

Un Buen Comienzo: Improving language development for preschool children in disadvantaged communities in Chile

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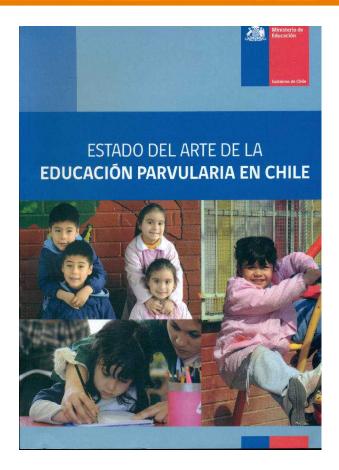




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1. Preschool Education in Chile





 In 2014, the Chilean government prioritizes preschool education (PSE)

1. ECE is made mandatory

Establishment of a Vice-Ministry of PSE

2. Coverage

- By 2017, 53% of children have access to PSE
 - 94% for transition levels
 - 48% for intermediate levels.
 - 18% for ECE

Chile is the one of the 3 OECD countries with the highest access to PSE for four year-old children

1. Preschool education in Chile





- In 2017, the **PSE curriculum** was updated
 - Focus on inclusion and diversity
 - Inclusion of educational games as a key element to promote learning
- A framework to promote learning excellence is being developed
 - Capacity building
 - Rigorous and continuous evaluation of teachers
 - Use of evidence-based pedagogical practices

- Chile obtained best results in reading comprehension for Latin America (PISA, 2015)
- Chile PSE education outcomes are below the average for OECD countries (PISA, 2015)
- 59% of the population only has basic reading Skills (CNCA, 2011)
- One in five parents enjoy reading (lower than international average) (PIRLS, 2016)

3. FEO: Who we are







Non-profit educational organization aiming at creating and increasing learning opportunities and outcomes for children from disadvantaged communities in Chile

3. FEO: What we do



ESSENCE

We exist to create and increase educational opportunites for Chilean children to improve the quality of their learning and development

VISION

To improve learning and pedagogical practices in Chilean schools through innovation

EQUITY

We use innovation and quality improvement methods to create better opportunities for children from disadvantaged communities

PILLARS

ESSENCE

INNOVATION

TRANSLATION OF EDUCATIONAL RESEARCH INTO ACTION

COLLABORATIVE WORK

4.Un Buen Comienzo

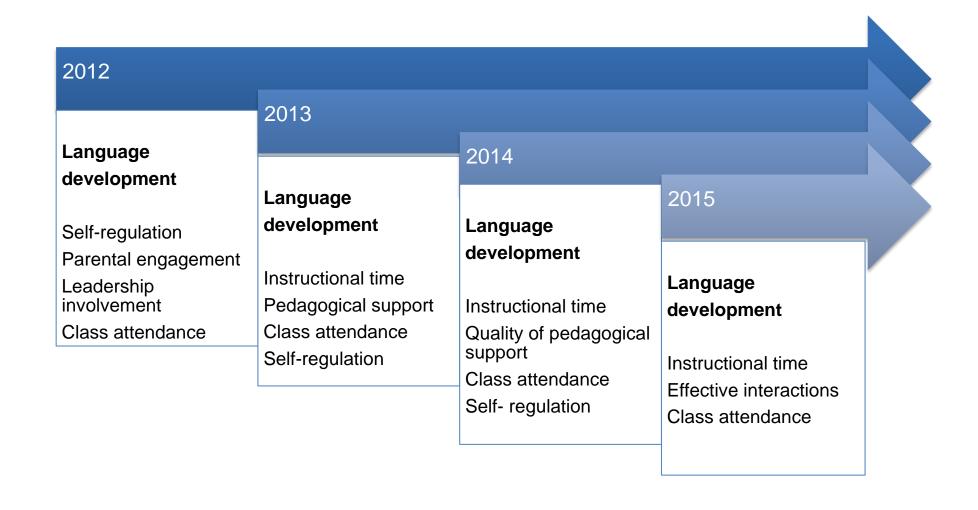




Program designed in partnership with Harvard University and the Institute for Healthcare Improvement to improve the quality of early education, to promote capability and leadership development, and to support schools in the adoption and implementation of best practices aiming at improving language and socio-emotional development of level Chilean preschool children from disadvantaged communities

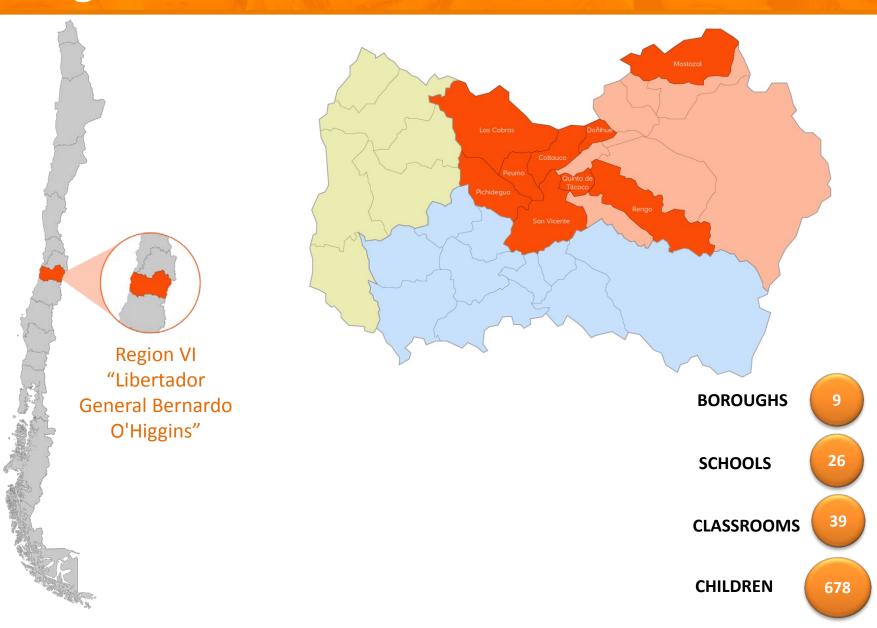
Background





Setting





Sociodemographic characteristics



Families

Sociodemographic characteristics (N=226)

Characteristic	N (%)	N (%)
Education Level of Parents	Father	Mother
Did not attend school (%)	17 (7.4)	31 (13.6)
Incomplete secondary education (%)	90 (39.8)	92 (40.5)
Complete secondary education (%)	94 (41.6)	89 (39.5)
Undergraduate school (%)	25 (11.2)	14 (6.4)

Poverty line = income <= \$361,310

<u>Income</u>	_ Family	N (%)
Less than \$200.000 (<=USD \$315)	66 (29.9)	
Less than \$200.000 (<=USD \$315) \$200.001 to \$300.000 (USD \$315 to 473)	71 (31.2)	i
\$300.001 to \$500.000 (USD \$473 to 788)	52 (23.1)	
More than \$500.000 (>USD \$788)	30 (13.2)	
Does not know	6 (2.6)	

Teachers and Leadership

Sociodemographic characteristics

	Teachers (N=39)	Leadership (N= 26)	
Characteristic	N (%) or mean	N (%) or mean	
Age	43	52	
Gender	E = E = 1		
Woman	39 (100)	11 (41)	
Man	0 (0)	15 (59)	
Education level			
Technical school	9 (24)	0 (0)	
Undergraduate	<u>25 (63)</u>	10 (40)	
Graduate	5 (13)	16 (60)	

UBC Objectives



General Objective:

- To increase the average language, vocabulary, reading comprehension and writing scores for participating children by 25% between March and June, and another 15% between June and November of 2015
- No child will end at a score lower that 70% at the end of the year.

Specific objectives:

- 1. To maximize instructional time
- 2. To improve the quality of classroom interactions
- 3. To improve school attendance
- 4. To promote school leadership and staff development

Indicators



Driver	Indicators	Goal
Instructional time	Average time (minutes) allocated to language activities per week	>= 60 minutes
Effective interactions	Average achievement score in three different CLASS domains	>= 4 socio-emotional support >= 4 classroom organization >= 3.25 pedagogical support
Class absenteeism	% of children that miss 2 days or more of class in a two-week period % of children with chronic absenteeism	Median <= 22% <=47%* (baseline 2014)
Language development	Average language, vocabulary, reading comprehension and writing scores (percentage)	25% increase between March and June 15% increase between June and November

METHODOLOGY



Using Quality Improvement methods to promote language development

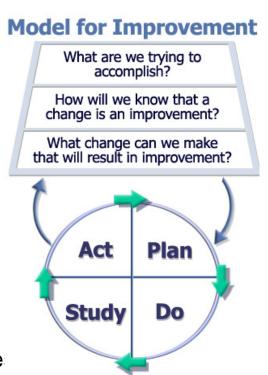


We use **quality improvement** methods to:

- 1. Improve learning processes
- 2. Adopt and adapt best practices to the local context
- 3. Sustain the changes over time in schools and communities

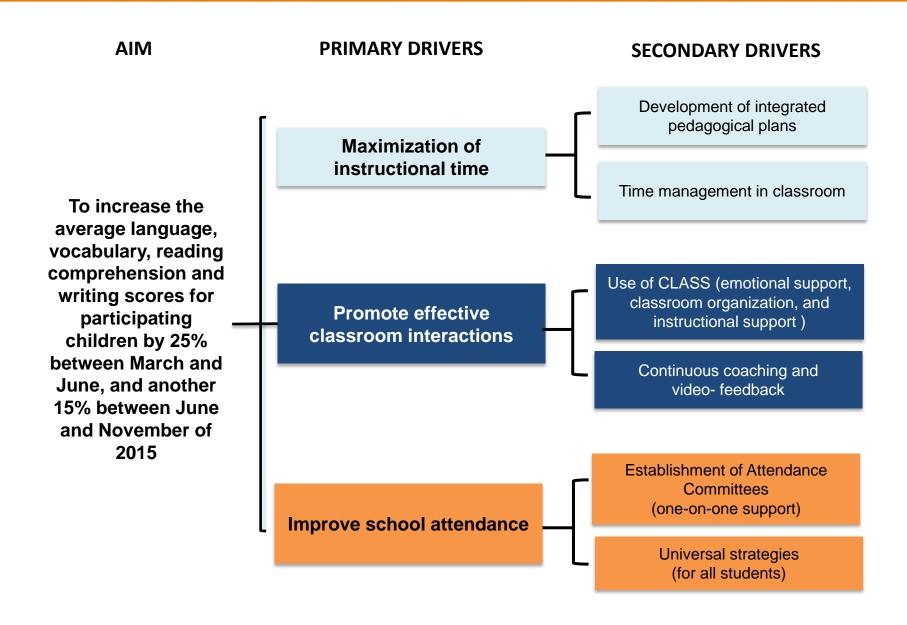
Through

- Developing local improvement initiatives
- Testing changes at small scale (classroom and school)
- Using data collected and analyzed locally to assess the change
- Promoting collaboration for learning and best practices sharing



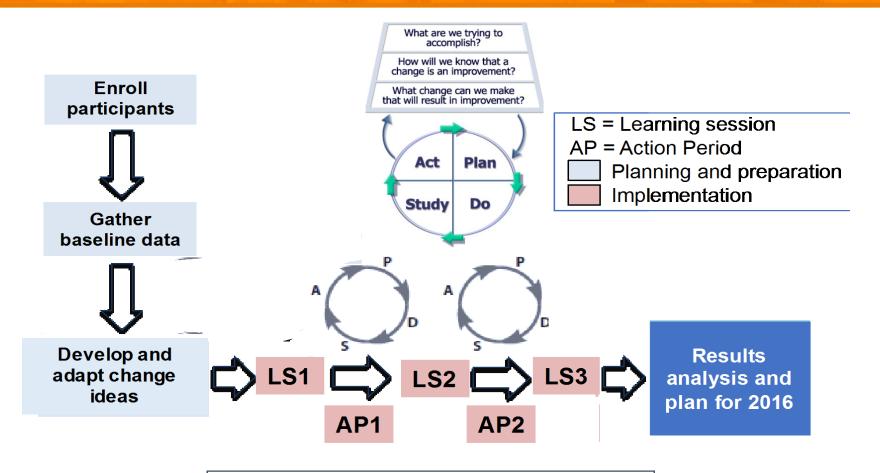
Theory of Change: Driver Diagram





Execution Theory: BTS Collaborative Model





Support: Monthly accompaniment; borough workshops and visits between schoos; and in-person and virtual trainings

Methodology: Collaboration to promote improvement and learning









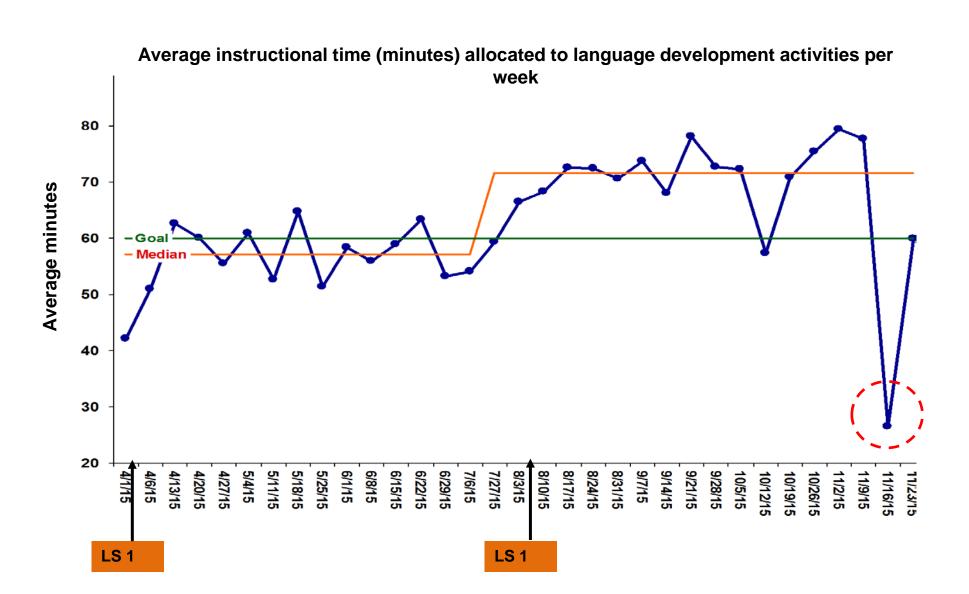


RESULTS



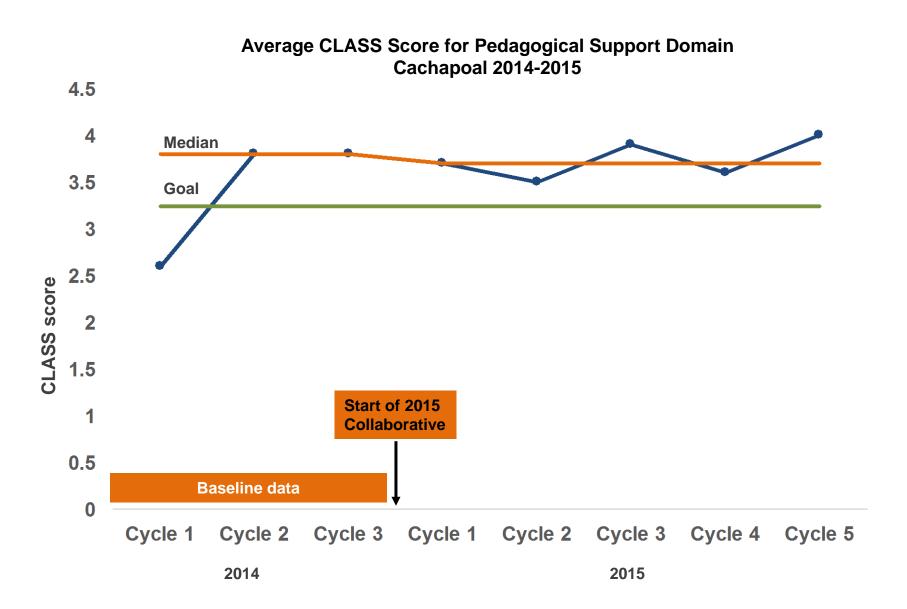
Instructional Time





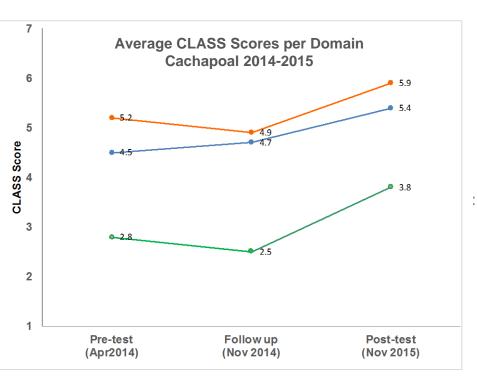
Effective interactions: Pedagogical Support Approximately 1990

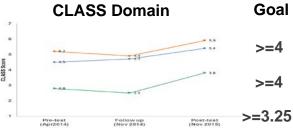




Effective interactions





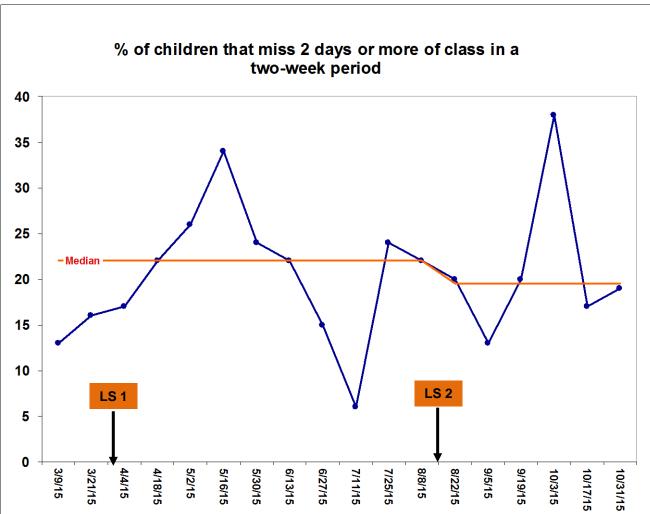


Tr	eatment gro	up	Tre	eatment gro	up	Tr	reatment gro	oup
Pre- test	Follow-up	Post-test	Pre- test	Follow-up	Post-test	: Pre-test	Follow-up	Post-test
5,2	4,9	6,2	5,2	4,9	6,2	5,2	4,9	6,2
6,9	6,5	6,9	6,9	6,5	6,9	6,9	6,5	6,9
4,6	4,8	6,1	4,6	4,8	6,1	4,6	4,8	6,1
3,9	3,3	4,5	3,9	3,3	4,5	3,9	3,3	4,5
4,8	4,9	5,8	4,8	4,9	5,8	4,8	4,9	5,8
4,5	5,1	5,4	4,5	5,1	5,4	4,5	5,1	5,4
4,3	4,2	4,9	4,3	4,2	4,9	4,3	4,2	4,9
2,6	2,0	3,7	2,6	2,0	3,7	2,6	2,0	3,7
3,1	2,7	4,2	3,1	2,7	4,2	3,1	2,7	4,2
2,7	2,8	3,4	2,7	2,8	3,4	2,7	2,8	3,4

Class absenteeism



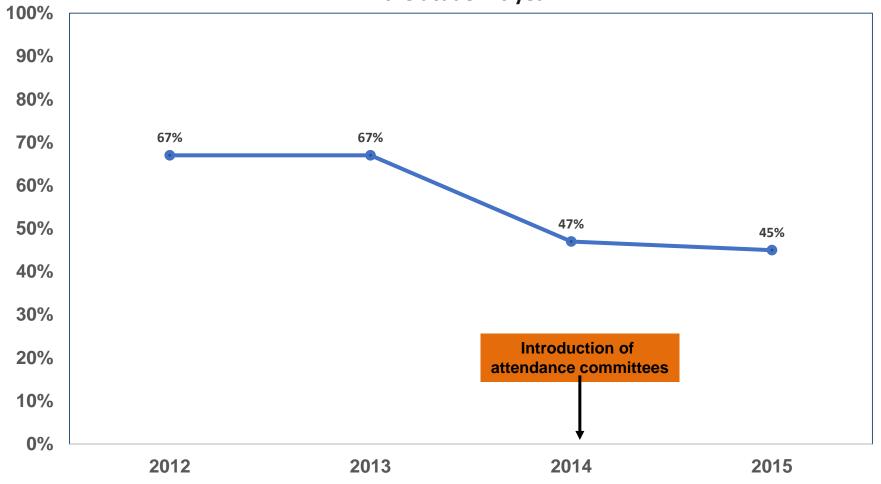




Chronic absenteeism

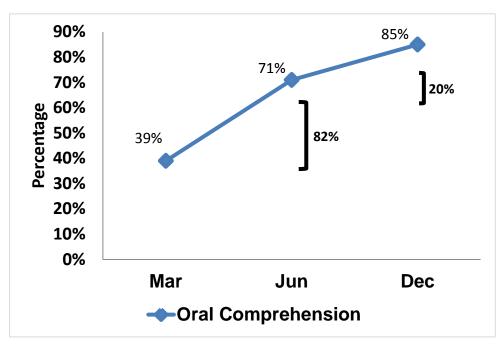


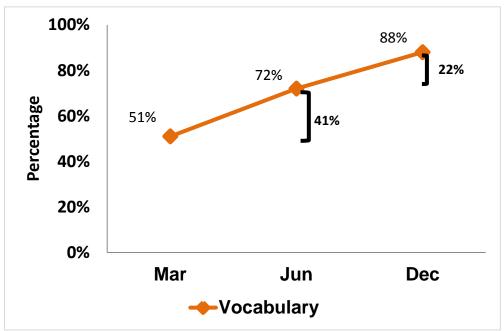
% of children who meet criteria for chronic absenteeism at the end of the academic year

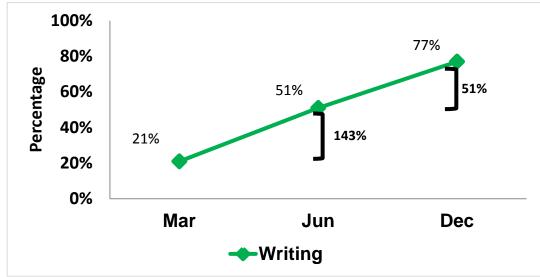


Language results: Average language, vocabulary, reading comprehension and writing scores (NT1)



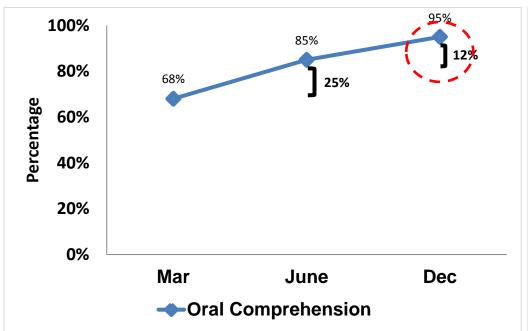


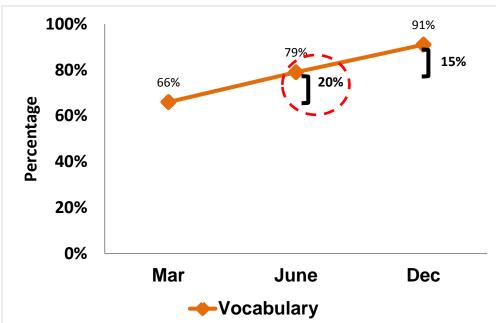


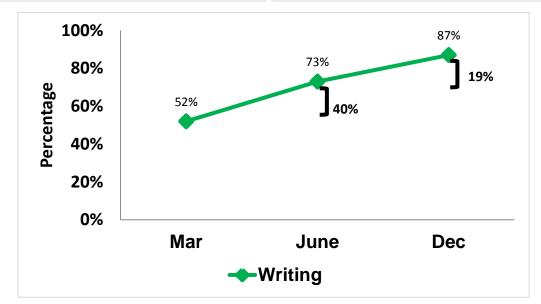


Language results: Average language, vocabulary, reading comprehension and writing scores NT2)











Results from external evaluation

An external evaluation showed a statistically significant difference between the intervention group and the control group, with a larger **effect size** for the intervention group in all domains

- Letter word-identification 0.3standard deviations (SD)
- Dictation 0.3 SD
- Passage comprehension 0.2 SD

Qualitative results

A qualitative assessment of the experience of teachers and leadership teams with the UBC collaborative highlighted the following as key facilitators to the adoption of the UBC strategies:

- Team work
- Collaboration across participating schools
- Coaching and accompaniment
- Pedagogical support
- Use of data for improvement
- Leadership buy-in and support

Conclusions



Driver	Indicators	Goal	Re	sults	
Instructional time	Average time (minutes) allocated to language activities per week	>= 60 minutes	72 minutes		
Effective interactions	Average achievement score in three different CLASS domains	>= 4 socio-emotional support >= 4 classroom organization >= 3.25 pedagogical support	Socio-emotional support = 5.9 Classroom organization = 5.4 Pedagogical support = 3.9		
Class absenteeism	% of children that miss 2 days or more of class in a two-week period % of children with chronic absenteeism	Median <= 22% <=47%* (baseline 2014)	45%		
Language development	Average language, vocabulary, reading	25% increase between March and June	Level	% increase Mar-Jun	76 increase Jun-Nov
1 1 1 1 1 1 1 1 1 1	15% increase between June and November	comprehensionVocabularyWriting	82% 41% 143%	20% 22% 51%	
			comprehension • Vocabulary	25% 20% 40%	12% 15% 19%

Case Study Video





Key Success Factors



- Adoption of a quality improvement methodology
- Translation of evidence into practice
- Adaptation to the local context
- The BTS model helped create a sense of connectedness and belonging to the collaborative
 - Common sense of purpose
 - Empowerment of local teams
 - Increased communication and interactivity among participating classrooms
 - Best practices sharing
 - Knowledge development from ongoing interaction
- Constant and continuous accompaniment and feedback
- Use of data to guide decision-making

Acknowledgements



- FEO team
- School leadership and educators teams
- Participating children and their families
- Advisors from Institute for Healthcare Improvement and Harvard University





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