
Emergent writing (average score out of 22 possible points)	10.6	9.7	12.0	0.8 (0.282)	-2.3* (0.004)
Emergent reading (average score out of 9 possible points)	2.0	1.8	2.7	0.2 (0.588)	-1.0* (0.007)
Phonemic awareness (average score out of 10 possible points)	3.2	3.0	3.1	0.2 (0.449)	-0.1 (0.630)
Pseudo-word decoding (number correct in one minute, up to 50)	1.9	1.9	3.1	0.0 (0.955)	-1.2 (0.050)
Listening comprehension (average score out of 6 possible points)	2.1	2.2	2.2	0.0 (0.951)	0.0 (0.832)
Boys					
Letter identification (average score out of 24 possible points)	14.4	14.1	14.1	0.3 (0.758)	0.1 (0.943
Emergent writing (average score out of 22 possible points)	9.7	9.3	10.2	0.4 (0.637)	-0.9 (0.254)
Emergent reading (average score out of 9 possible points)	1.8	1.7	2.3	0.1 (0.786)	-0.6 (0.119)
Phonemic awareness (average score out of 10 possible points)	2.8	2.9	3.1	-0.1 (0.774)	-0.2 (0.411)
Pseudo-word decoding (number correct in one minute, up to 50)	1.4	1.1	3.1	0.3 (0.593)	-1.9* (0.010)
Listening comprehension (average score out of 6 possible points)	1.9	2.0	2.2	-0.1 (0.623)	-0.2 (0.482)
Number of children	**349**	**324**	**316**		

Source: *Leer Juntos, Aprender Juntos* Students' Emergent Literacy Skills Assessment—Baseline 2013 and 2014.

Note: Regression-adjusted means. *P*-values in parentheses.

* Difference in group means is statistically significant at the 0.05 level.

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APPENDIX K:
DATA COLLECTION INSTRUMENTS

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K.1. Survey instruments

The baseline, midline, and endline survey instruments are available online upon request at USAID's Development Data Library website (https://data.usaid.gov/)

K.2. Qualitative data collection instruments

This section includes the following qualitative data collection instruments

1. Save the Children staff interview instrument
2. Save the Children specialist interview instrument
3. Community volunteers interview instrument
4. Teachers in treatment Groups A and B focus group protocol
5. Teachers in Group C focus group protocol
6. Parents in treatment Groups A and B focus group protocol
7. Community action component activities observation instrument

1. *LEER JUNTOS, APRENDER JUNTOS*: SAVE THE CHILDREN STAFF

A. ROLES AND RESPONSIBILITIES

1. What is your role and what are your responsibilities in the implementation of LJAJ? What were some of your primary activities in the LJAJ implementation?
2. How/when did you learn the program model and intervention goals? What type of support did you receive to understand the program goals?
   - Probe: hires dedicated exclusively for LJAJ are more committed or steeped into the program? How much of the original intervention model gets lost in translation as it is adapted and implemented by different organizations?
3. How is the implementation team organized?
   - Probe: communication line, decision-making, changes to the organization during the project
4. What challenges in the LJAJ implementation have you encountered in your role? How have you handled them?

B. ADAPTATION OF THE LITERACY BOOST MODEL TO PERU

5. How was the Literacy Boost model adapted to Guatemala, particularly to the sociocultural and linguistic context of Quiché?
   - Probe: who, when, how was it done; explore adaptations to the teacher training and the community action components
6. How is the K'iche' language and culture incorporated into the program?
7. What challenges came up during the cultural adaptation? How were those challenges addressed? Has the model or the teaching strategies evolved over the course of the project? How?

C. FIDELITY

8. How was the teacher training component organized and how did it take place? What have been the main challenges in training and coaching teachers? How were those addressed?
   - Probe: explore specific challenges by activity type: book banks, book fairs, reading buddies, reading camps
9. How was the reading assessment component of the program implemented? What were the challenges in administering or using assessment data? How was the reading assessment data used?
   - Probe: were teachers able to use assessment data to inform instruction? How did you provide assessment data to teachers, how they received it? Did they use it?
10. How has LJAJ been implemented in phase I and phase II schools? What are the main differences between phases? In what ways has implementation of LJAJ varied from school to school?
11. What aspects of the program did not take place according to plan or to SC guidelines?

D. SC KEY STAFF'S PERCEPTIONS ON PROGRAM TAKE UP AND IMPACT

12. How have school principals, teachers, parents and children received the LJAJ activities?

13. What challenges have come up with parents' and children's participation in program activities? How were those challenges addressed?
14. In what ways do you think LJAJ can be improved to better serve teachers and students in that region?
15. How can program take up be improved? What changes would be needed?

E. PROGRAM GOALS AND PERCEIVED IMPACTS

16. Is the program reaching the intended target population, and, if not, why not?
17. How do you track and measure the program's goals?
    - Probes: how are benchmarks set and tracked? How have you adjusted to meet program goals?
18. Do you think students in the program are actually reading better? How has the program benefited children and families?
    - Do you think students in the program are actually spending more time reading at home and at school?

D. WRAP UP

19. In your view, what aspects of the program have been the most successful ones, and which ones the least?
20. What recommendation would you make to future implementers if this programs were to be scaled up or implemented in other regions in Guatemala or other countries with indigenous populations?

Thanks for your collaboration!

2. *LEER JUNTOS, APRENDER JUNTOS*: VOLUNTARIOS

Presentación

Gracias por aceptar reunirse con nosotros el día de hoy. Grade y Mathematica Policy Research, una firma de investigación y evaluación independiente con sede en los EE.UU., está trabajando con Save the Children para llevar a cabo una evaluación del Programa "Leer Juntos, Aprender Juntos (LJAJ)" y para entender los programas educativos de la región de Apurímac. El propósito de nuestra conversación de hoy es conocer más acerca de sus experiencias como voluntarios. Nuestra conversación durará unos 60 minutos aproximadamente. Nos gustaría grabar y tomar notas durante la discusión para que podamos recordar con precisión las experiencias que ustedes compartan con nosotros.

Un grupo focal es una conversación grupal guiada, en este caso con voluntarios como ustedes, para aprender acerca de sus experiencias. El moderador del grupo hará preguntas acerca de la enseñanza de la lectura en primer y segundo grado. Por favor, tenga en cuenta que no hay respuestas correctas o incorrectas en la conversación. Las preguntas del moderador sirven para organizar la conversación, pero esperamos que los participantes quieran compartir sus opiniones y experiencias relacionadas al tema. La participación en la discusión de grupo es voluntaria y no es necesario responder a preguntas que no quiera contestar.

Les pediremos a todos los participantes mantener en reserva lo que otras personas compartan durante el grupo y no compartir lo conversado fuera del grupo. Lo que ustedes compartan aquí se mantendrá en privado. Sus opiniones no se compartirán con personas fuera del equipo de investigación, y los participantes no se identificarán con información personal. En las transcripciones y notas de los grupos focales se omitirán los nombres de las personas que participan y su nombre no aparecerá en informes o presentaciones.

Vamos a grabar la discusión en grupo para facilitar la toma de notas, sin embargo solamente el equipo de investigación tendrá acceso a la grabación. La grabación de audio se borrará después de que termine el estudio.

Si tienen alguna pregunta o duda, por favor, contactar a María Balarin mbalarin@grade.org.pe, a cargo del estudio, o a Kristell Benavides kbenavides@grade.org.pe / telf. 01 247 9988. También puede comunicarse con Camila Fernandez en cfernandez@mathematica-mpr.com.

A. ROL Y MOTOVACIÓN DE LOS VOLUNTARIOS

Quisiera empezar preguntándoles sobre su rol como voluntarios en el programa LJAJ. ¿Que los llevó a convertirse en voluntarios de LJAJ?

1. ¿Cuáles han sido sus funciones y responsabilidades?
2. ¿En qué consisten las actividades en las que ustedes colaboran?
3. ¿Cuál es su opinión sobre las actividades de la comunidad?
4. ¿De qué manera ayudan estas actividades a los estudiantes?
5. ¿De qué manera ayudan estas actividades a los docentes?
6. ¿De qué formas han contribuido a las actividades de LJAJ? (Tiempo, materiales)
7. ¿Qué actividades que realizaban en su vida diaria han dejado de hacer por participar como voluntarios de LJAJ?
8. ¿Qué desafíos han tenido que afrontar como voluntarios del programa LJAJ? ¿Cómo los han afrontado?
9. ¿Qué les ha impedido participar en más actividades de su comunidad?
10. ¿Recomendarían el voluntariado a otras personas en su comunidad? ¿Por qué sí/Por qué no?
11. ¿Qué les ha gustado más de ser voluntarios para LJAJ?

B. PERCEPCIONES DE LOS VOLUNTARIOS SOBRE EL PROGRAMA

12. ¿Cómo describirían la percepción de los miembros de la comunidad sobre las actividades comunitarias de LJAJ?
13. ¿Cómo se incorporan en las actividades comunitarias de LJAJ el lenguaje y la cultura quechua?
14. ¿Cuáles han sido los principales desafíos que han encontrado con respecto a la participación de padres y niños?
15. ¿Ha habido alguna dificultad específica en la implementación de las actividades comunitarias del programa LJAJ?
16. ¿Cómo sienten que ha sido la recepción del Programa por parte de la comunidad y las familias con las que participan?
17. ¿De qué manera creen que LJAJ puede mejorar para adaptarse a las necesidades de los miembros de la comunidad? ¿Qué aspectos del programa dirían que están funcionando bien y cuáles no? ¿Por qué?

D. CIERRE

Para finalizar,

18. ¿Tienen alguna idea o información adicional sobre el programa, las actividades del programa, o la implementación del programa que les gustaría compartir?

¡Gracias por su participación!

3. *LEER JUNTOS, APRENDER JUNTOS*: GRUPOS FOCALES CON ESPECIALISTAS DEL PROGRAMA

Presentación

Gracias por aceptar reunirse con nosotros el día de hoy. Como ustedes saben, GRADE y Mathematica Policy Research, una firma de investigación y evaluación independiente con sede en los EE.UU., están trabajando con Save the Children para llevar a cabo una evaluación del Programa "Leer Juntos, Aprender Juntos (LJAJ)" y para entender los programas educativos de la región de Apurímac.
El propósito de esta conversación es conocer sus experiencias en la implementación de las actividades del Programa Leer Juntos, Aprender Juntos (LJAJ). Nuestra conversación durará alrededor de 90 minutos.

Por favor, tenga en cuenta que no hay respuestas correctas o incorrectas en la conversación. La participación en la discusión de grupo es voluntaria y no es necesario responder a preguntas que no quiera contestar. Les pediremos a todos los participantes mantener en reserva lo que otras personas compartan durante el grupo y no compartir lo conversado fuera del grupo. Lo que ustedes compartan aquí se mantendrá en privado. Sus opiniones no se compartirán con personas fuera del equipo de investigación, y los participantes no se identificarán con información personal. En las transcripciones y notas de los grupos focales se omitirán los nombres de las personas que participan y su nombre no aparecerá en informes o presentaciones.

Vamos a grabar la discusión en grupo para facilitar la toma de notas, sin embargo solamente el equipo de investigación tendrá acceso a la grabación. La grabación de audio se borrará después de que termine el estudio.

Si tienen alguna pregunta o duda, por favor, contactar a María Balarin mbalarin@grade.org.pe, a cargo del estudio, o a Kristell Benavides kbenavides@grade.org.pe / telf. 01 247 9988. También puede comunicarse con Camila Fernandez en cfernandez@mathematica-mpr.com.

A. ROL DE LOS ESPECIALISTAS

Quisiera comenzar preguntándoles ¿cómo le enseñan ustedes a leer a los estudiantes de primero y segundo grado?

1. ¿Cuáles han sido sus responsabilidades?
2. ¿Cuáles han sido sus actividades principales en la implementación del programa?
3. ¿Qué tipo de preparación y soporte han recibido durante la implementación del programa? ¿De parte de quién?
4. ¿Cómo está organizado el equipo de implementación? ¿Con quienes se comunican para planear el trabajo y conversar sobre sus responsabilidades y actividades en el campo?
5. ¿En qué forma sienten ustedes que han contribuido con la implementación del Programa? (tiempo, habilidades, materiales)
6. ¿Qué desafíos ha enfrentado en su rol? ¿Cómo han manejado esos desafíos hasta el momento?

B. FIDELIDAD DE LA IMPLEMENTACIÓN DEL PROGRAMA

7. ¿Cómo se ha implementado LJAJ en las escuelas de la fase I y la fase II? ¿Qué diferencias ha habido en la implementación del programa en las escuelas de la fase 1 las de la fase 2?
8. ¿Cómo se organizó el componente de formación a los docentes y cómo se realizó? ¿Cuáles han sido los principales desafíos? ¿Cómo fueron asumidos por los docentes?
9. ¿Cómo se organizó el componente de acompañamiento a los docentes y cómo se realizó? ¿Cuáles han sido los principales desafíos? ¿Cómo fueron asumidos por los docentes?
10. ¿Cómo se han organizado los talleres con padres y cómo se han realizado? ¿Cuáles han sido los principales desafíos? ¿Cómo fueron asumidos por los padres?
11. ¿Cómo se organizó el banco de libros y cómo ha sido usado en la comunidad?
    - Explorar el contenido de la actividad y los roles de los diferentes actores. ¿Cuáles han sido los principales desafíos con respecto a esta actividad?
    - ¿Cómo se respondió a dichos desafíos?
12. ¿Cómo se organizó el préstamo de libros y cómo se ha llevado a cabo en la comunidad?
    - Explorar el contenido de la actividad y los roles de los diferentes actores. ¿Cuáles han sido los principales desafíos con respecto a esta actividad?
    - ¿Cómo se respondió a dichos desafíos?
13. ¿Cómo se organizó la actividad amigos de la lectura y cómo se ha llevado a cabo en la comunidad? ¿Cuáles han sido los principales desafíos con respecto a esta actividad?
    - Explorar el contenido de la actividad y los roles de los diferentes actores. ¿Cómo se respondió a dichos desafíos?
14. ¿Cómo se organizaron los campamentos de lectura y cómo se ha llevado a cabo en la comunidad? ¿Cuáles han sido los principales desafíos?
    - Explorar el contenido de la actividad y los roles de los diferentes actores. ¿Cómo se respondió a dichos desafíos?
15. ¿Qué aspectos del programa no se han desarrollado de acuerdo al planeamiento o a las indicaciones de Kallpa?
16. ¿Qué tipo de adaptaciones han tenido que hacer para satisfacer las necesidades de la población objetivo?

17. ¿Qué tipo de diferencias se han producido en la implementación del programa en las escuelas según su tamaño, ubicación geográfica, tipo o cualquier otra característica relevante?

C. PERCEPCIONES DE LOS ESPECIALISTAS

18. ¿Cómo han recibido los profesores, padres y estudiantes las actividades de LJAJ?
19. ¿Cómo describirían las características de los estudiantes/padres que participan de las actividades en la comunidad?
20. ¿Cómo se incorporan en las actividades de la comunidad el lenguaje y la cultura quechua?
21. ¿Cuáles han sido los principales desafíos que han encontrado con respecto a la participación de padres y niños?
22. ¿De qué manera creen que LJAJ puede mejorar para adaptarse a las necesidades de los miembros de la comunidad?

D. CIERRE

23. ¿Tienen alguna idea o información adicional sobre el programa, las actividades del programa, o la implementación del programa que les gustaría compartir?
24. ¿Cuáles prácticas pedagógicas utiliza con mayor frecuencia, y por qué? ¿Podrían dar algunos ejemplos?
25. ¿Qué aspectos de la lectura y la escritura son más difíciles para los estudiantes?
26. ¿Qué aspectos de la lectura y la escritura aprenden con facilidad los estudiantes?

¡Gracias por su participación!

4. *LEER JUNTOS, APRENDER JUNTOS*: GRUPOS FOCALES DE MAESTROS (GRUPO A & B)

Presentación

Gracias por aceptar reunirse con nosotros el día de hoy. Como ustedes saben, GRADE y Mathematica Policy Research, una firma de investigación y evaluación independiente con sede en los EE.UU., están trabajando con Save the Children para llevar a cabo una evaluación del Programa "Leer Juntos, Aprender Juntos (LJAJ)" y para entender los programas educativos de la región de Apurímac.
El propósito de nuestra conversación de hoy es conocer más acerca de sus experiencias enseñándole a leer a sus alumnos de primer y segundo grado. Nuestra conversación durará unos 60 minutos aproximadamente. Nos gustaría grabar y tomar notas durante la discusión para que podamos recordar con precisión las experiencias que ustedes compartan con nosotros.

Un grupo focal es una conversación grupal guiada, en este caso con maestros como ustedes, para aprender acerca de sus experiencias. El moderador del grupo hará preguntas acerca de la enseñanza de la lectura en primer y segundo grado. Por favor, tenga en cuenta que no hay respuestas correctas o incorrectas en la conversación. Las preguntas del moderador sirven para organizar la conversación, pero esperamos que los participantes quieran compartir sus opiniones y experiencias relacionadas al tema. La participación en la discusión de grupo es voluntaria y no es necesario responder a preguntas que no quiera contestar.

Les pediremos a todos los participantes mantener en reserva lo que otras personas compartan durante el grupo y no compartir lo conversado fuera del grupo. Lo que ustedes compartan aquí se mantendrá en privado. Sus opiniones no se compartirán con personas fuera del equipo de investigación, y los participantes no se identificarán con información personal. En las transcripciones y notas de los grupos focales se omitirán los nombres de las personas que participan y su nombre no aparecerá en informes o presentaciones.

Vamos a grabar la discusión en grupo para facilitar la toma de notas, sin embargo solamente el equipo de investigación tendrá acceso a la grabación. La grabación de audio se borrará después de que termine el estudio.

Si tienen alguna pregunta o duda, por favor, contactar a María Balarin mbalarin@grade.org.pe, a cargo del estudio, o a Kristell Benavides kbenavides@grade.org.pe / telf. 01 247 9988. También puede comunicarse con Camila Fernandez en cfernandez@mathematica-mpr.com.

A. PEDAGOGÍA DE LA LECTURA A LOS ALUMNOS DE PRIMER Y SEGUNDO GRADO

Quisiera comenzar preguntándoles ¿cómo le enseñan ustedes a leer a los estudiantes de primero y segundo grado?

1. ¿Cuáles son las prácticas pedagógicas para la enseñanza de la lectura que funcionan mejor con sus alumnos? ¿Qué métodos de instrucción se utilizan? ¿Podrían dar algunos ejemplos?
2. ¿Cuáles prácticas pedagógicas utiliza con mayor frecuencia, y por qué? ¿Podrían dar algunos ejemplos?
3. ¿Qué aspectos de la lectura y la escritura son más difíciles para los estudiantes?
4. ¿Qué aspectos de la lectura y la escritura aprenden con facilidad los estudiantes?

B. PARTICIPACIÓN EN EL PROGRAMA, APRENDIZAJE Y CAMBIOS EN LAS PRÁCTICAS

Ahora hablemos del programa Leer Junto, Aprender Juntos (LJAJ).

5. ¿Qué conocen sobre el programa LJAJ? ¿Cuáles son los objetivos del programa?
6. ¿En qué tipo de formación o actividades de entrenamiento de LJAJ han participado?
7. ¿Qué cosas has aprendido en el entrenamiento LJAJ? ¿Podrían dar algunos ejemplos?
8. ¿Qué tipo de cosas aprendió a través del coaching entrenamiento (acompañamiento) LJAJ? ¿Podrían dar algunos ejemplos?
9. ¿De qué manera LJAJ ha cambiado su manera de enseñarles a sus alumnos a leer? ¿Podrían dar algunos ejemplos?
10. ¿De qué manera LJAJ ha cambiado sus rutinas en la clase o en la forma de interactuar con sus estudiantes? ¿Podrían dar algunos ejemplos?
11. ¿Cuáles son las diferencias y similitudes entre la pedagogía de la lectura del Currículo Nacional Base o del Programa Nacional de Lectura y la de LJAJ?
12. ¿Enfrentó algún desafío para estar disponible para participar en actividades de capacitación o entrenamiento de LJAJ? ¿Cuáles fueron esos desafíos?
13. ¿Qué aspectos de LJAJ les han gustado más? ¿Por qué?
14. ¿Qué aspectos de LJAJ les han gustado menos gustó menos? ¿Por qué?

C. ASPECTOS SOCIOCULTURALES DEL PROGRAMA

15. ¿Qué aspectos del programa toman en cuenta la cultura, el idioma y las costumbres de su comunidad?
16. ¿Qué aspectos del programa son difíciles de integrar en la comunidad?

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17. ¿En qué medida creen que LJAJ le ha ayudado a mejorar su capacidad de enseñar a los niños a leer?
18. ¿Qué retos o dificultades tienen enfrentan aún al enseñarle a leer a los alumnos de primer y segundo grado? ¿Qué les podría ayudar a superar esos desafíos?
19. ¿Cuáles son los aspectos del programa que se pueden mejorar?
20. ¿Recomendaría el entrenamiento LJAJ a otros en la comunidad? ¿Por qué / por qué no?
21. ¿Tiene usted alguna idea o información adicional sobre el programa, las actividades del programa o de la implementación que le gustaría compartir?

¡Gracias por su participación!

5. *LEER JUNTOS, APRENDER JUNTOS*: GRUPOS FOCALES DE MAESTROS (GRUPO C)

Presentación

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El propósito de nuestra conversación de hoy es conocer más acerca de sus experiencias enseñándole a leer a sus alumnos de primer y segundo grado. Nuestra conversación durará unos 60 minutos aproximadamente. Nos gustaría grabar y tomar notas durante la discusión para que podamos recordar con precisión las experiencias que ustedes compartan con nosotros.

Un grupo focal es una conversación grupal guiada, en este caso con maestros como ustedes, para aprender acerca de sus experiencias. El moderador del grupo hará preguntas acerca de la enseñanza de la lectura en primer y segundo grado. Por favor, tenga en cuenta que no hay respuestas correctas o incorrectas en la conversación. Las preguntas del moderador sirven para organizar la conversación, pero esperamos que los participantes quieran compartir sus opiniones y experiencias relacionadas al tema. La participación en la discusión de grupo es voluntaria y no es necesario responder a preguntas que no quiera contestar.

Les pediremos a todos los participantes mantener en reserva lo que otras personas compartan durante el grupo y no compartir lo conversado fuera del grupo. Lo que ustedes compartan aquí se mantendrá en privado. Sus opiniones no se compartirán con personas fuera del equipo de investigación, y los participantes no se identificarán con información personal. En las transcripciones y notas de los grupos focales se omitirán los nombres de las personas que participan y su nombre no aparecerá en informes o presentaciones.

Vamos a grabar la discusión en grupo para facilitar la toma de notas, sin embargo solamente el equipo de investigación tendrá acceso a la grabación. La grabación de audio se borrará después de que termine el estudio.

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A. PEDAGOGÍA DE LA LECTURA A LOS ALUMNOS DE PRIMER Y SEGUNDO GRADO

Quisiera comenzar preguntándoles ¿cómo le enseñan ustedes a leer a los estudiantes de primero y segundo? ¿Qué métodos de instrucción se utilizan?

1. ¿Qué tipo de actividades de lectura y escritura hacen los niños en su salón de clases? ¿Puede darnos algunos ejemplos?
2. ¿Cuáles son las prácticas pedagógicas para la enseñanza de la lectura que funcionan mejor con sus alumnos?
3. ¿Cuáles prácticas pedagógicas utilizan con mayor frecuencia, y por qué?
4. ¿Qué aspectos de la lectura y la escritura son más difíciles para los estudiantes? ¿Puede darnos algunos ejemplos?
5. ¿Qué aspectos de la lectura y la escritura aprenden con facilidad los estudiantes? ¿Puede darnos algunos ejemplos?
6. ¿Qué retos o dificultades enfrentan al enseñarle a leer a los alumnos en primer y segundo grado?

B. EXPERIENCIAS DE FORMACIÓN Y APOYO DOCENTE

Ahora hablemos del programa de sus experiencias formándose como maestro, y del tipo de apoyo pedagógico que reciben en esta escuela.

7. ¿Han recibido alguna capacitación o entrenamiento enfocado específicamente en enseñar a leer a los niños en la escuela primaria?
8. ¿Cuál fue ese entrenamiento?¿Quién lo impartió? ¿Cuándo? ¿Puede darnos algunos ejemplos?
9. ¿Qué cosas aprendieron en el entrenamiento? ¿Puede darnos algunos ejemplos?
10. ¿En qué medida han podido aplicar lo que aprendieron en esas capacitaciones al enseñar la lectura? ¿Puede darnos algunos ejemplos?
11. ¿En qué medida lo que aprendieron ha mejorado su capacidad para enseñar a los niños a leer? ¿Puede darnos algunos ejemplos?

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Para finalizar,

12. ¿Hay algo que crean que puede ayudarles a ustedes a mejorar la manera le enseñan a aprenden a leer a los alumnos?
13. ¿Qué tipo de apoyo piensan que podría ayudar a superar los desafíos que enfrentan al enseñarle a leer a los estudiantes de primer y segundo grado?

¡Gracias por su participación!

6. *LEER JUNTOS, APRENDER JUNTOS*: PADRES DE FAMILIA (GRUPOS A&B)

- Presentación

Muchas gracias por aceptar reunirse con nosotros en este día. Nosotros hacemos parte de un equipo que está realizando un estudio sobre programas educativos en la región de Apurímac. En el estudio están colaborando varias organizaciones, entre ellas GRADE, Mathematica Policy Research (centro de investigación basada en EEUU) y Save The Children. El propósito de la conversación de hoy es aprender más acerca de de sus hijos y miembros de la familia en el proceso de aprendizaje de la lectoescritura y conocer sobre su participación en actividades dentro y fuera de la escuela para ayudarle a los niños a aprender a leer. Nuestra conversación durara alrededor de 60 minutos.

Un grupo focal es una conversación grupal guiada, en este caso con padres de familia como ustedes, para aprender acerca de sus experiencias. El moderador del grupo hará preguntas acerca de la lectura de los niños de primer y segundo grado. Por favor, tenga en cuenta que no hay respuestas correctas o incorrectas en la conversación. Las preguntas del moderador sirven para organizar la conversación, pero esperamos que los participantes quieran compartir sus opiniones y experiencias relacionadas al tema. La participación en la discusión de grupo es voluntaria y no es necesario responder a preguntas que no quieran contestar.

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Vamos a grabar la discusión en grupo para facilitar la toma de notas, sin embargo solamente el equipo de investigación tendrá acceso a la grabación. La grabación de audio se borrará después de que termine el estudio.

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A. CONOCIMIENTOS Y EXPECTATIVAS DE LOS PADRES SOBRE EL PROGRAMA LJAJ

-Quisiera empezar preguntándoles: ¿Cómo han aprendido a leer sus hijos?

1. ¿Cómo participan ustedes en el aprendizaje de la lectura? ¿Cuánto tiempo le dedican a la práctica de la lectura en su hogar?
2. ¿Qué saben ustedes sobre el programa LJAJ?
3. ¿Cuáles son los objetivos de las actividades de LJAJ? ¿Para qué sirven? ¿A quiénes están dirigidas?
4. ¿Por qué son importantes las actividades de LJAJ para ustedes?
5. ¿Cómo participan ustedes en las actividades propuestas por LJAJ?
6. ¿Cuáles eran sus expectativas con respecto LJAJ? ¿Esas expectativas han cambiado? ¿De qué manera? ¿Por qué?

B. PARTICIPACIÓN, APRENDIZAJE Y CAMBIOS EN LAS PRÁCTICAS

7. ¿En qué tipos de actividades de LJAJ han participados ustedes? ¿Con qué frecuencia?
8. ¿Qué han aprendido ustedes en esas actividades?
9. ¿En qué tipos de actividades de LJAJ han participados sus hijos? ¿Con cuánta frecuencia?
10. ¿Qué han aprendido sus hijos en esas actividades?
11. ¿Han afrontado algún desafío para poder participar en las actividades de LJAJ? ¿Cuáles fueron esos desafíos? (tiempo, relevancia percibida de la actividad, etc.) ¿Les gustaría participar más de las actividades de LJAJ?
12. ¿Cuáles son los aspectos de las actividades de LJAJ que más les gustaron? ¿Por qué?
13. ¿Cuáles son los aspectos de LJAJ que menos les gustaron? ¿Por qué? ¿De qué formas creen que LJAJ los ha beneficiado a ustedes y a sus familias?¿De qué forma LJAJ ha cambiado sus rutinas en casa o el modo en que interactúan con sus hijos?
14. ¿Las actividades de LJAJ con los padres les parecen apropiadas para esta región (Andahuaylas/Chincheros etc.) y para su cultura? ¿Por qué?
15. ¿Las actividades de LJAJ con los niños les parecen apropiadas para esta región (Andahuaylas/Chincheros etc.) y para su cultura? ¿Por qué?

C. CIERRE

-Para finalizar,

16. ¿Creen que podrían haber algunos cambios para mejorar las actividades de LJAJ? ¿Cuáles serían sus sugerencias?
17. ¿Recomendaría participar de LJAJ a otras personas en la comunidad? ¿Por qué sí/Por qué no?
18. ¿Tienen alguna idea o información adicional sobre el programa, las actividades del programa, o la implementación del programa que les gustaría compartir?

¡Gracias por su participación!

7. *LEER JUNTOS, APRENDER JUNTOS*
FORMATO DE OBSERVACIONES DE ACTIVIDES COMUNITARIAS
ESTUDIO CUALITATIVO DE IMPLEMENTACIÓN

Fecha de la observación: |__|__| / |1__|1__| / |_2_|_0_|_1_|_4_|

Nombre del observador:

Municipio:

Tipo de Actividad:

Descripción del lugar y del contexto donde se lleva a cabo la actividad:

Número de Participantes: |__| , |__|__|__|

Número de Lideres/Voluntarios en la actividad: |__|__|__|

Descripción de Participantes:

Descripción de Actividad de Lideres/Voluntarios:

Descripción de la Actividad (lenguaje utilizado, objetivos de la actividad, materiales, instrucciones, etc.):

Involucramiento de participantes' en la Actividad (ej. qué tan involucrados estaban los participantes en la tarea, entendieron y siguieron las instrucciones dadas, parecían disfrutar la actividad):

Otras notas (ej. qué tan involucrados estuvieron los voluntarios y otros líderes en la tarea, dieron ellos instrucciones claras):

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