

“Improving Reading at Scale: Evidence for Structured Literacy Instruction in Argentina’s Primary Schools”

NCT Number: NOT YET ASSIGNED

Date: 01/28/2026

Supplementary Materials

Group level effects on component skills

Similar to the group-level analysis of the group and time effects on reading skills, we analyzed the group and time effects on component skills that were collected at more than one time point. In this analysis, we used linear mixed-effect models, with fixed effects for group (effect-coded, control coded as (-1)), time (inserted as an effect-coded categorical variable, T1 coded as (-1)), and their interaction. Models also had by-participant random intercepts, which was the maximal random-effect structure justified by the design. F-values and significance levels for the effects of group, time, and their interaction are presented in Table S1. The three measures that were assessed in more than one time point were Phoneme Segmentation, Set for variability, and Nonword Repetition. For all the component skills with more than one assessment, there was a significant main effect of time (see Table S1), meaning that, on average, participants improved in their component skills with time. Two models also revealed greater improvement in the intervention through time compared to the control group, as evidenced by significant group-by-time interactions. Thus, students in the intervention group showed significantly greater gains in phoneme segmentation, measured at T1-T4 ($F(3, 1140.94)=2.97, p=.031, \eta^2p<.01$; Fig. S1A), and in Set for Variability, measured at T1 and T4 ($F(1, 385.59)= 5.71, p=.017, \eta^2p=.01$; Fig. S1B).

Table S1.

Group-level Analyses: F-values of terms from linear mixed-effect models predicting component skills from Group (intervention vs. control), and Time.

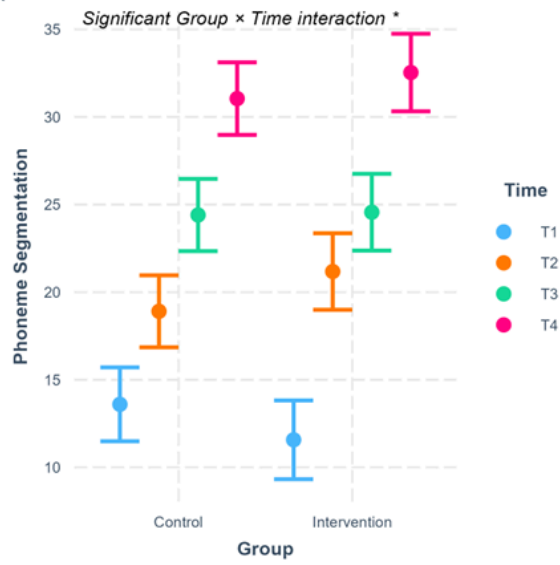
Dependent Variable	Time-points measured	Group	Time	Group X Time
Phoneme Segmentation (Phoneme Segmentation Fluency)	T1, T2, T3, T4	$F(1, 430.85) = 0.04$	$F(3, 1140.94) = 217.71^{***}$	$F(3, 1140.94) = 2.97^*$
Set for Variability (sfv)	T1, T4	$F(1, 419.09) = 0.97$	$F(1, 385.59) = 264.19^{***}$	$F(1, 385.59) = 5.71^*$
Nonword Repetition (NON_Word_Rep)	T1, T4	$F(1, 405.35) = 0.17$	$F(1, 353.70) = 195.31^{***}$	$F(2, 353.70) = 1.8$

Notes: †<.1; * <.05; **<.01; ***<.001

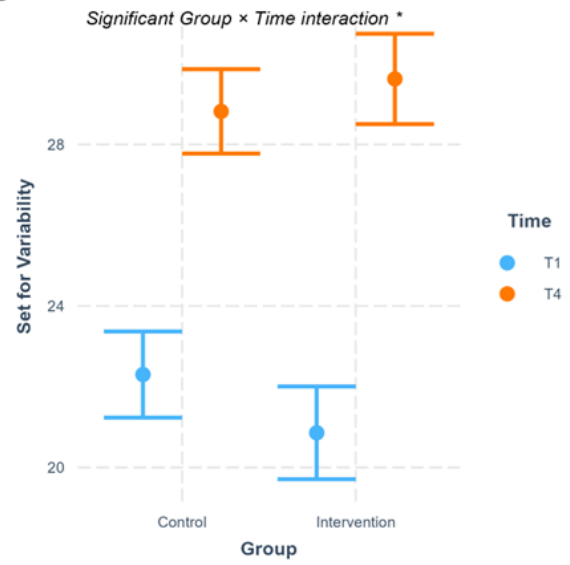
Fig. S1

Estimated Interaction Effect of Group and Time on Phoneme Segmentation (Left Panel, A); and Estimated Interaction Effect of Group and Time on Set For Variability (Right Panel, B).

A



B



Notes: †<.1; * <.05; **<.01; ***<.001

Observation Rubric for Control Group Classrooms

School Name	Section		
How many students are in the grade?			
How many students are present?			
Class topic			
Vocabulary	Yes	No	Not observed
The teacher explicitly teaches new vocabulary			
The teacher asks if they know the vocabulary			
Reading			
Letters are taught			
By their name			
By their sound			
The teacher does phonological awareness activities			
rhymes			
initial/final sound			
The teacher read texts aloud			
Students read aloud all together			
Students read aloud one by one			
After reading, the teacher asks literal questions			
After reading, the teacher asks inferential questions			
After reading, the teacher asks closed questions (YES/NO)			
After reading, the teacher asks open questions			
Students are expected/ asked to guess what it says in texts			
Writing			
Students write spontaneously in their copybooks			
Students copy tests/sentences from the board (not date and tittle)			
The teacher corrects students' spelling as part of the activity			
The teacher checks what students do in their workbooks at the moment			
The teacher corrects her students' work			

Dictations are given			
Word dictations			
Sentence dictations			
The teacher gives feedback on her student's errors			
Classroom materials			
Which of these materials are in the classroom			
One workbook for each student			
A reading book			
An alphabet posted on the classroom wall			
Words written on the wall			
Name chart			
Birthday chart			

Teacher's Survey: Originally in Spanish

Teacher's Survey Translation

Final Survey for CABA Teachers December 2022/November 2023

Email

First Name

Last Name

School Name

Education completed

- ☐ High School
- ☐ Tertiary
- ☐ University
- ☐ Other

Years of experience in the classroom

- ☐ Less than two years
- ☐ Two to Five years
- ☐ Five to ten years
- ☐ Ten to twenty years
- ☐ More than twenty years

Training and resources for the teacher

Choose all options that you consider describe the training:

- ☐ Interesting
- ☐ Provided me with new information
- ☐ Entertaining
- ☐ Boring
- ☐ Did not provide me with new knowledge
- ☐ Neutral

The training sessions were:

- ☐ Excellent
- ☐ Very good
- ☐ Good
- ☐ Regular
- ☐ I did not participate in all of them

Teacher's Manual

- ☐ Excellent
- ☐ Very good
- ☐ Good
- ☐ Regular
- ☐ I didn't use it

Participating in this research has provided me with knowledge for my literacy class.

- ☐ Totally agree
- ☐ Agree

☐ Neither agree nor disagree

☐ Disagree

☐ Totally disagree

Would you recommend this program to your colleagues?

☐ Yes

☐ No

☐ Maybe

Why? _____

How prepared are you to teach your students to read?

☐ Very prepared

☐ Well prepared

☐ Moderately prepared

☐ Not prepared

How prepared are you to teach reading to children with difficulties?

☐ Very prepared

☐ Well prepared

☐ Moderately prepared

☐ Not prepared

How prepared do you think you are to work with reading comprehension strategies (e.g., inferences, predictions, retelling, and summarizing) during reading?

☐ Very prepared

☐ Well prepared

- ☐ Moderately prepared
- ☐ Not prepared

What tools did you incorporate into your practices?

How prepared are you to teach other teachers to work with Aprendo Leyendo (I Learn to Read)?

- ☐ Very prepared
- ☐ Well prepared
- ☐ Moderately prepared
- ☐ Not prepared

What is reading fluency and why is it important?

- ☐ a. Having the ability to quickly decode sounds.
- ☐ b. Having the ability to read with accuracy and automaticity with ease, to free up cognitive effort and focus it on text comprehension.

What is reading?

- ☐ a. Decoding
- ☐ b. Saying the name of the letters
- ☐ c. Understanding written language to access meaning

What tools are fundamental for reading?

- ☐ a. Decoding
- ☐ b. Vocabulary
- ☐ c. General knowledge
- ☐ d. Decoding + vocabulary + comprehension strategies + general knowledge

Why do we teach reading lowercase letters?

- ☐ a. It is the letter found in all texts
- ☐ b. To save students the transition from reading uppercase to lowercase
- ☐ c. To teach the semantic meaning of uppercase letters
- ☐ d. All of the above answers.

Why is it important for children to read aloud?

- ☐ a. To know how each child is reading and to be able to intervene in case of errors
- ☐ b. To identify those who cannot read
- ☐ c. To give teachers more work

Why do we read lists of words, phrases, and sentences?

- ☐ a. For practice of precision, automaticity, and reading fluency
- ☐ b. To learn vocabulary
- ☐ c. For children to practice reading with good rhythm
- ☐ d. All of the above answers

Why is reading stories important?

- ☐ a. To work on reading comprehension
- ☐ b. To read taught skills in context
- ☐ c. To practice reading progressively longer stories and be able to sustain attention
- ☐ d. All of the above answers.

How many sounds do we find in the word "paquete"? (paquete means "package")

- ☐ 1
- ☐ 2

☐ 3

☐ 4

☐ 5

☐ 6

Program implementation

**In comparison with other methodologies, programs, or ways of teaching reading:
How did the implementation of Aprendo Leyendo (I Learn to Read) turn out for you?**

☐ Very challenging

☐ Challenging

☐ Easy

☐ Very easy

☐ Other:

What challenges did the implementation of the Aprendo Leyendo program present to you?

☐ Working with the whole class at the same time

☐ Catching up on the work of absent children

☐ Integrating Aprendo Leyendo with the contents of Language Practice and other curricular contents

☐ Teaching it every day for 40 or 50 minutes

☐ None

Did the Aprendo Leyendo methodology help you improve other learning areas?

☐ Yes

☐ No

What other areas have improved? Choose all that apply.

- ☐ a. The teaching of other areas of knowledge
- ☐ b. Classroom climate, coexistence, and work habits
- ☐ c. Organization and planning of classes
- ☐ d. Articulation and collaborative work among teachers
- ☐ e. None
- ☐ Other:

What did you like most about Aprendo Leyendo in classroom work?

- ☐ a. The reading and writing teaching methodology
- ☐ b. The workbooks and stories for students (type of exercises)
- ☐ c. The training for teachers and materials
- ☐ d. All points a-c
- ☐ Other:

What was the last Step you completed up to today?

Did you use the teacher's manual to organize your classes?

- ☐ All classes -
- ☐ Once a week -
- ☐ Few times -

How many times a week do you work with the program?

- ☐ 1 to 2 times a week
- ☐ 2 to 3 times a week -
- ☐ 3 to 4 times a week -
- ☐ every day

In comparison with other methodologies or programs: how motivated for reading do you notice your students are?

- ☐ More motivated
- ☐ Equally motivated
- ☐ Less motivated

Did you notice an improvement in your students' handwriting?

- ☐ A lot
- ☐ A little
- ☐ None

Do you find benefits in the practice of reading aloud and immediate feedback?

- ☐ Many
- ☐ Few
- ☐ None
- ☐ Other: _____

It seems to me that my students are learning to read:

- ☐ Better than before -
- ☐ The same as always -
- ☐ Worse than before
- ☐ Other: _____

It seems to me that my students' ability to comprehend texts:

- ☐ Has improved
- ☐ Is the same as always -

☐ Has decreased

☐ Other: _____

Describe if the Aprendo Leyendo methodology has helped improve other areas of your work in the classroom. Which ones are they?

What did you like most about the Aprendo Leyendo program?

☐ The reading and writing teaching methodology

☐ The workbooks and stories for students (type of exercises, sequencing)

☐ The training and support resources for teachers (manual, platform, bulletin board, flashcards)

☐ The reading level with which all my children finished 2nd grade

☐ All

☐ Other: _____

Would you like to teach in first and second grade again with Aprendo Leyendo?

What would you like us to improve?
