



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

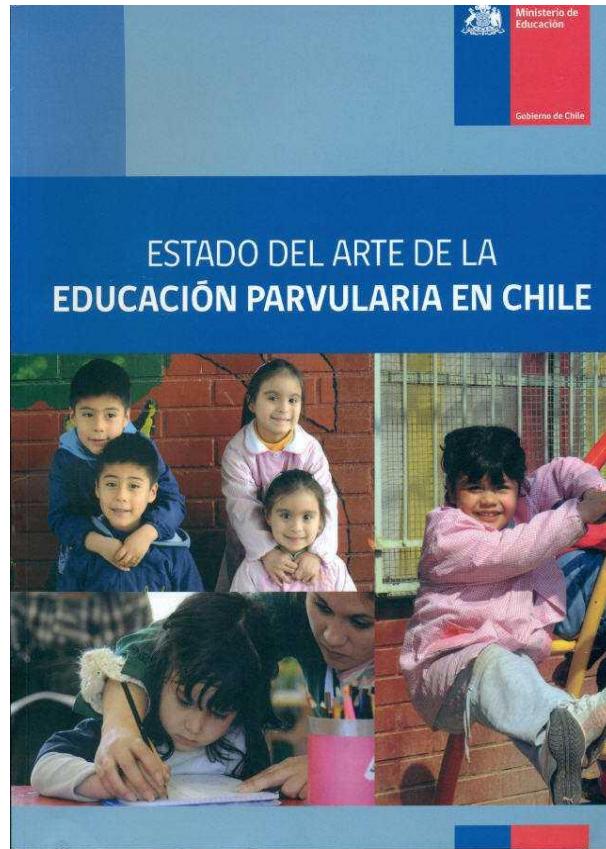
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CONTENT

1. Preschool education in Chile: Structure, access and quality
2. The challenge
3. Fundación Educacional Oportunidad
 - a) Who we are
 - b) What we do
4. Un Buen Comienzo program
 - a) Objectives
 - b) Sample
 - c) Aim
 - d) Methods
 - e) Results
 - f) Conclusions
5. Success Factors

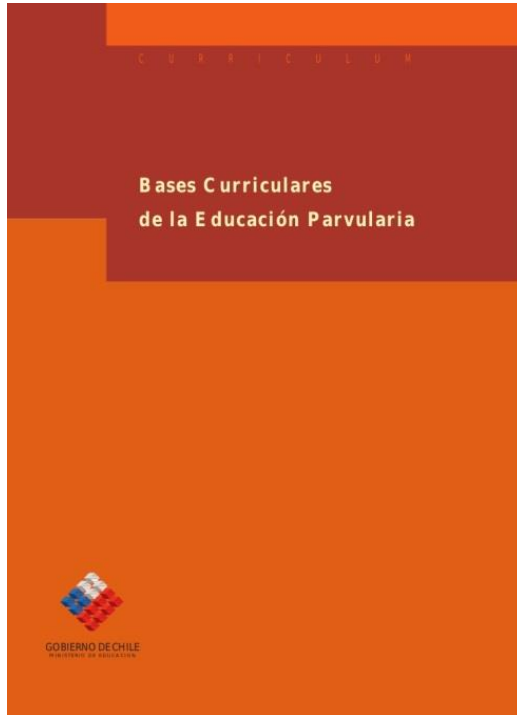
1. Preschool Education in Chile



- 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**



2. The challenge

- 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)
- Almost 50% of families living in poverty never read to their children (Strassi & Lissi, 2006)

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

OUR VISION

To improve learning and pedagogical practices in Chilean schools through innovation

3. FEO: What we do

ESSENCE

We exist to create and increase educational opportunities 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

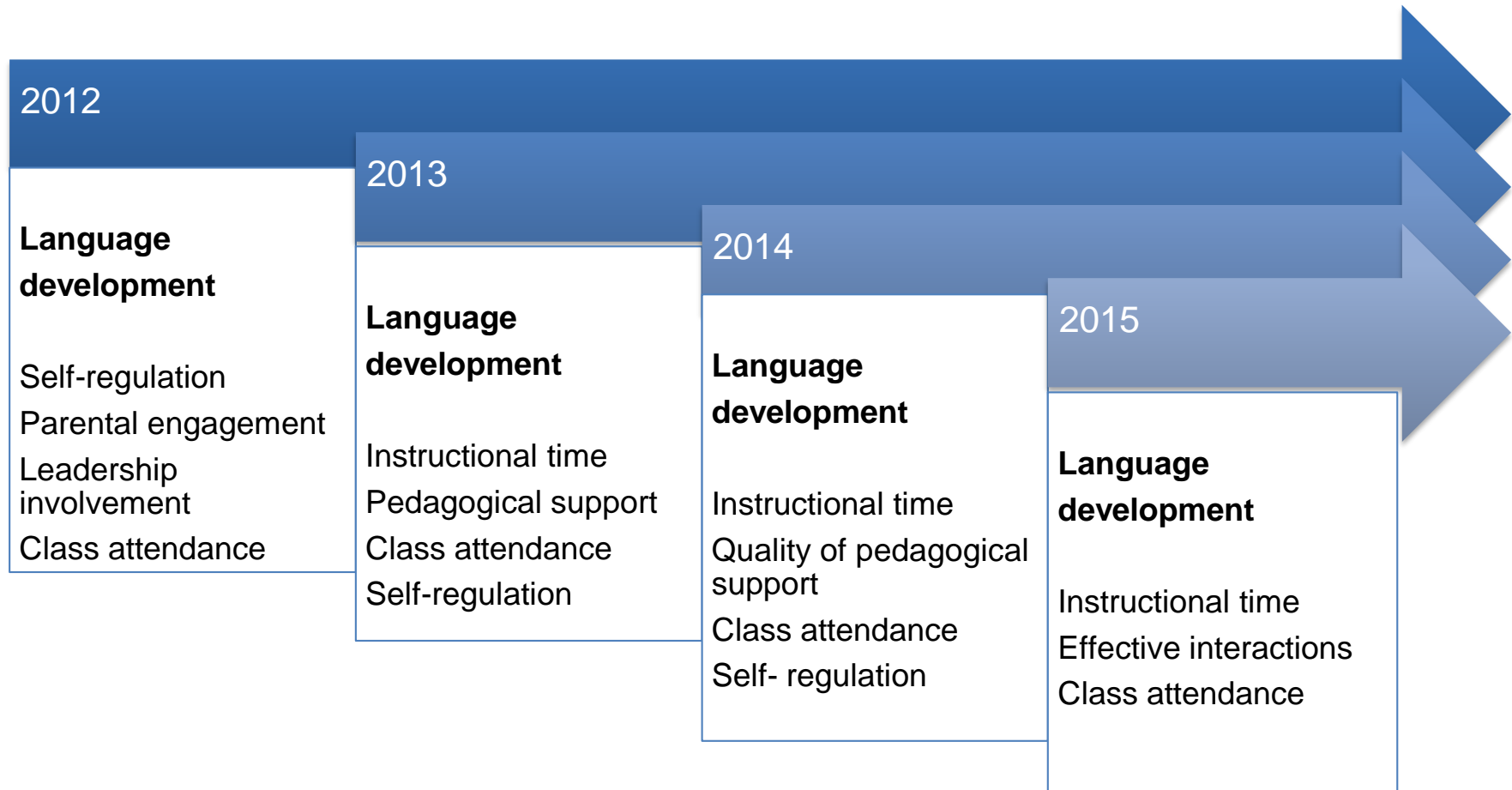
TRANSLATION OF EDUCATIONAL
RESEARCH INTO ACTION

COLLABORATIVE WORK



Un Buen Comienzo EDUCACIÓN INICIAL DE CALIDAD

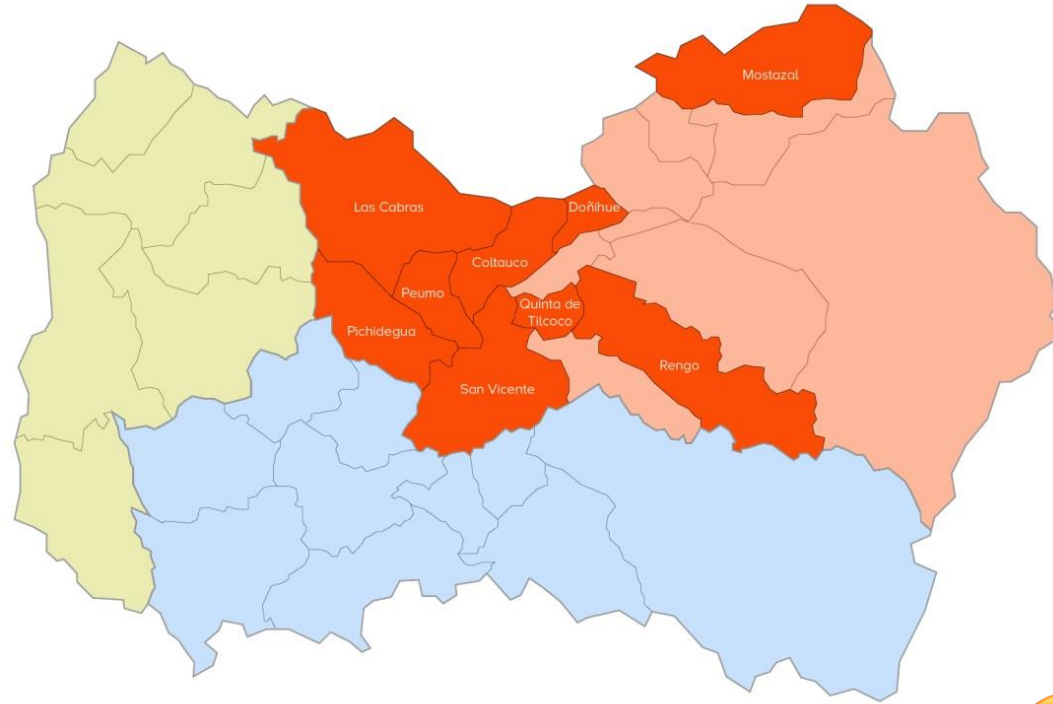
Program designed in partnership with Harvard University and the Institute for Healthcare Improvement to improve the quality of early education, to promote capability and leadership development, and to support schools in the adoption and implementation of best practices aiming at improving language and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



Setting



Region VI
"Libertador
General Bernardo
O'Higgins"



BOROUGHS

9

SCHOOLS

26

CLASSROOMS

39

CHILDREN

378

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

Income	Family	N (%)
Less than \$200.000 (≤USD \$315)	66 (29.9)	
\$200.001 to \$300.000 (USD \$315 to 473)	71 (31.2)	
\$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

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

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 than 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

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



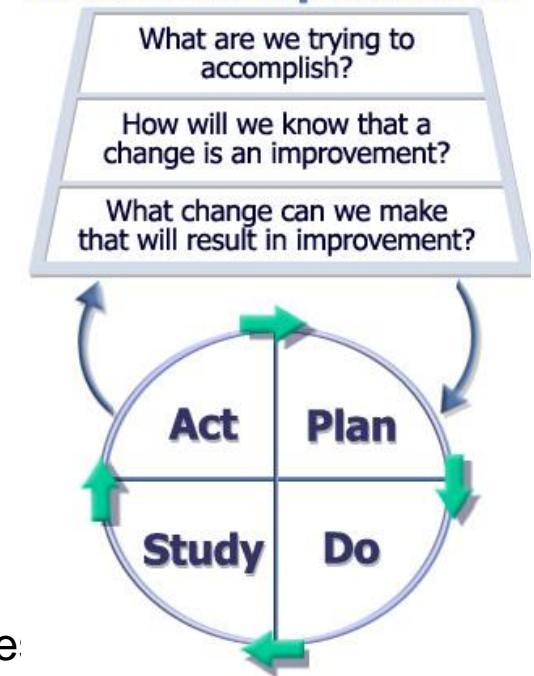
We use **quality improvement** methods to:

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

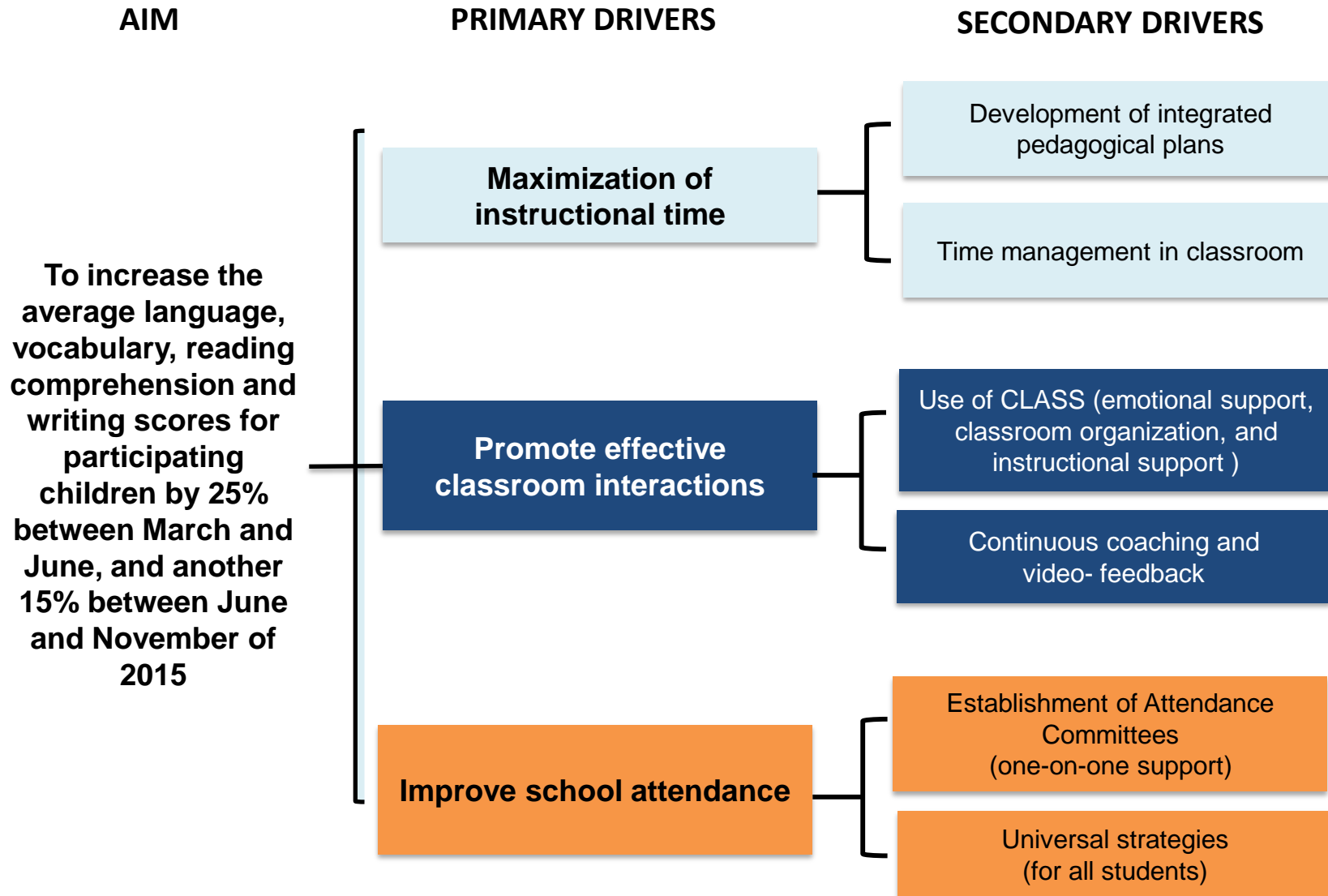
Through

- **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

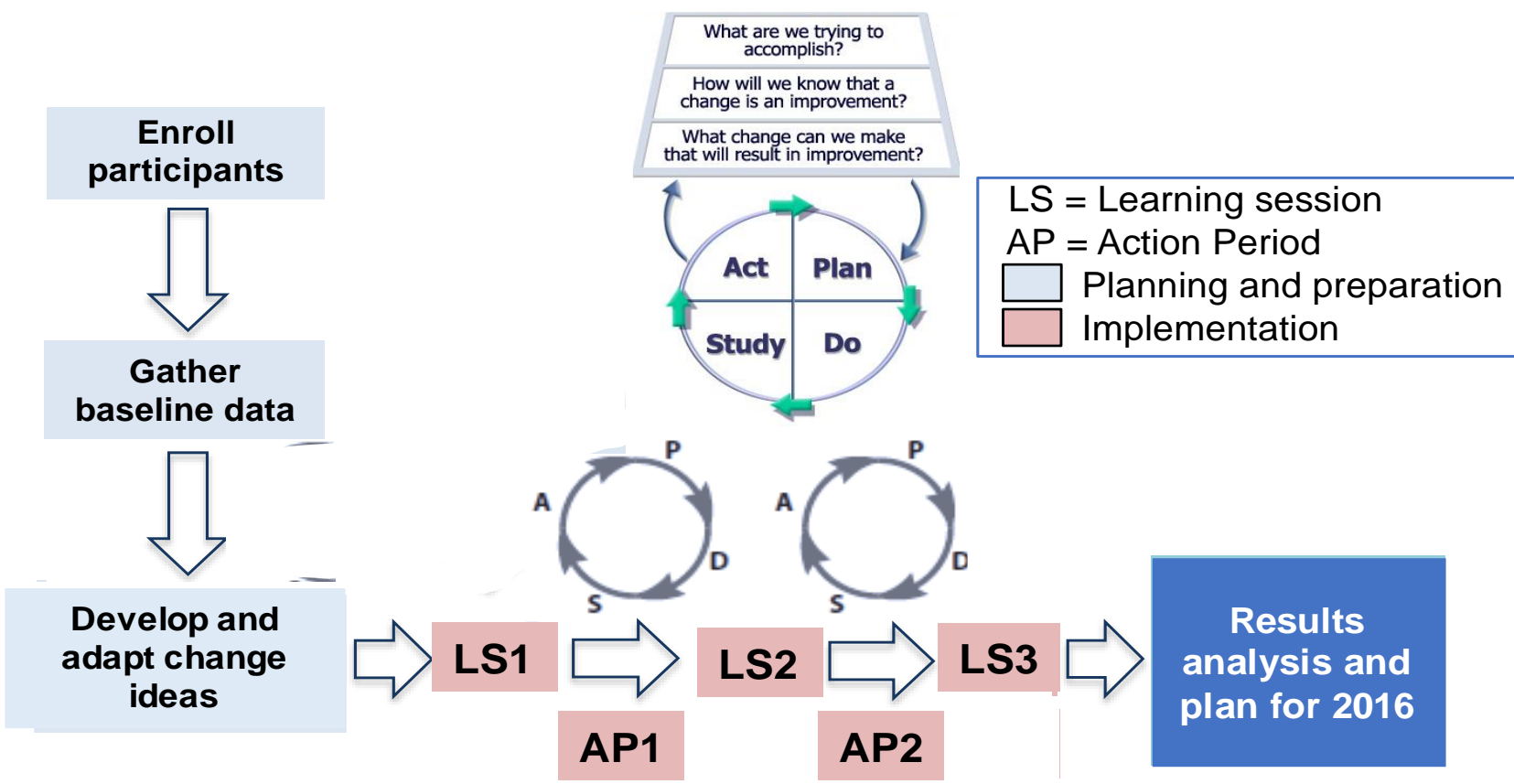
Model for Improvement



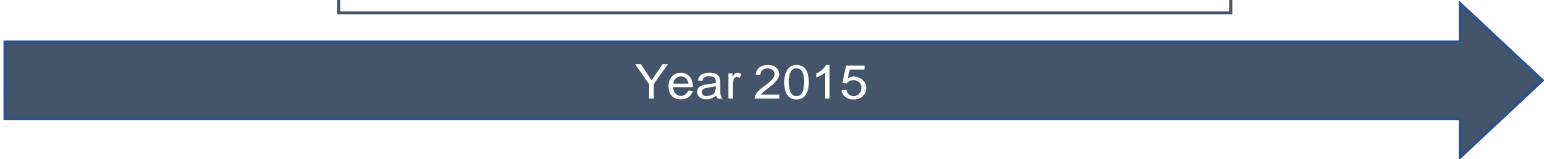
Theory of Change: Driver Diagram



Execution Theory: BTS Collaborative Model



Support: Monthly accompaniment; thorough workshops and visits between schools; and in-person and virtual trainings



Methodology: Collaboration to promote improvement and learning



Coaching session focused on improving local pedagogical practices



Session to review and provide feedback on data



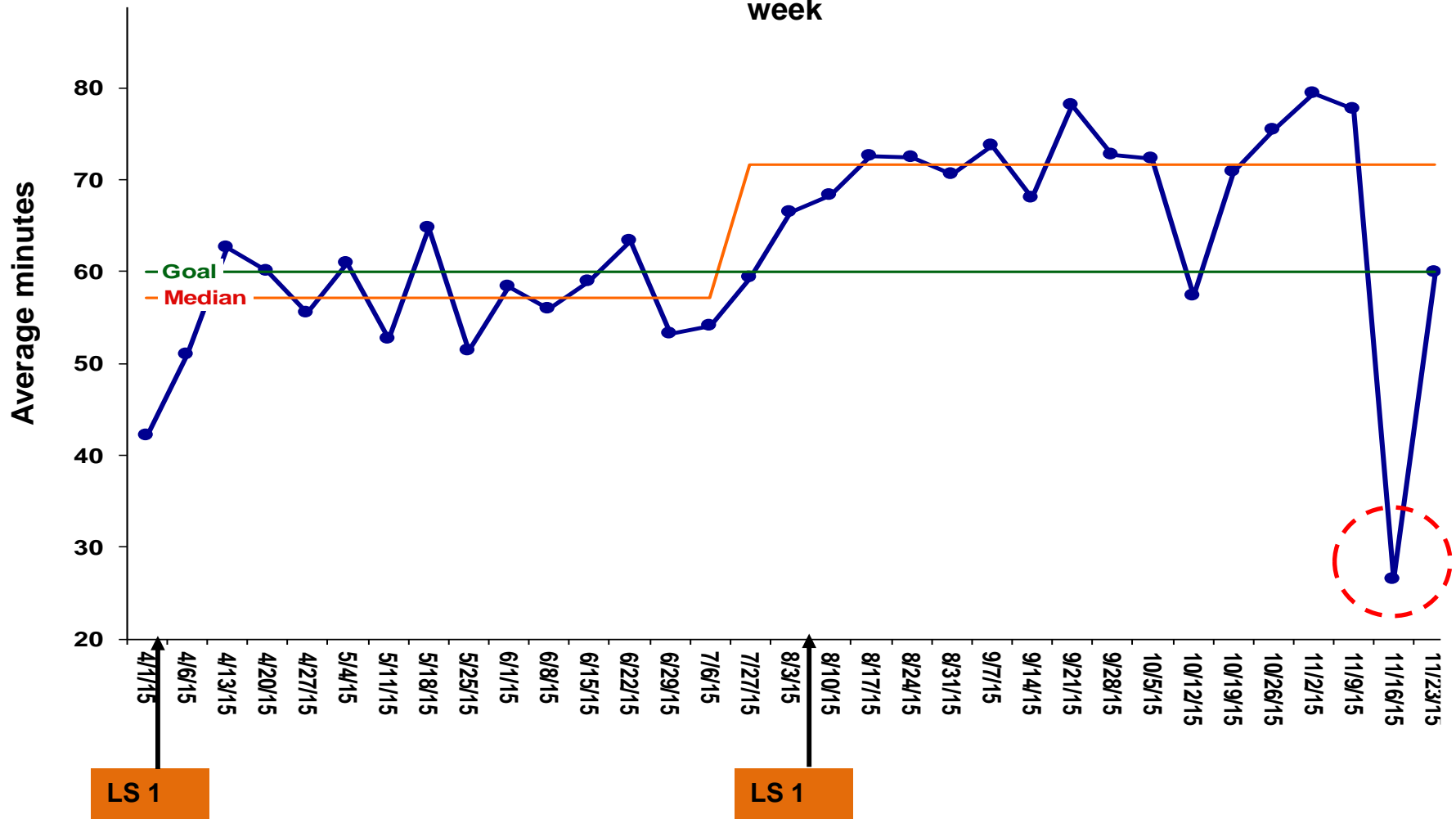
Observation and feedback of pedagogical practices (CLASS)

RESULTS

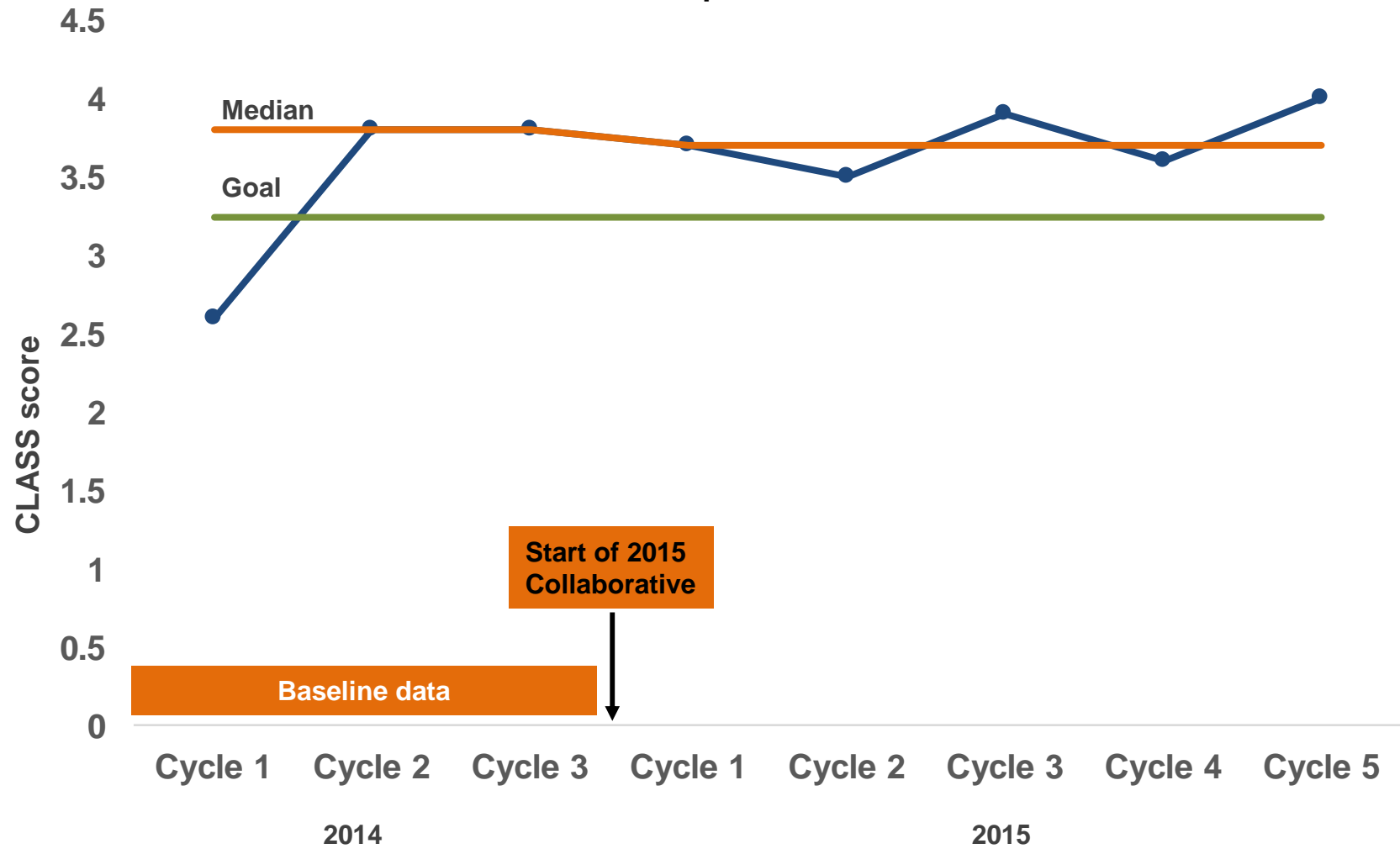


Instructional Time

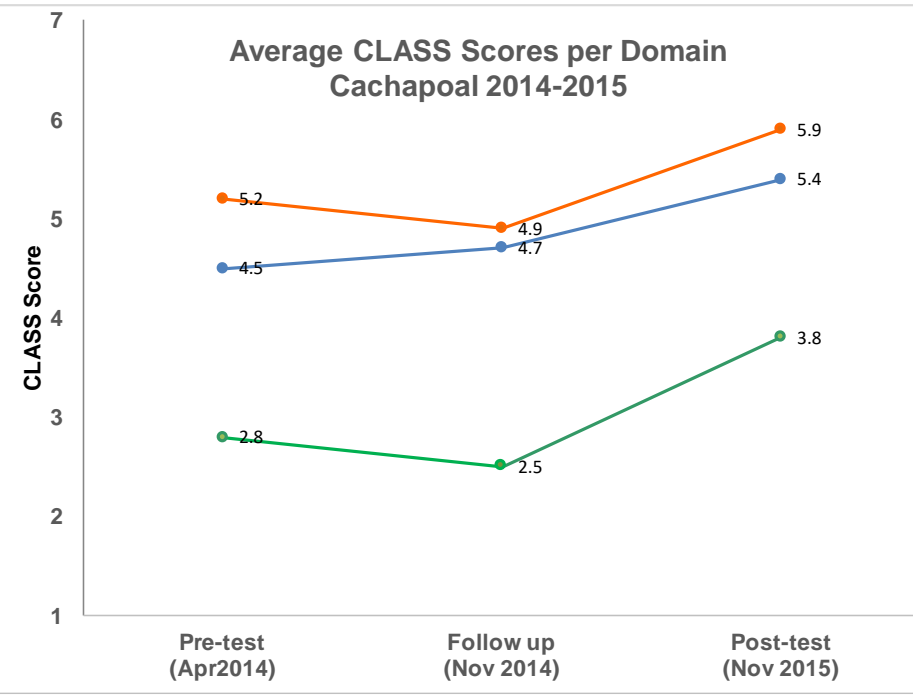
Average instructional time (minutes) allocated to language development activities per week



Average CLASS Score for Pedagogical Support Domain Cachapoa 2014-2015



Effective interactions

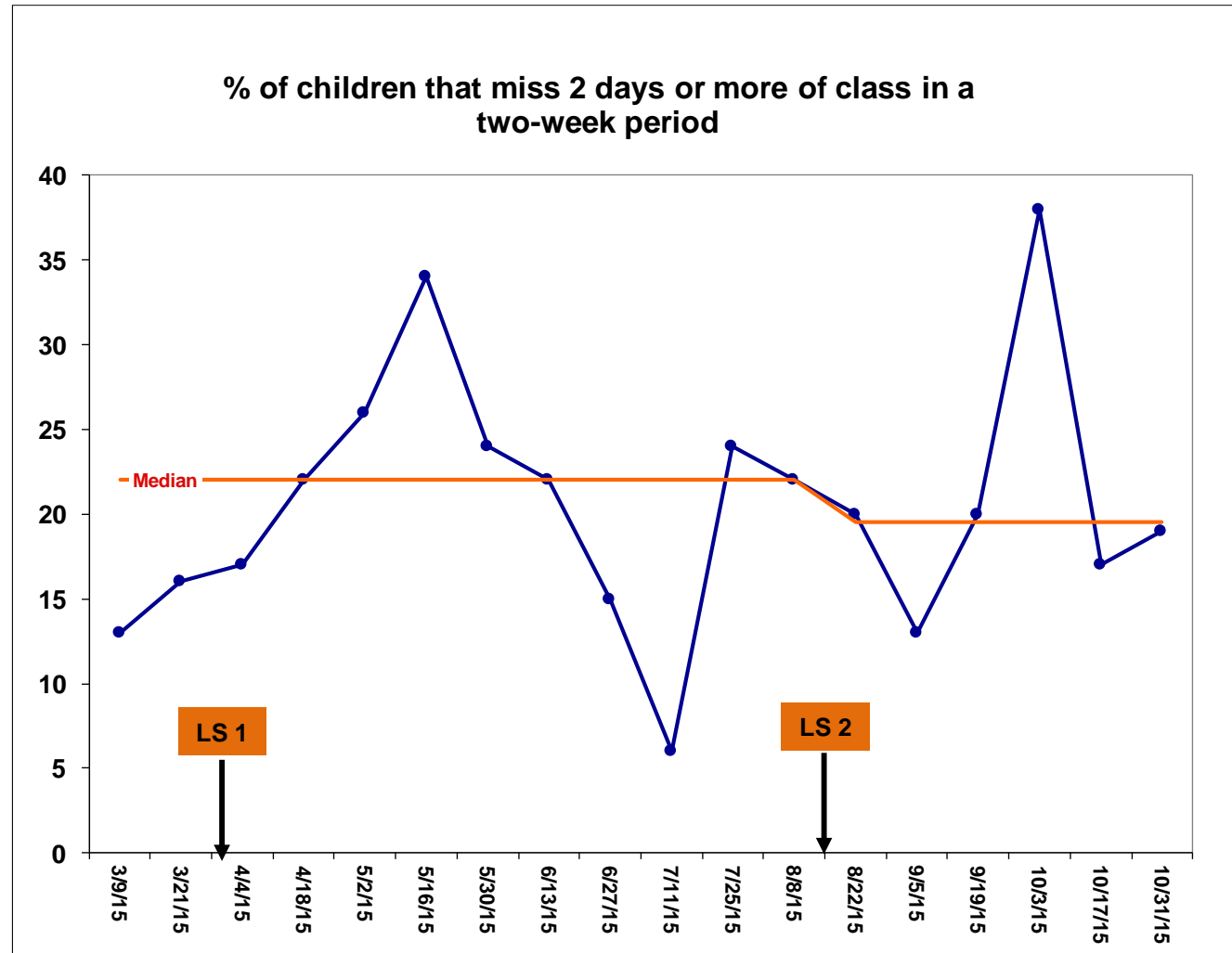


CLASS Domain	Goal
Emotional support	≥ 4
Classroom organization	≥ 4
Pedagogical Support	≥ 3.25

Table 7. CLASS scores (by dimension)

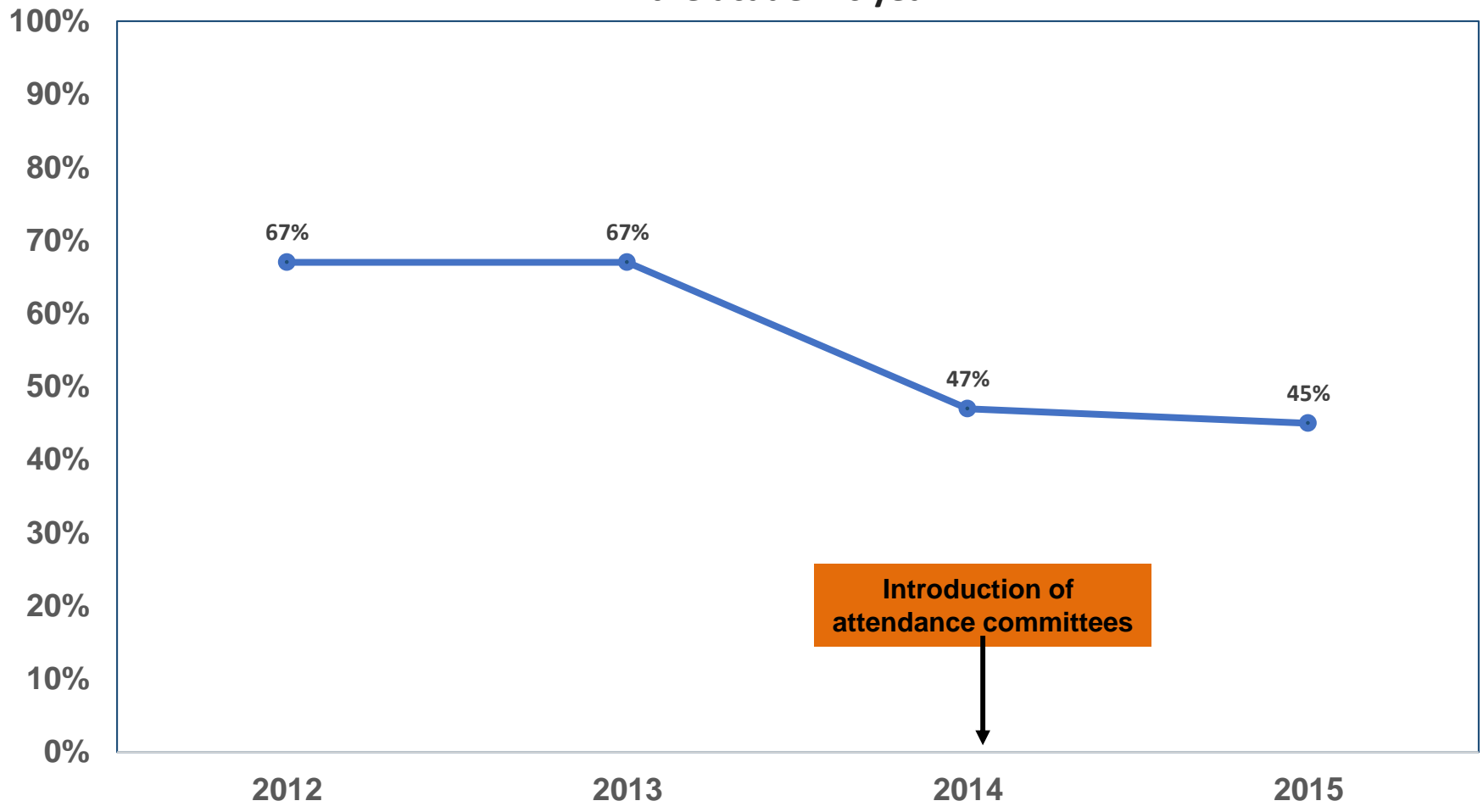
Dimension	Comparison group			Treatment group		
	Pre- test	Follow-up	Post-test	Pre- test	Follow-up	Post-test
Positive climate	5,4	4,6	5,8	5,2	4,9	6,2
Negative climate	6,7	6,5	6,6	6,9	6,5	6,9
Teacher sensitivity	4,1	4,5	5,5	4,6	4,8	6,1
Acknowledgement of children's feelings or emotions	3,5	2,9	4,2	3,9	3,3	4,5
Redirect challenging behavior	4,7	4,6	5,6	4,8	4,9	5,8
Productivity	4,6	4,9	4,9	4,5	5,1	5,4
Learning formats	3,7	4,1	4,6	4,3	4,2	4,9
Concept making	2,4	1,8	3,1	2,6	2,0	3,7
Quality feedback	2,5	2,1	3,6	3,1	2,7	4,2
Language skills modeling	2,4	2,4	2,9	2,7	2,8	3,4

Class absenteeism

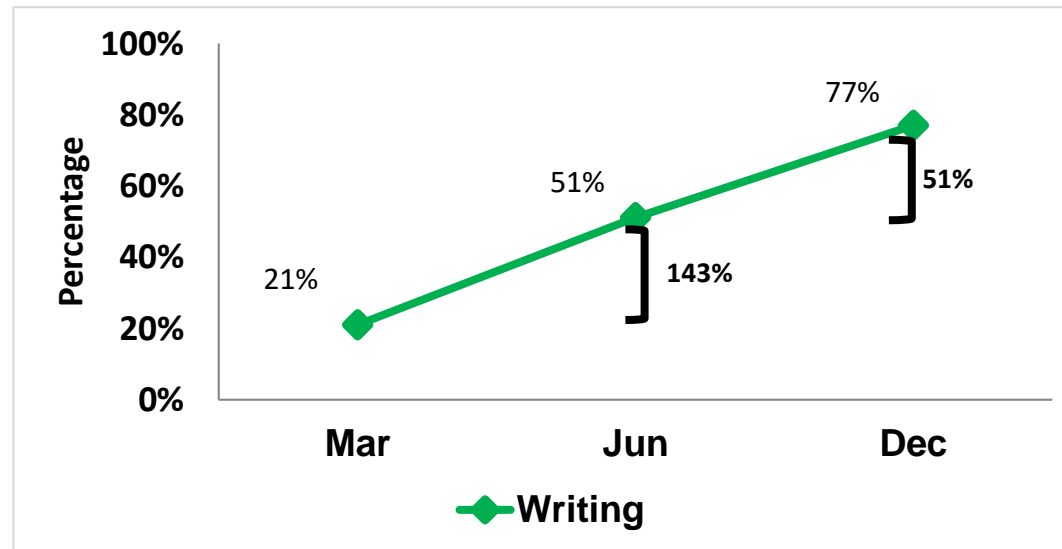
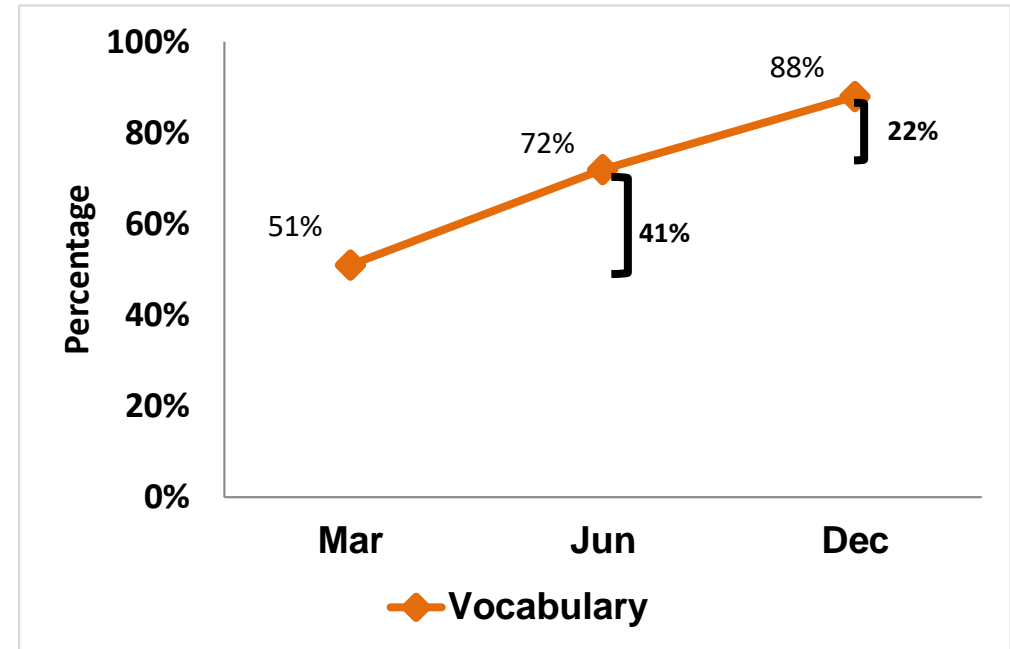
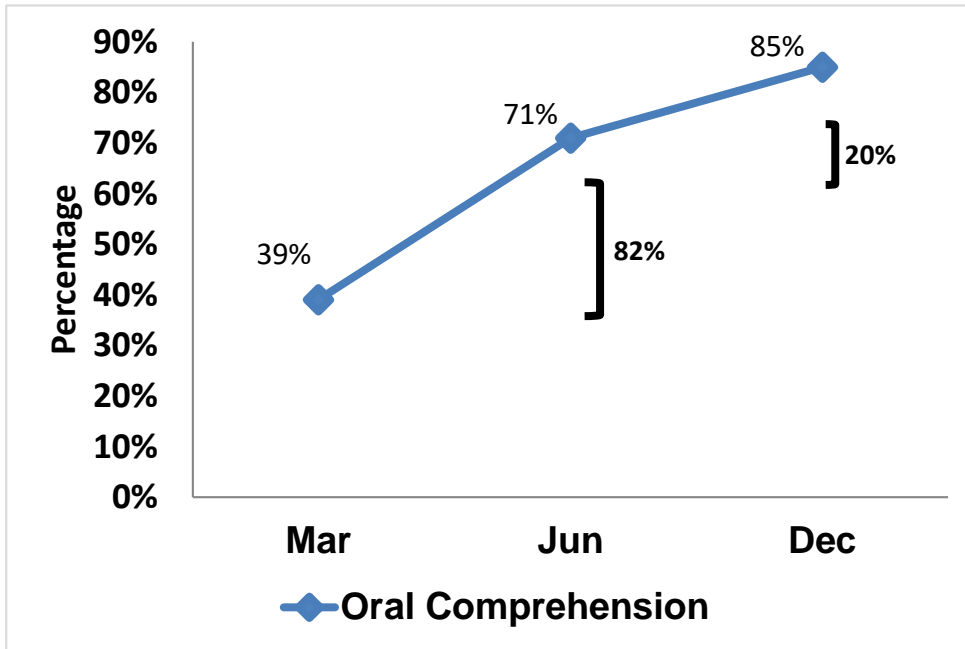


Chronic absenteeism

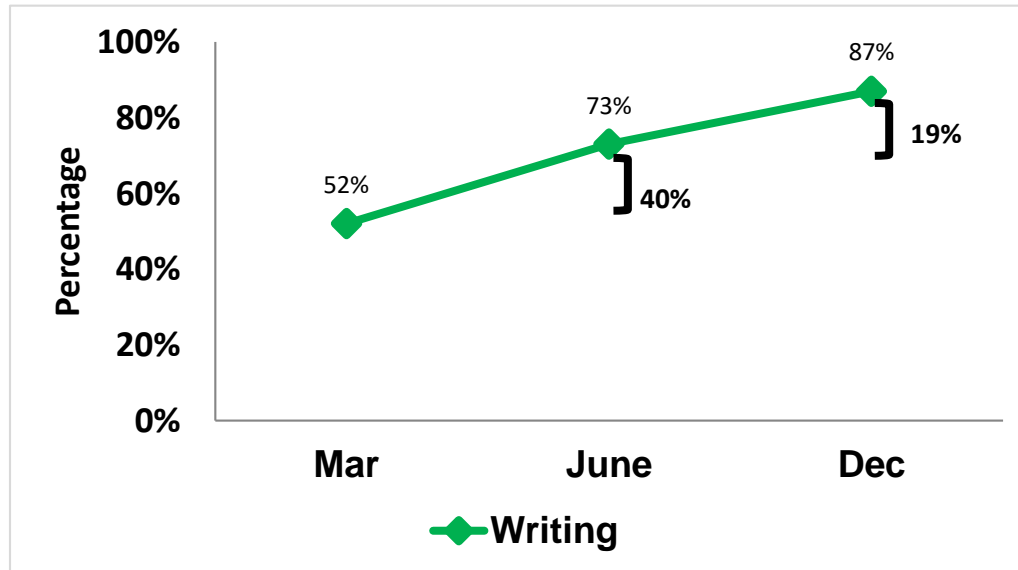
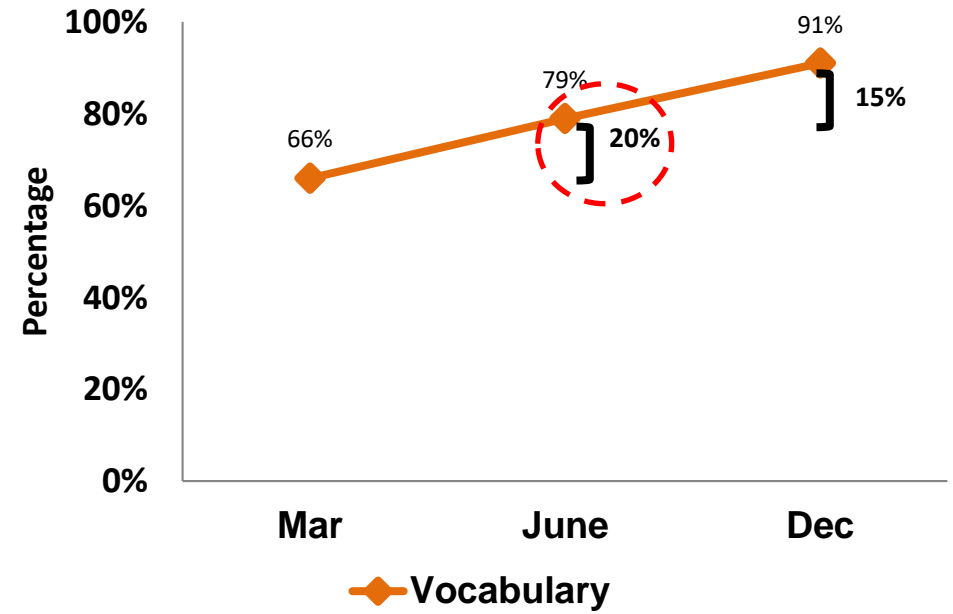
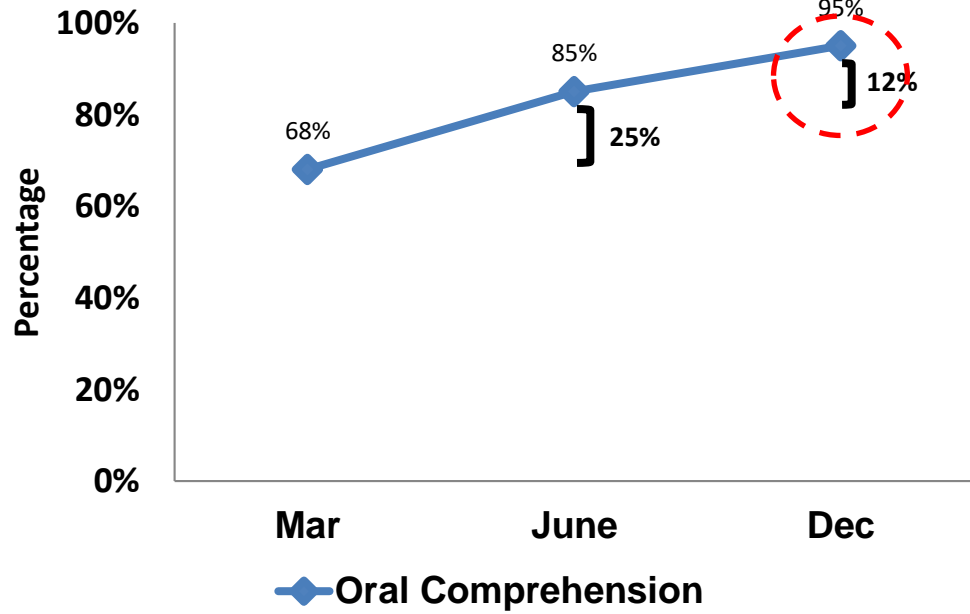
% of children who meet criteria for chronic absenteeism at the end of the academic year



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



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








- 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 – 0.3 standard deviations (SD)
 - Dictation – 0.3 SD
 - Passage comprehension – 0.2 SD



- 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	Results			
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 $\leq 22\%$ $\leq 47\%*$ (baseline 2014)	45%			
Language development	Average language, vocabulary, reading comprehension and writing scores (percentage)	25% increase between March and June 15% increase between June and November	Level	% increase Mar-Jun	% increase Jun-Nov	
			NT1 <ul style="list-style-type: none"> Oral comprehension Vocabulary Writing NT2 <ul style="list-style-type: none"> Oral comprehension Vocabulary Writing 	82% 41% 143% 25% 20% 40%	20% 22% 51% 12% 15% 19%	 

Collaborative work between communities and schools is key to promote language development

The word "VIDEO" is written in a large, bold, stylized font. The letters are filled with orange and have a thick black outline. The text is positioned over a black film strip that is angled upwards from left to right. The film strip has white sprocket holes along its edges.

- 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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