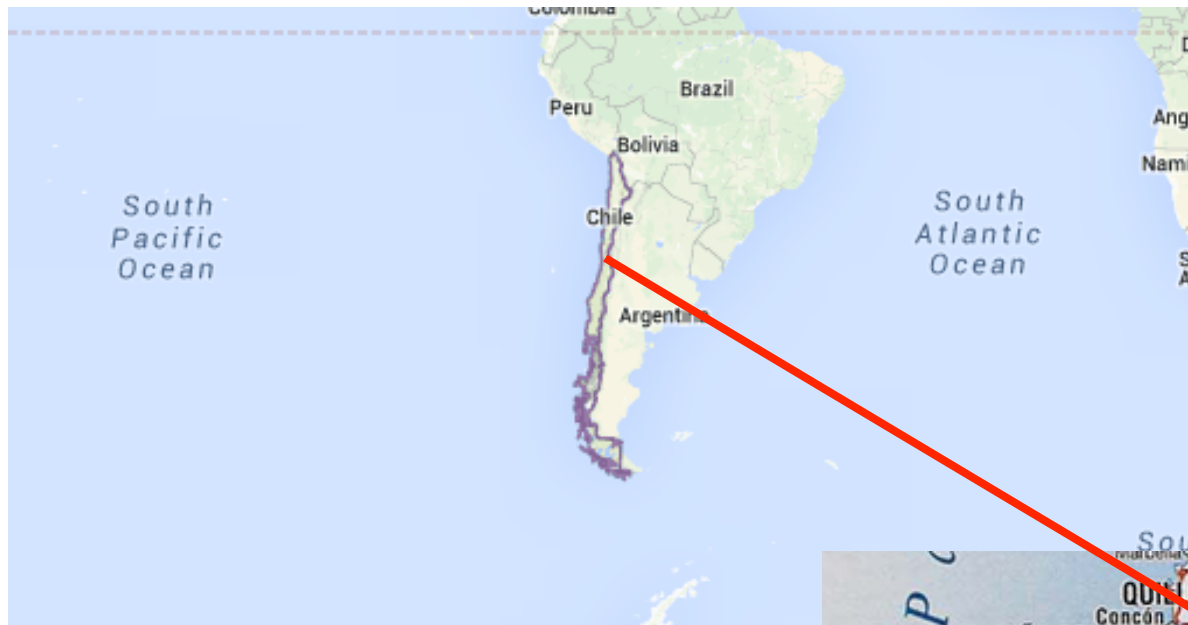


**A Good Start (Un Buen Comienzo, UBC):
Developing early language and literacy in
disadvantaged communities**

- What would happen in the world if suddenly 60% of the educational research we do today disappears?
 - Mary Barbeck, New York University Steinhardt School of Culture, Education and Human Development
- “An analysis of 196 articles published in 2012 in four leading teacher education journals internationally found only 1% to report large-scale mixed-methods studies, only 6% to examine the impact of teacher education on teaching practice and/or student learning...” (Sleeter, 2014)

- Chile
 - Universal voucher system to fund education: from early childhood to high school, and voucher-like in tertiary education
 - Chile compared with OECD
 - The most privatized educational system
 - The most unequal country
 - One of the most socioeconomically segregated educational systems
 - The country with the highest influence of socioeconomic status on student achievement
 - One of the the highest levels of high school graduation
 - The leading country, in terms of student achievement, in Latin America

- Early childhood
 - Four main providers
 - Public provision:
 - Junta Nacional de Jardines Infantiles (6 months to 5 years old)
 - Primary schools that have pre-kínder and kínder (4 and 5 years old)
 - Fundación Integra (NGO managed by the Office of the President, 6 months to 5 years old)
 - Private provision
 - Funds transfer scheme



UBC: a Teacher Professional Development Program

- Emerged from concerns about quality of preschool education in Chile
- Teacher professional development intervention
- Intended for the public preschool system in Chile
- Funded and implemented by **Fundación Educacional Oportunidad**
- Started in 2008 and continues today

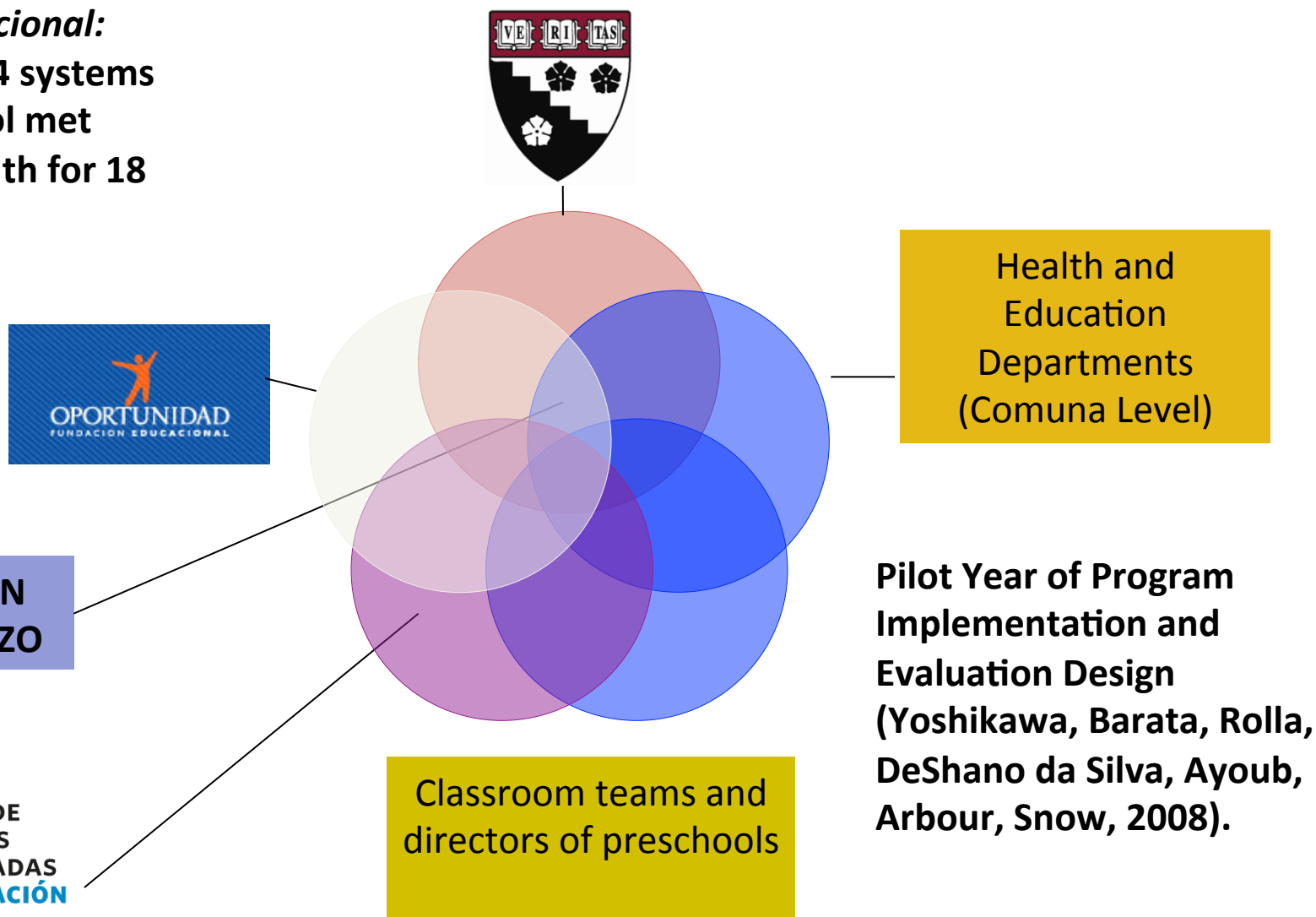
- **Reduce levels of reading difficulties** that children from low-income families experience in Chile.
- **Reduce the vocabulary gap** between children in low-income families and their more advantaged counterparts.

- **Promote a positive classroom environment** for children's learning.
- **Promote parent's involvement** as their children's first teachers.
- **Improve attendance** in preschool with preventive health measures, particularly in the area of respiratory disease, through health screening and well-child visits.

Mesa Técnica

Interinstitucional:

**Leaders of 4 systems
of preschool met
once a month for 18
months.**



Participatory process of development of the methodology with stakeholders

Permanent Coordination with Ministry of Education, Municipalities, etc.

Professional development for two years: workshops, coaching, individual and group reflection

Intervention Focus

Language

Socioemotional Development

Health

Mediators

Classrooms
Teaching Staff
School Leadership

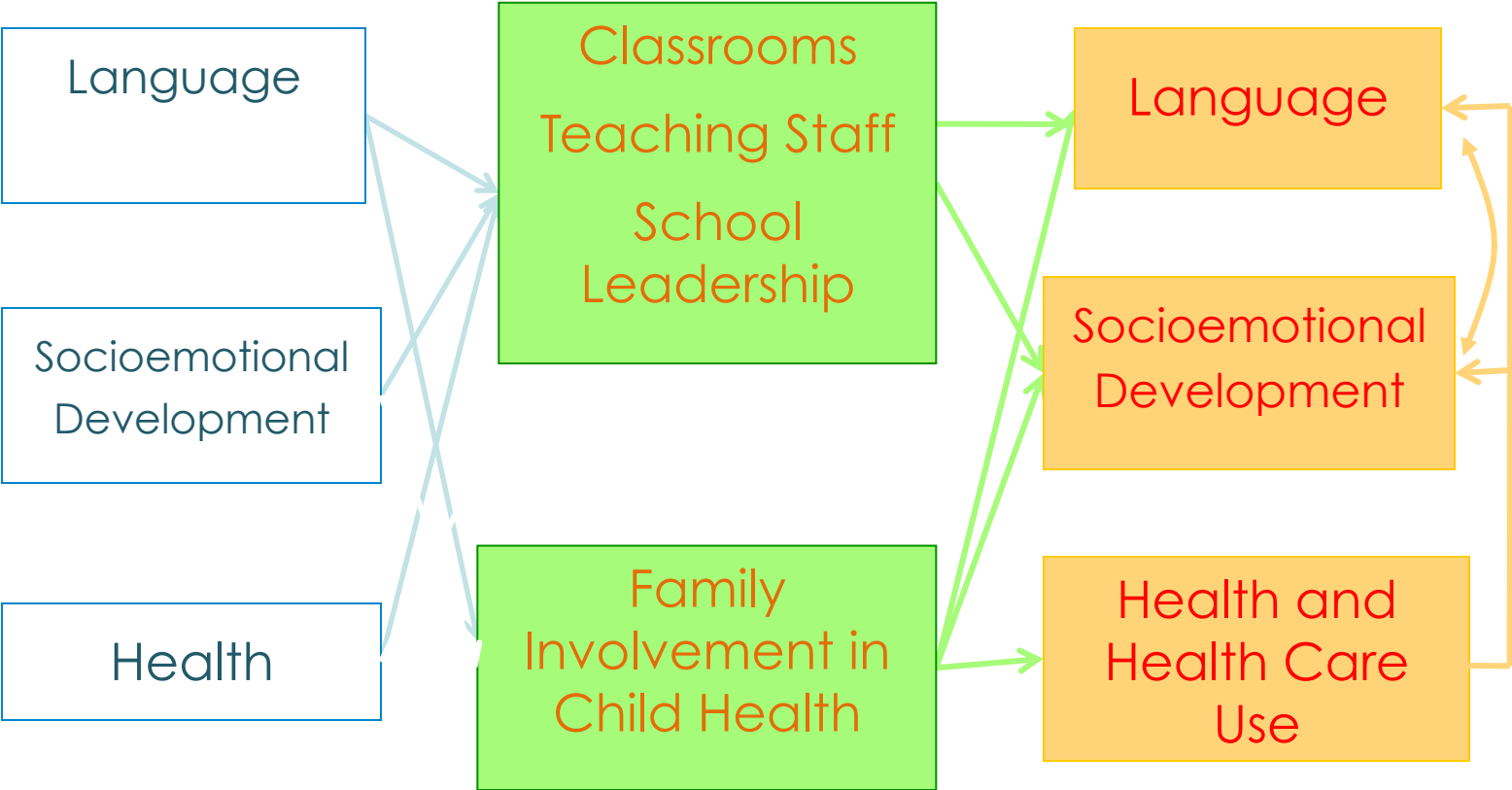
Family
Involvement in
Child Health

Child Outcomes

Language

Socioemotional Development

Health and Health Care Use



Pre-test

Year 1 - prekinder

Post-test 1

March

April

May

Module 1.
June

Module 2.
July

Module 3.
Aug.

Module 4.
Sept.

Module 5.
Oct.

Module 6.
Nov.

Year 2 - kinder

Post-test 2

Module 7.
March

Module 8.
April

Module 9.
May

Module 10.
June

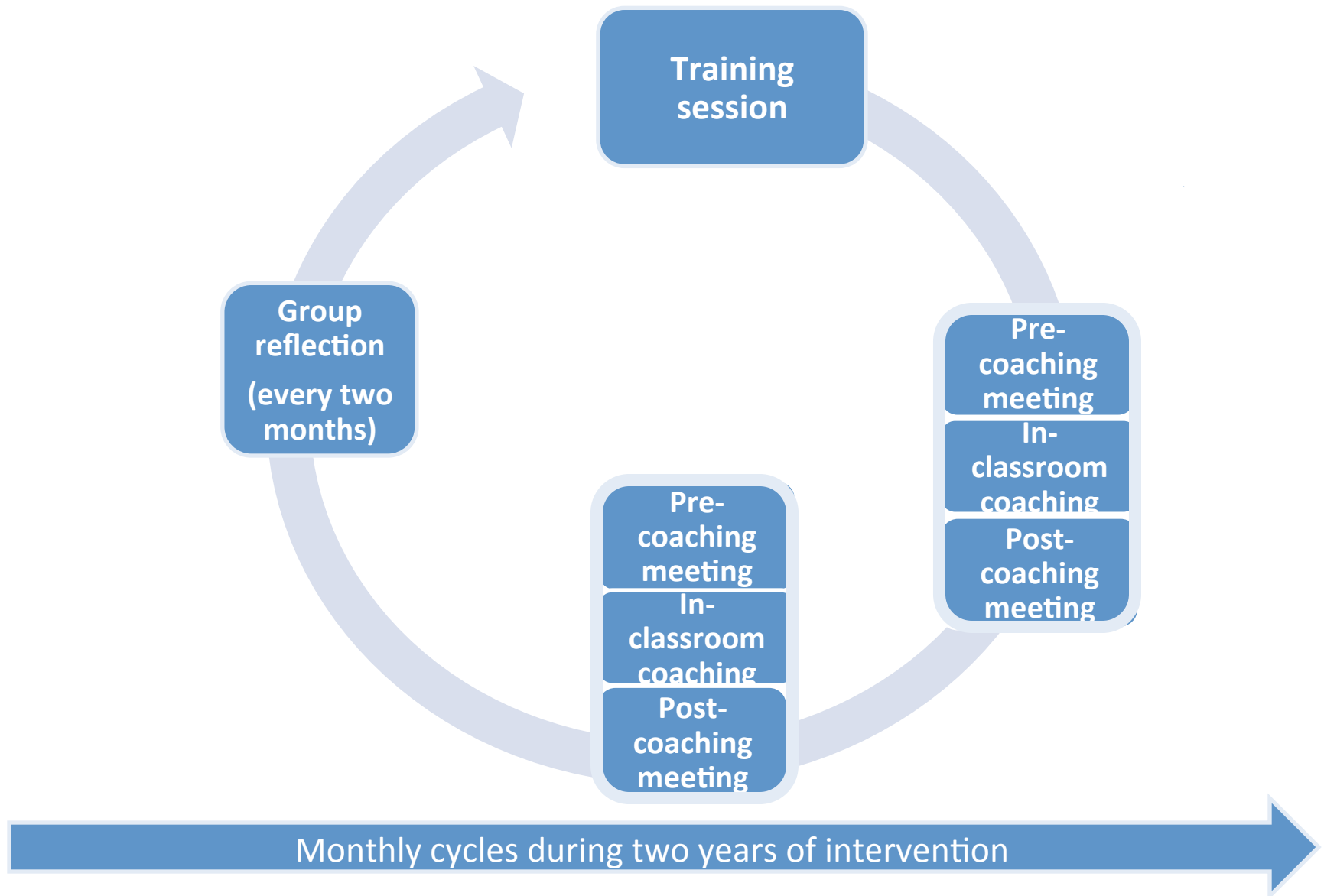
July

Module 11.
Aug.

Sept.

Module 12.
Oct.

Nov.



Modeling



Co-teaching



Observation

High support

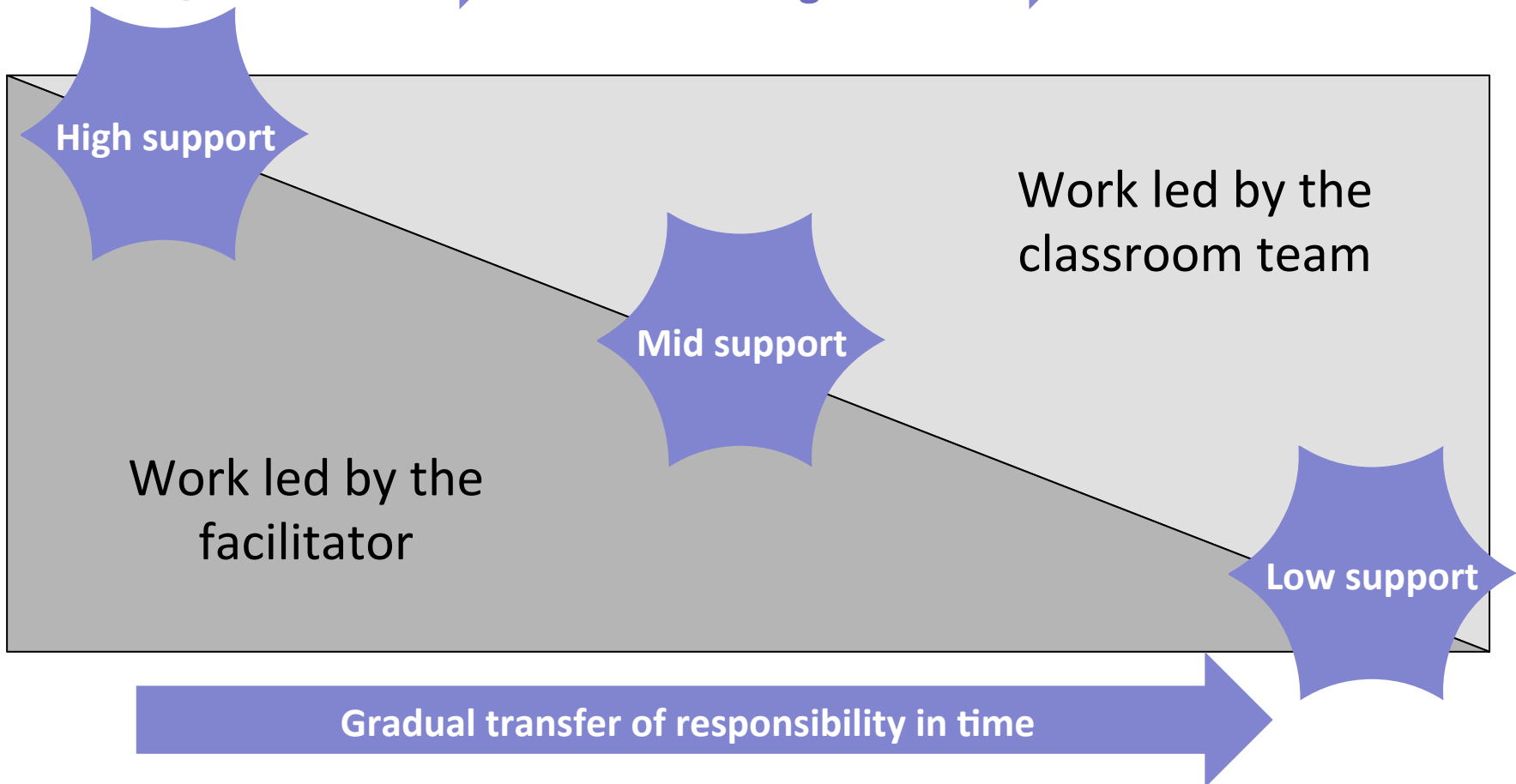
Mid support

Low support

Work led by the
facilitator

Work led by the
classroom team

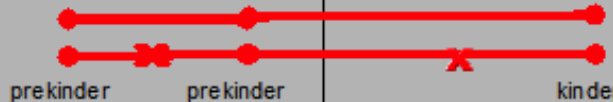

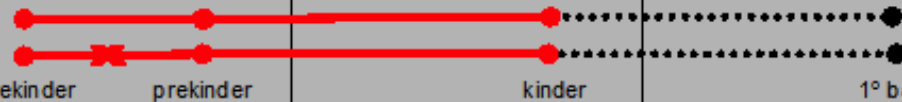


Gradual transfer of responsibility in time



Two different implementation and evaluation designs: experimental versus continuous improvement

- Cluster-randomized trial with 64 preschools (Moreno & Lugo-Gil, 2008) randomly assigned to:
- 1) Full UBC condition
- 2) Minimal intervention condition (self-care workshops; books provided to classrooms)
- Waves of assessment:
 - Pre-test (prior to random assignment); 4 year olds
 - Interim assessment (after one year; half of the program; end of 4 year old preschool year)
 - Post-test assessment (end of kindergarten year)

- Comunas selected with 1) high proportions low-income / at-risk children; 2) 8+ public preschools; in metro Santiago
- 14 municipalities invited to apply
- 6 selected
- Virtually all preschools in each participated
- 64 schools; 91 classrooms; 119 teachers; 94 aides; 1868 4-year-old children in study
- 100% recruitment rate of teachers; 100% response rate at wave 1; 95% response rate at wave 2 for classroom quality assessment.

		2008		2009		2010		2011	
		pre-test (abr-may)	post-test (oct-nov)	pre-test (abr-may)	post-test (oct-nov)	pre-test (abr-may)	post-test (oct-nov)	pre-test (abr-may)	post-test (oct-nov)
Escuelas 2010 (N = 29)	cohorte 3	Intervención 2 Intervención 1							
Escuelas 2009 (N = 29)	cohorte 2	I2							
Escuelas 2008 (N = 6)	cohorte 1	I2							
Total escuelas: 64									
Total educadoras y técnicos: 300 aprox.									
Total niños: 2200 aprox.									
	intervención								
	evaluación								

- Highly structured in terms of strategies
- Intensity of implementation decided by classroom teams (teachers and/or aides)
- Teacher proof intervention?

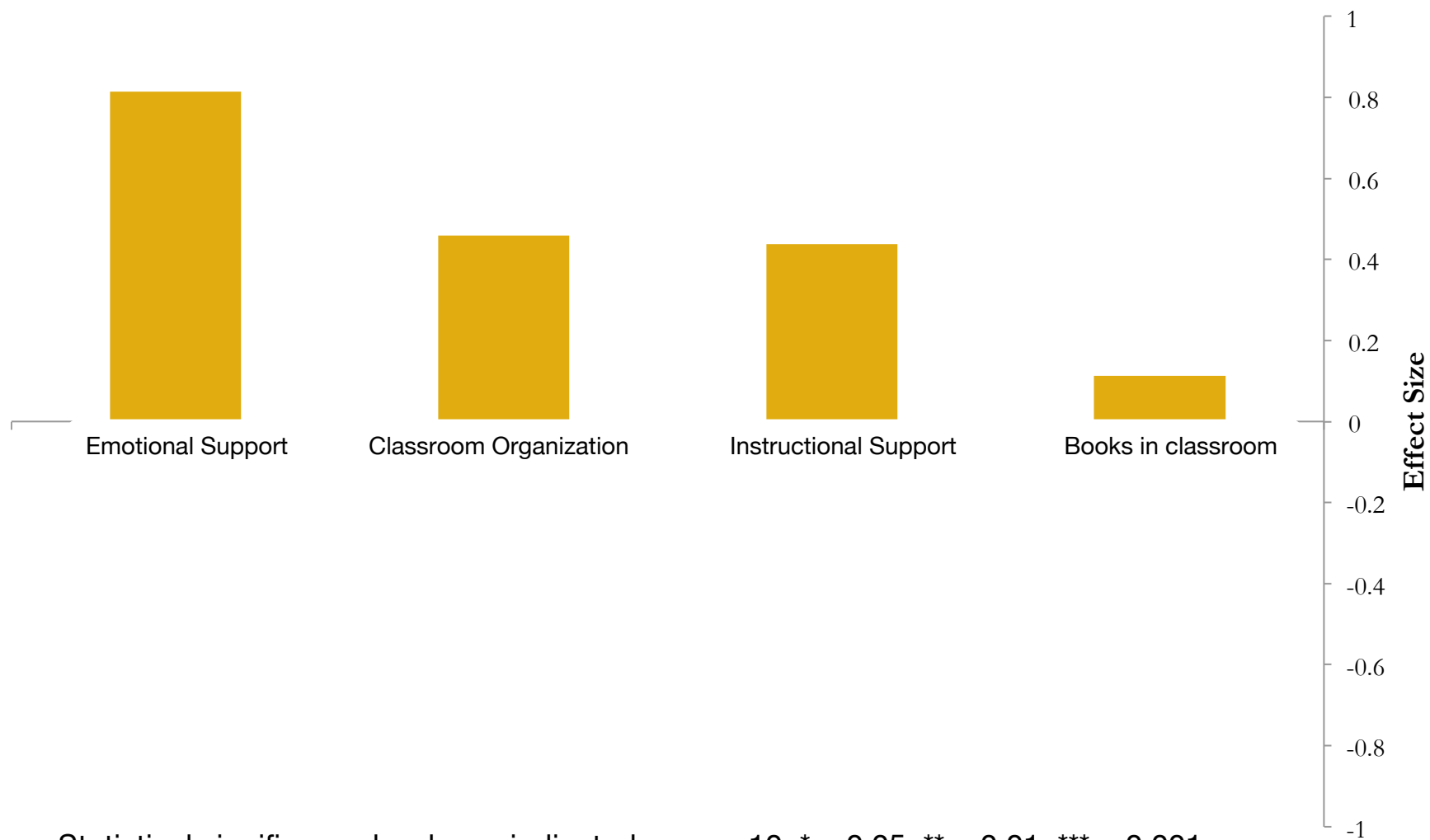
- Results are reported on two different levels:
 - Mediators: did the program change the teaching practices?
 - Outcomes: children language and socioemotional development

EMOTIONAL SUPPORT	C L A S S R O O M ORGANIZATION	I N S T R U C T I O N A L SUPPORT
Positive Climate	Behavior Management	Content Understanding
Teacher Sensitivity	Productivity	Quality of Feedback
Regarding for students perspectives	Instructional Learning Formats	Language Modeling
Negative Climate		

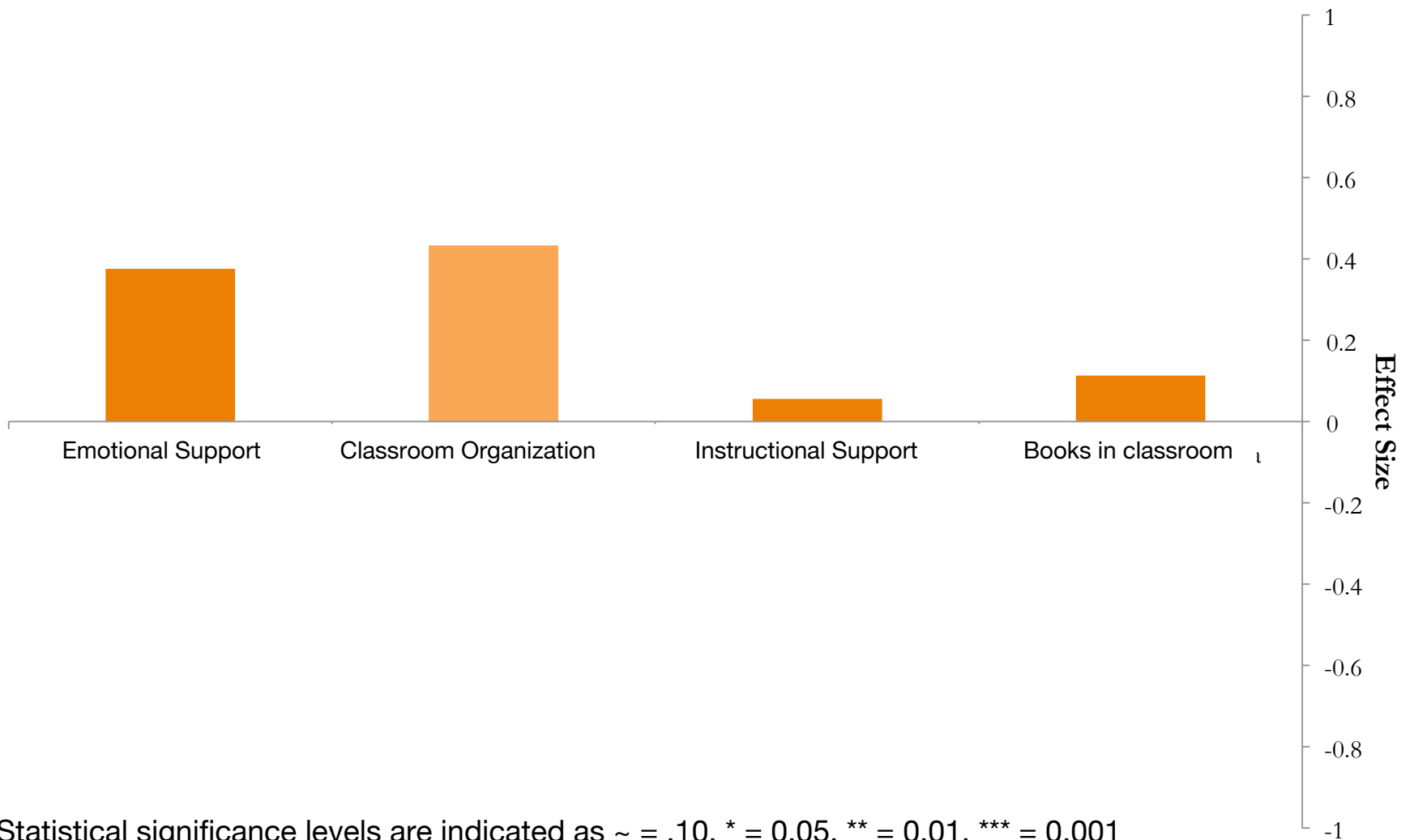
(Pianta, La Paro & Hamre, 2008)

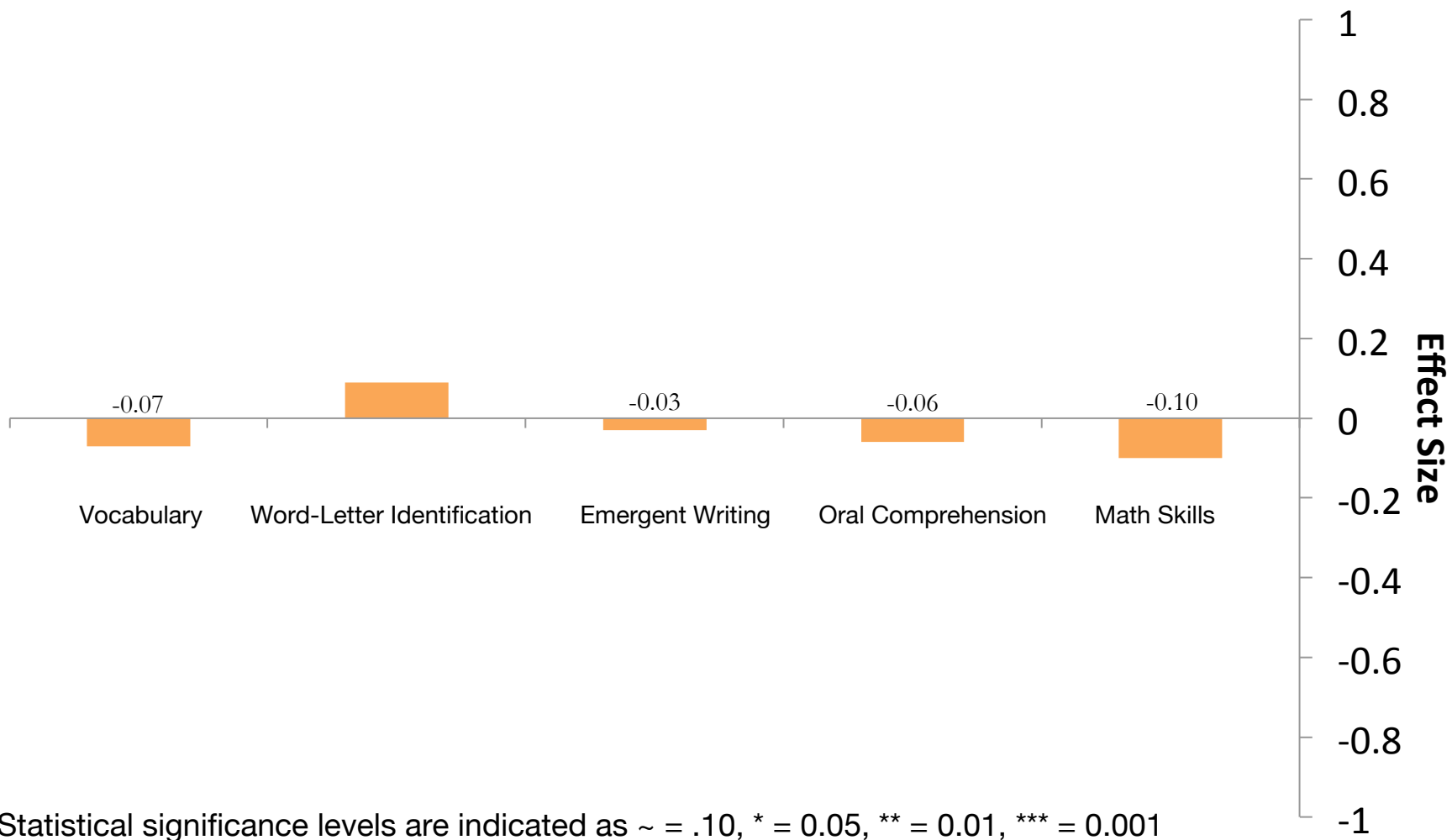
WOODCOCK- MUÑOZ	SOCIOEMOTIONAL QUESTIONNAIRE
Letters and Words Identification	Externalizing Behavior
Vocabulary	Pro Social Behavior
Emergent Writing	Attention
Text Understanding	

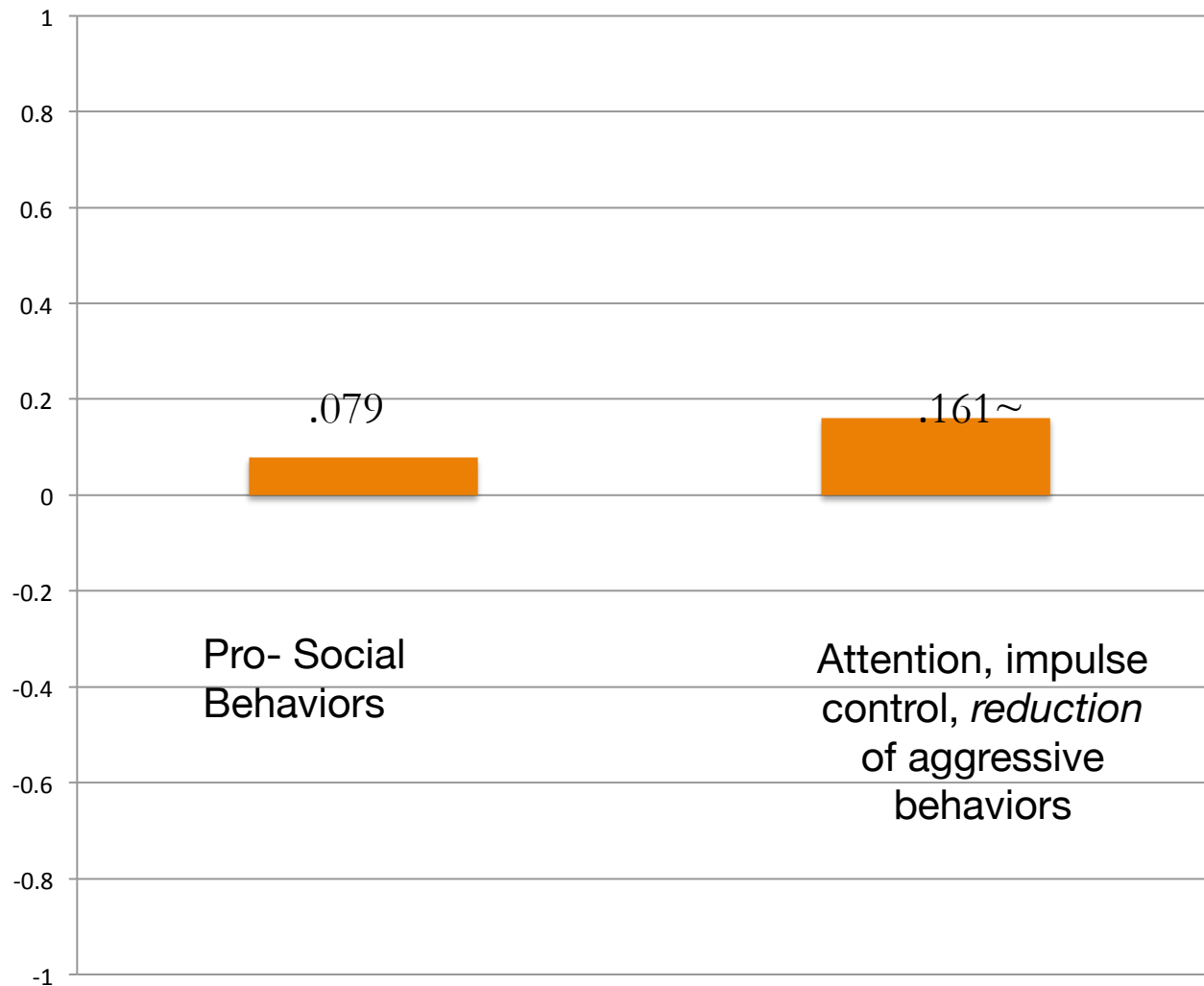
(Woodcock, Muñoz, Ruef & Alvarado, 2005)



Statistical significance levels are indicated as ~ = .10, * = 0.05, ** = 0.01, *** = 0.001

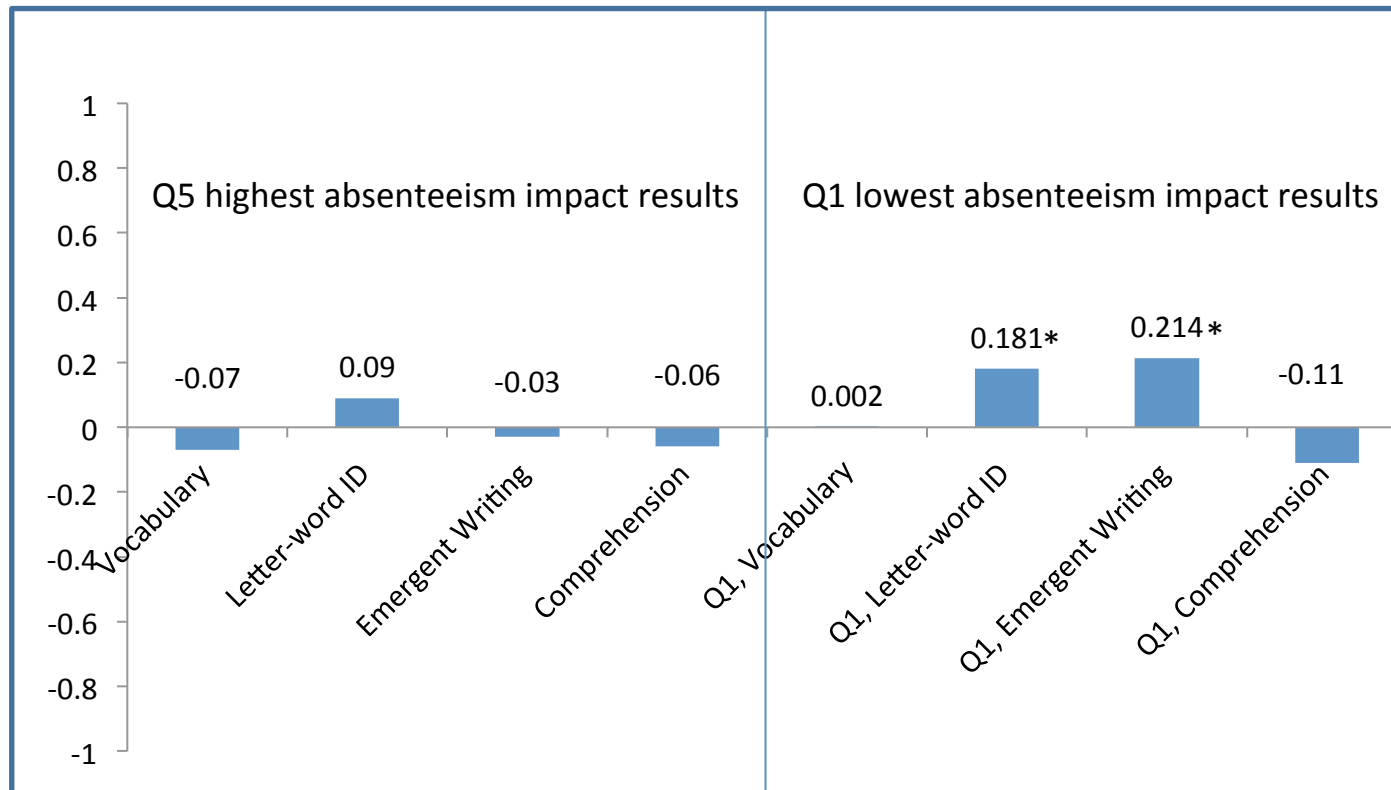




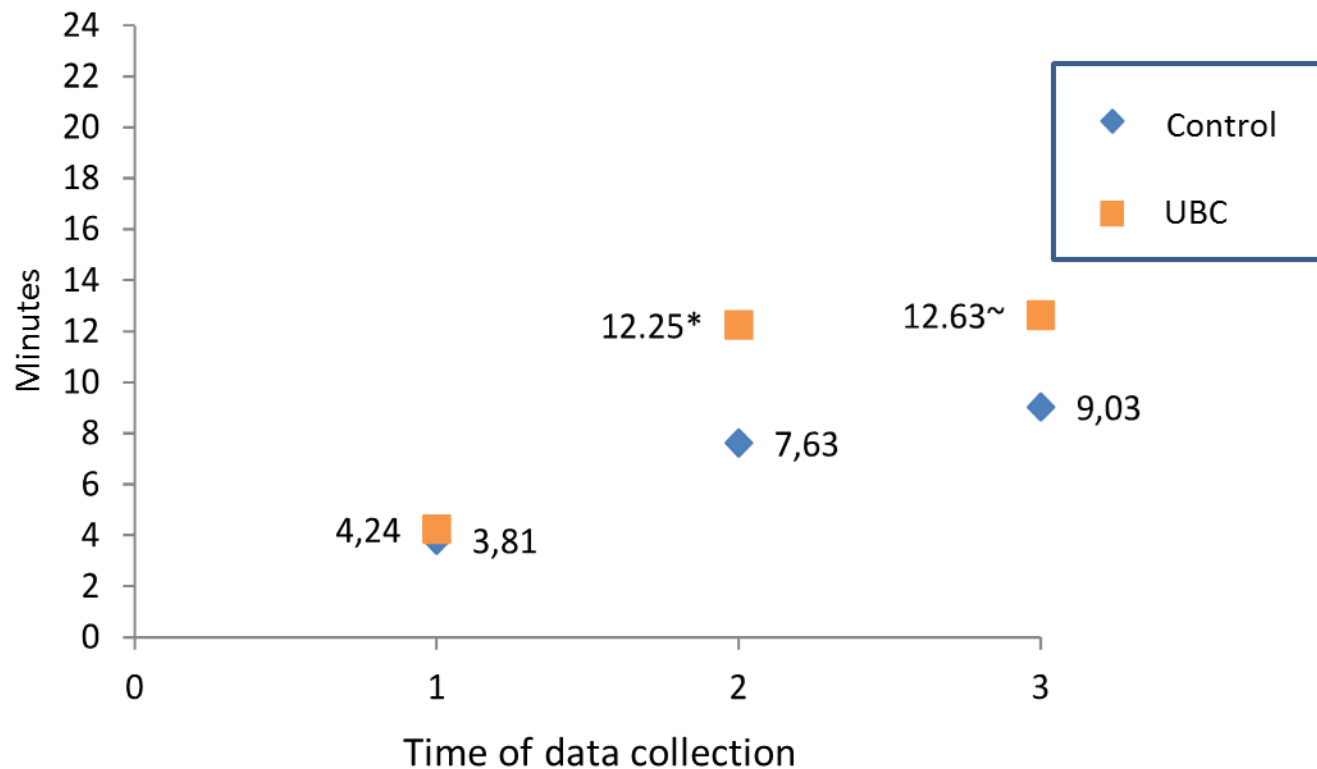


Statistical significance levels are indicated as ~ = .10, * = 0.05, ** = 0.01, *** = 0.001

- 65% of the children miss, at least, 10% of the school year because of absenteeism
 - Absenteeism is higher among UBC beneficiaries



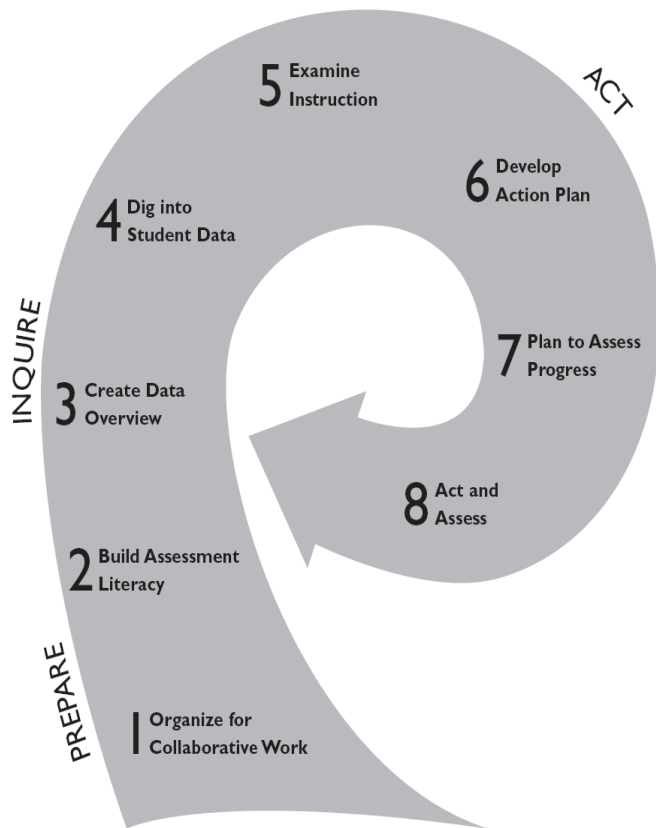
- Intensity of implementation very low: 12 minutes of language development activities a day



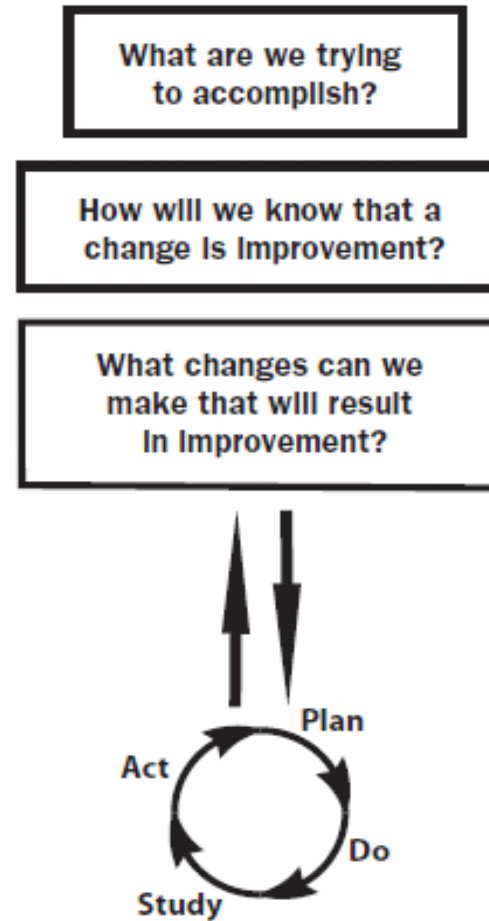
- Imperfect assumptions
 - Teachers abilities to maintain high intensity of the implementation
 - Absenteeism only partially related to respiratory illnesses
- Rigid design
 - Not possible to make changes to the intervention, despite evident shortcomings, to preserve the integrity of the experimental design
- Teacher proof or teacher based
 - Looking for a medicine that works independently of teacher capacities?
 - Looking for a method to build teacher capacities?
- Lack of integration of UBC with regular workings of the schools and classrooms
 - UBC activities versus regular activities

- Intensity: How to increase the intensity of language development activities in the classroom?
- Adaptability: How can one intervention works across the diversity of contexts in Chile?
- Variability: How to reduce variability in implementation of the intervention across sites?
- Implementation and evaluation
 - March 2010-December 2012

- Formal agreement with the Ministry of Education
 - Implement UBC in a rural, earthquake-affected context
 - 29 Schools, 13 clinics, 3 Municipalities VI Region
- Incorporation of new elements:
 1. Work with school leadership
 2. Include continuous Quality Improvement (QI) Methods into work with teachers and coaches:
 1. Partnership with Institute of Healthcare Improvement (IHI): Build a Learning Collaborative work with local teachers, healthcare providers, school & clinic leadership; municipal, regional & national stakeholders.
 2. Partnership with Harvard Graduate School of Education, Datawise: step-by-step process for working with data at school, in order to improve process and results.

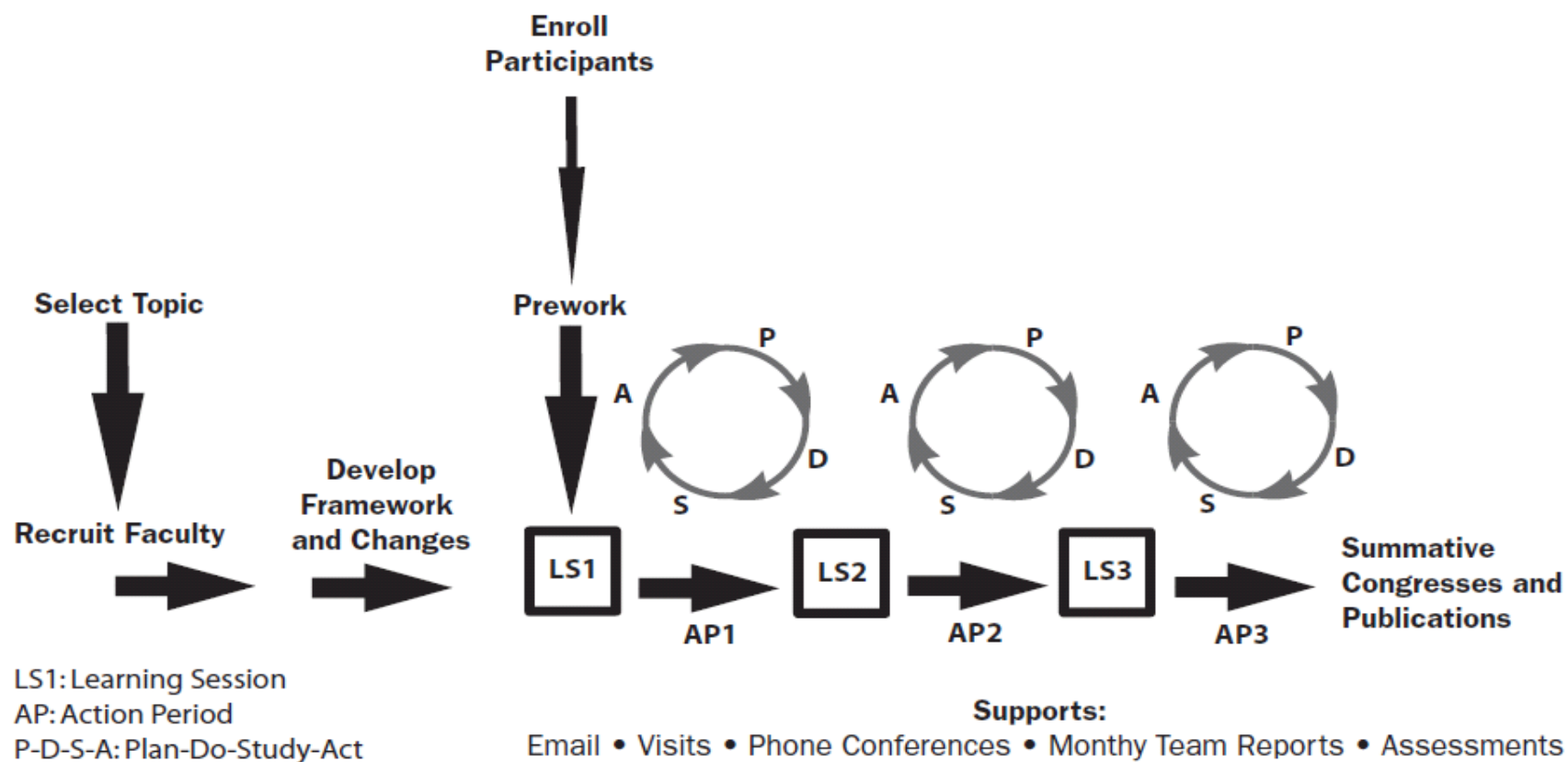


K. Parker Boudett, E. City, R. Murnane,
DATA WISE, HGSE.



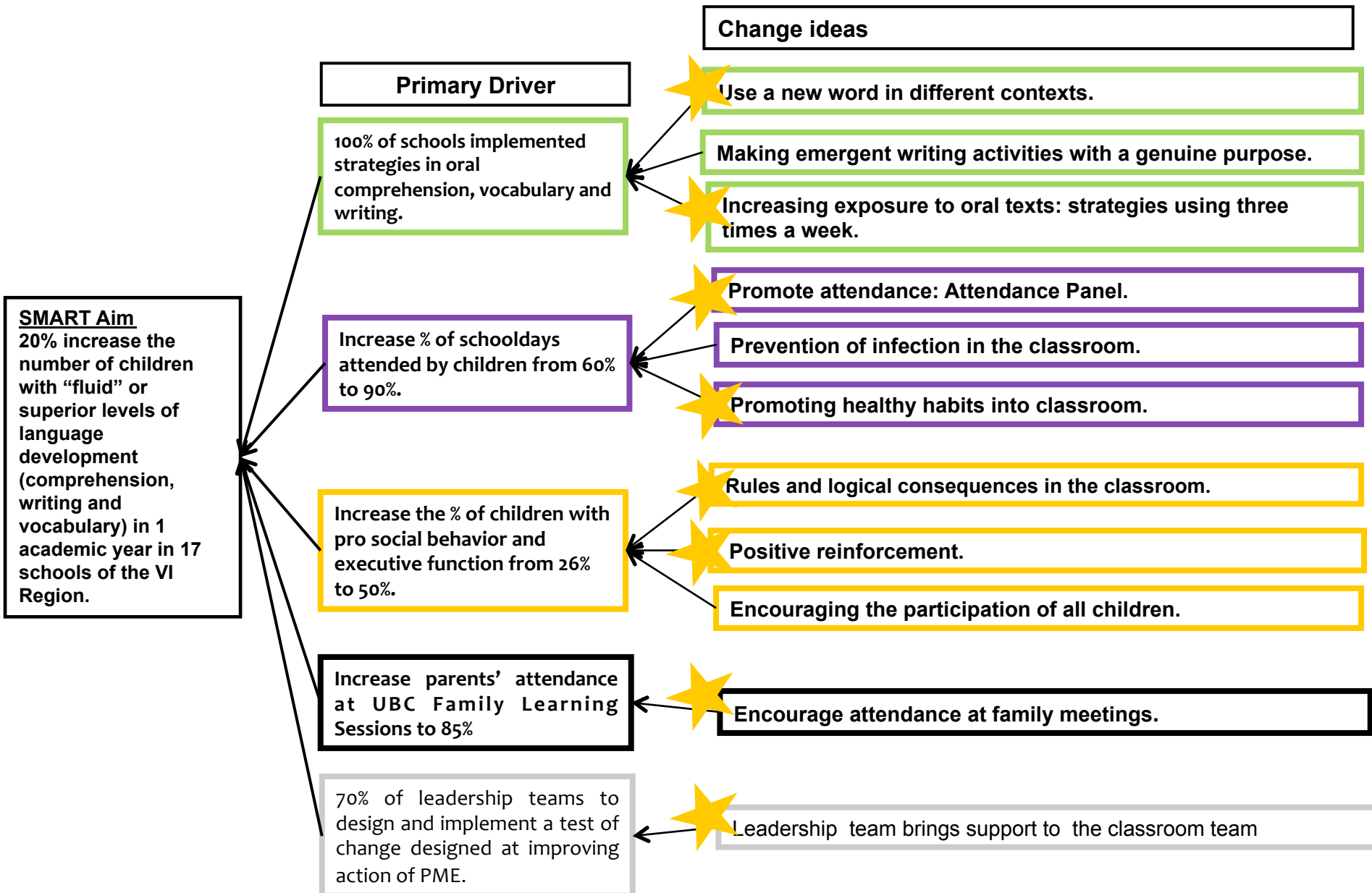
Langley, G.J., Nolan, K.M., Nolan, T.W, Norman, C.L., & Provost, L.P. (2009). *The improvement guide: A practical approach to enhancing organizational performance* (2nd Ed.). San Francisco: Jossey-Bass. P.24.

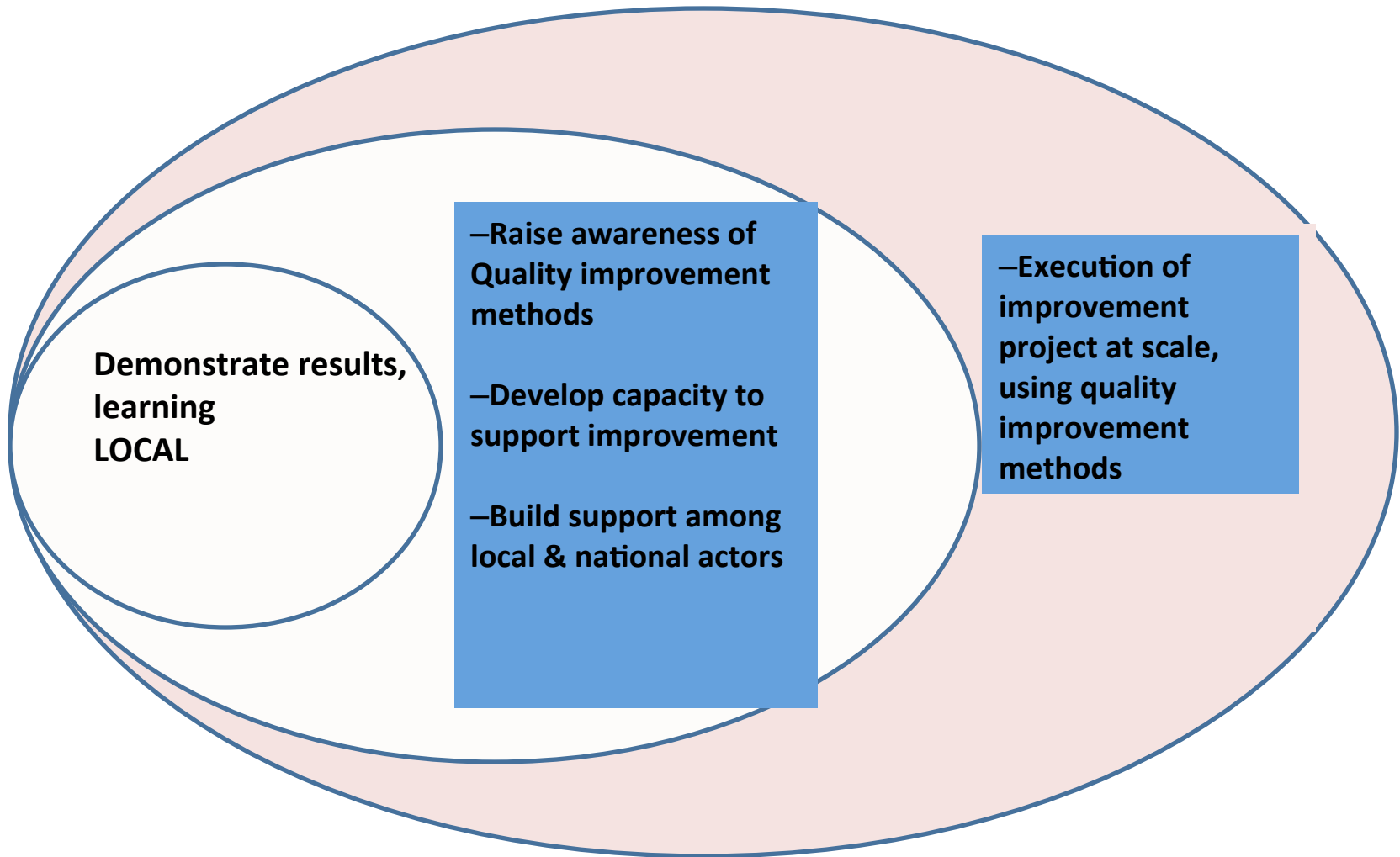
Figure 2. Breakthrough Series Model



During the period of collaborative work, each school team:

- ☐ Learn how to test and adapt their changes in school work before implementing them massively.
- ☐ Collects data each month with clear and precise indicators to help monitor and demonstrate improvement.
- ☐ Accelerates learning through the exchange of experiences with others school team during the learning sessions and action periods.

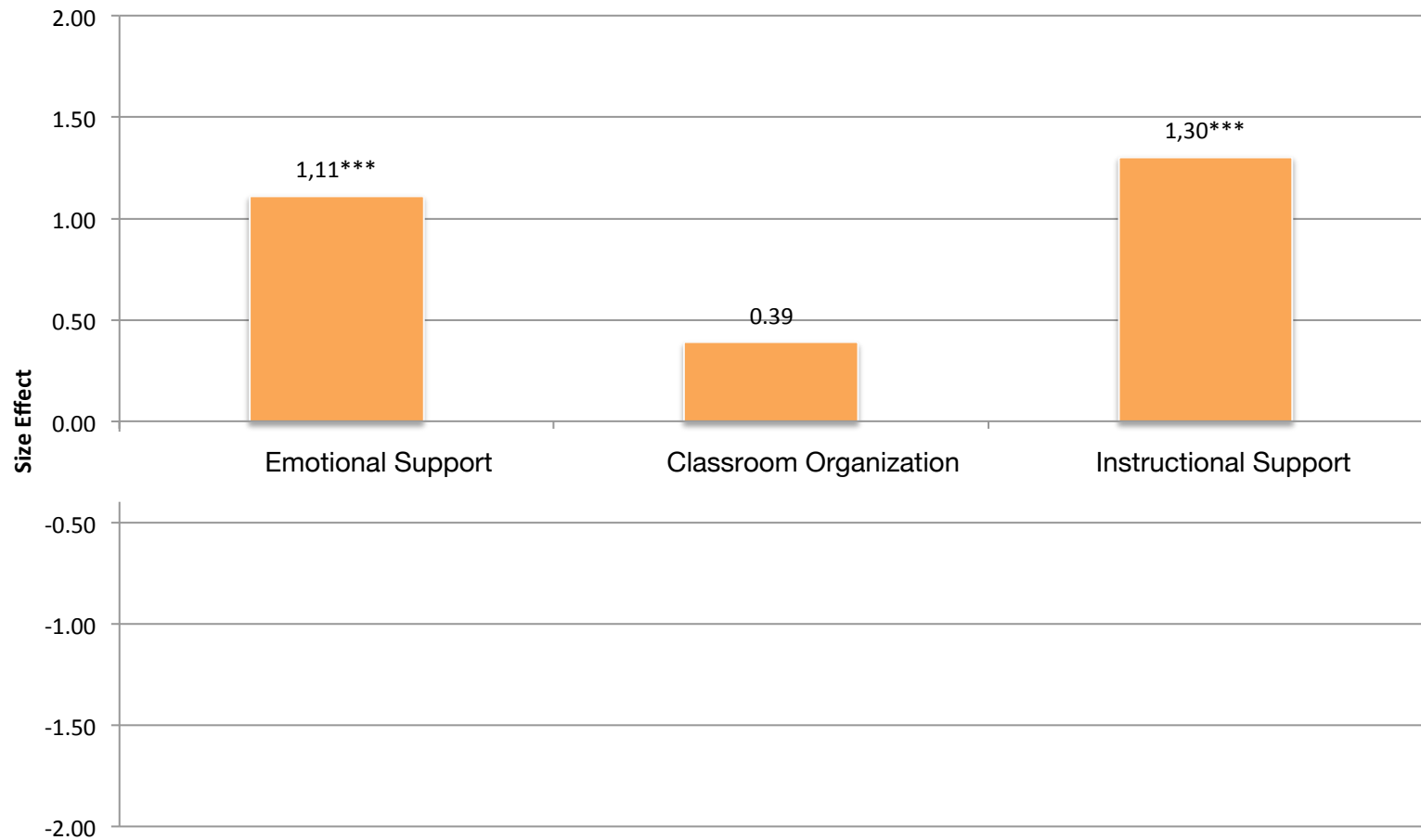




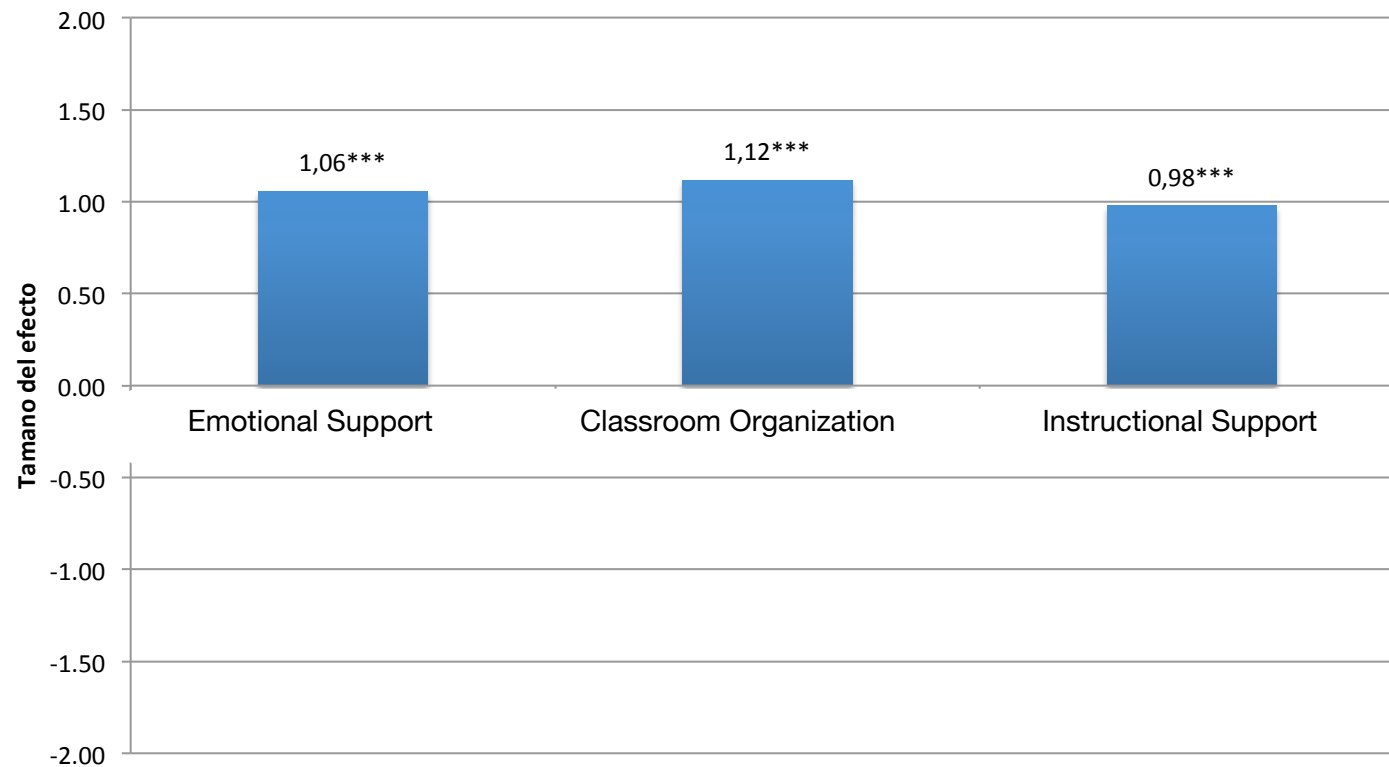
- Comparison group: the control of the experimental design using inverse propensity weighting

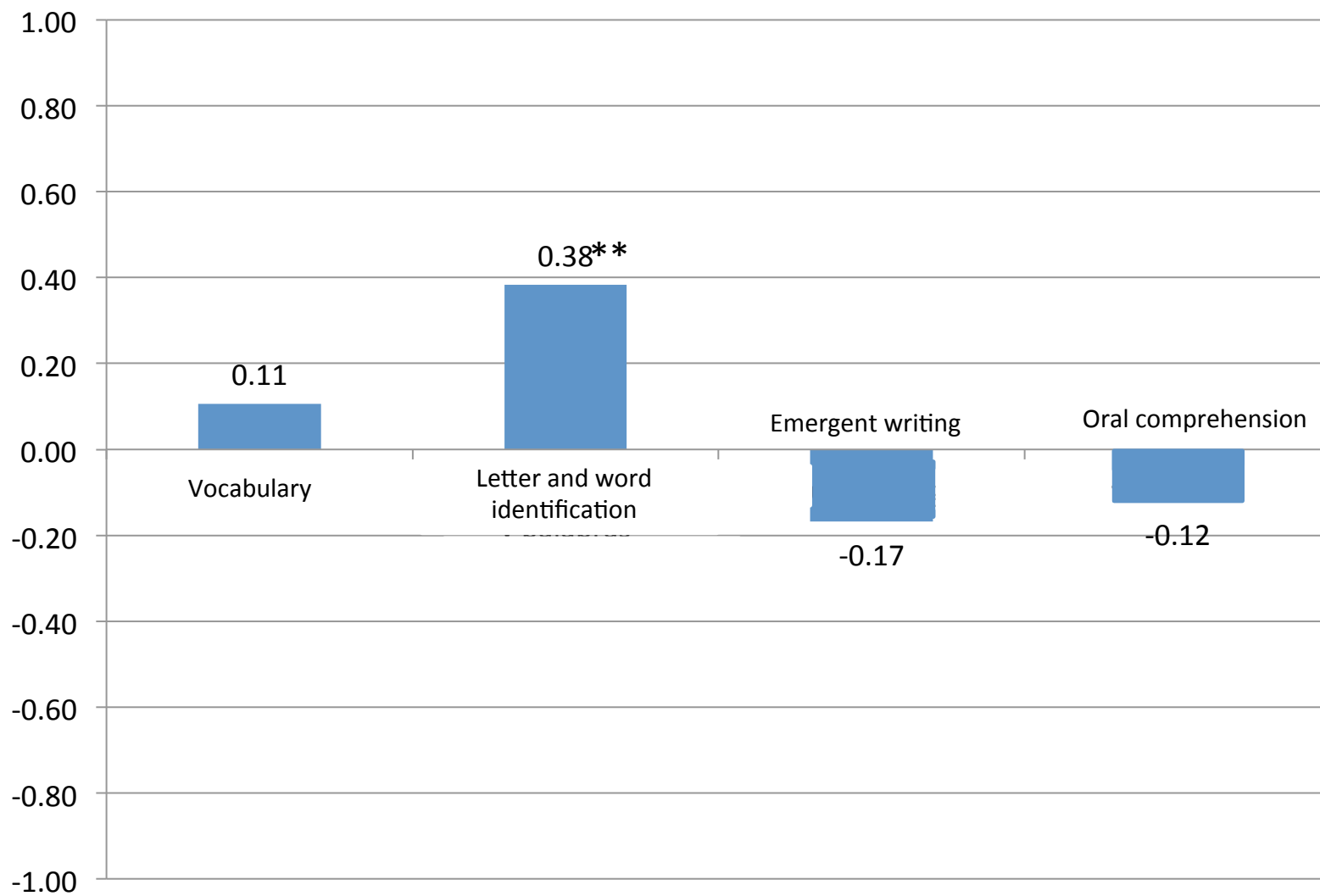
	Classrooms			Children	
	T1	T2	T3	T1	T3
Intervention	27	27	26 (-3,7%)	361	299 (-17,2%)
Control	38	36	35 (-7,9%)	843	619 (-26,6%)
Total	65	63	61 (-6,2%)	1204	918 (-23,8%)

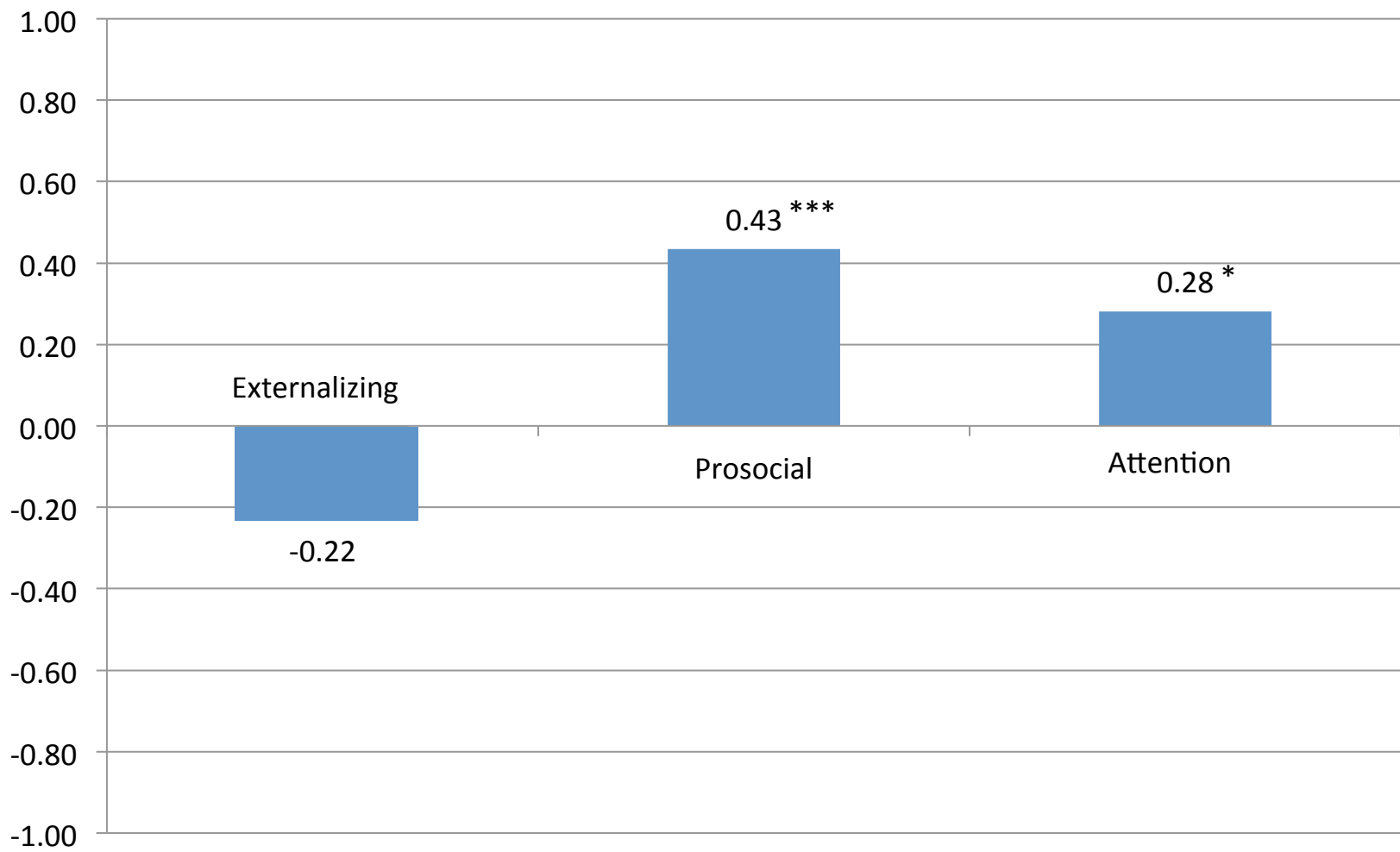
Quality of Classroom interactions after 1 year of intervention



Quality of Classroom interactions after 2 years of intervention







1. Investing in training for use of data was required to guarantee that the continuous quality improvement becomes a priority.
3. Increased frequency of implementation of UBC strategies through teachers initiative and innovation, not from prescription.
5. Schools have begun spreading spontaneously the improvement model
6. All schools have reported real time data on their process and results after the first semester.
7. School principals and their teams have provided key leadership for change and data analysis
8. Cultural change for improvement work: an unsuccessful experience is not a failure but an improvement opportunity.

Lessons from two different approaches for improving the quality of early childhood education and the language development among disadvantaged children

- Large effects on teaching quality can be attained relatively rapidly
- Difficult to translate improvements on teaching quality into effects of the same size on child development
- Effects on socioemotional development
- Some effects on language development, but in the most basic skills
 - Need for impacting comprehension
 - Raise vocabulary dosage (10 words per week, different levels of difficulty, today we teach 2 high level words only).
- Early childhood teachers face challenges
 - Low cultural capital
 - Weak initial training: technical institutes
 - The lowest salaries among teachers

- Comparison of experiment versus continuous improvement
 - Experimental designs
 - Powerful for causality (internal validity)
 - Weak in dealing with everyday contingencies that appear in the contexts of real schools
 - Teacher proof: Not aimed at building enduring teacher capacities
 - Continuous improvement
 - Restricted power for causality
 - Strong in dealing with contingencies
 - Aimed at building capacities, still need to understand if they can last

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