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Using the CLASS Observational Tool to Understand and Improve Classroom Interactions

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University of Virginia, USA
1 Noviembre, 2018

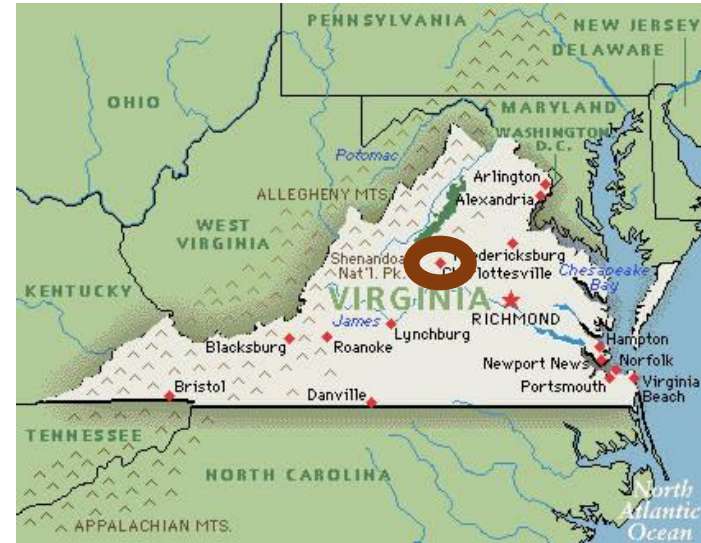
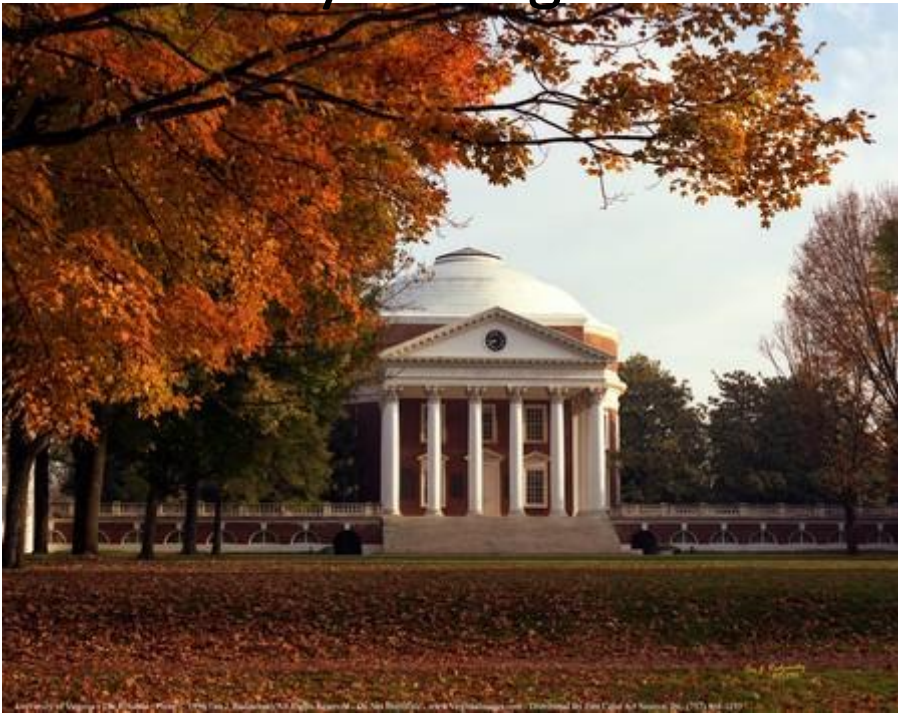
Outline of Presentation

- The Classroom Assessment Scoring System (CLASS)
 - Overview of the Measurement Tool
- Current application of CLASS in the United States
- Emerging applications in international settings
- Primero – un poco sobre mí



Charlottesville, VA

University of Virginia



Center for Advanced Study of Teaching and Learning



MISSION

To advance the quality and impact of teaching through scientific study in educational settings from infancy to higher education



My Research

How do students perceive their experiences in school?

How do students' perceptions relate to:

- Observed measures of the classroom
- Their motivation and engagement
- Their learning

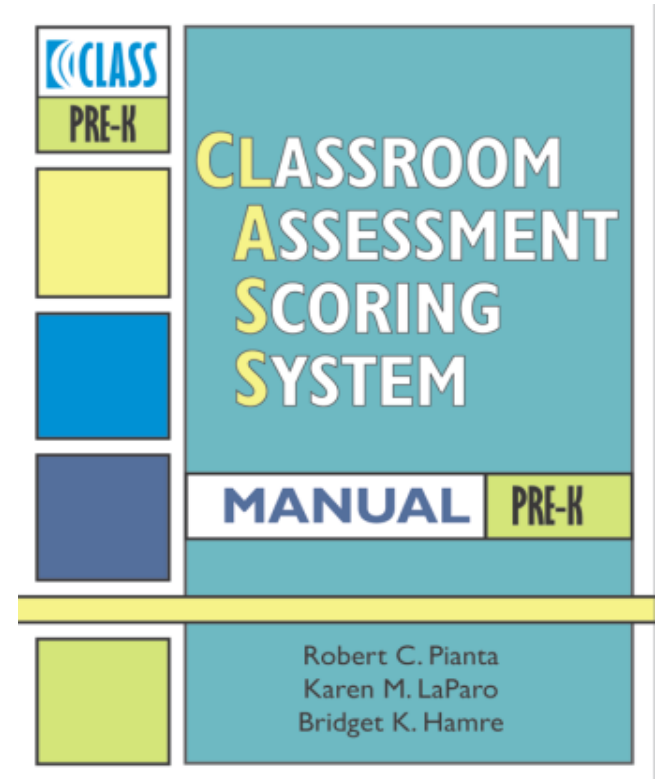


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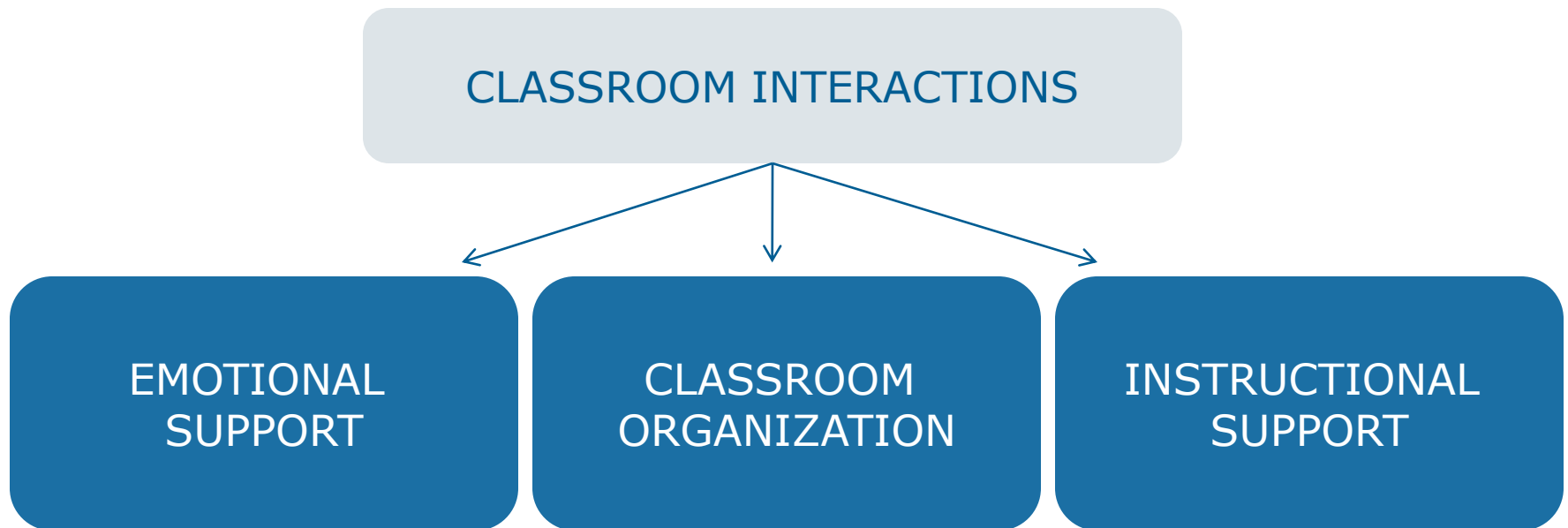
CLASS - Classroom Assessment Scoring System

- Developed by Robert Pianta and colleagues, based on educational & developmental psychology research
- Grade levels reflect both continuity and uniqueness across development
 - Infant
 - Toddler
 - Pre-K
 - K-3
 - Upper Elementary (4-6)
 - Secondary (6-12)
- Used across content areas



Interactions and Effective Teaching

The CLASS organizes effective classroom interactions into three broad categories or domains.



DOMAIN

EMOTIONAL
SUPPORT

CLASSROOM
ORGANIZATION

INSTRUCTIONAL
SUPPORT

DOMAIN

EMOTIONAL
SUPPORT

CLASSROOM
ORGANIZATION

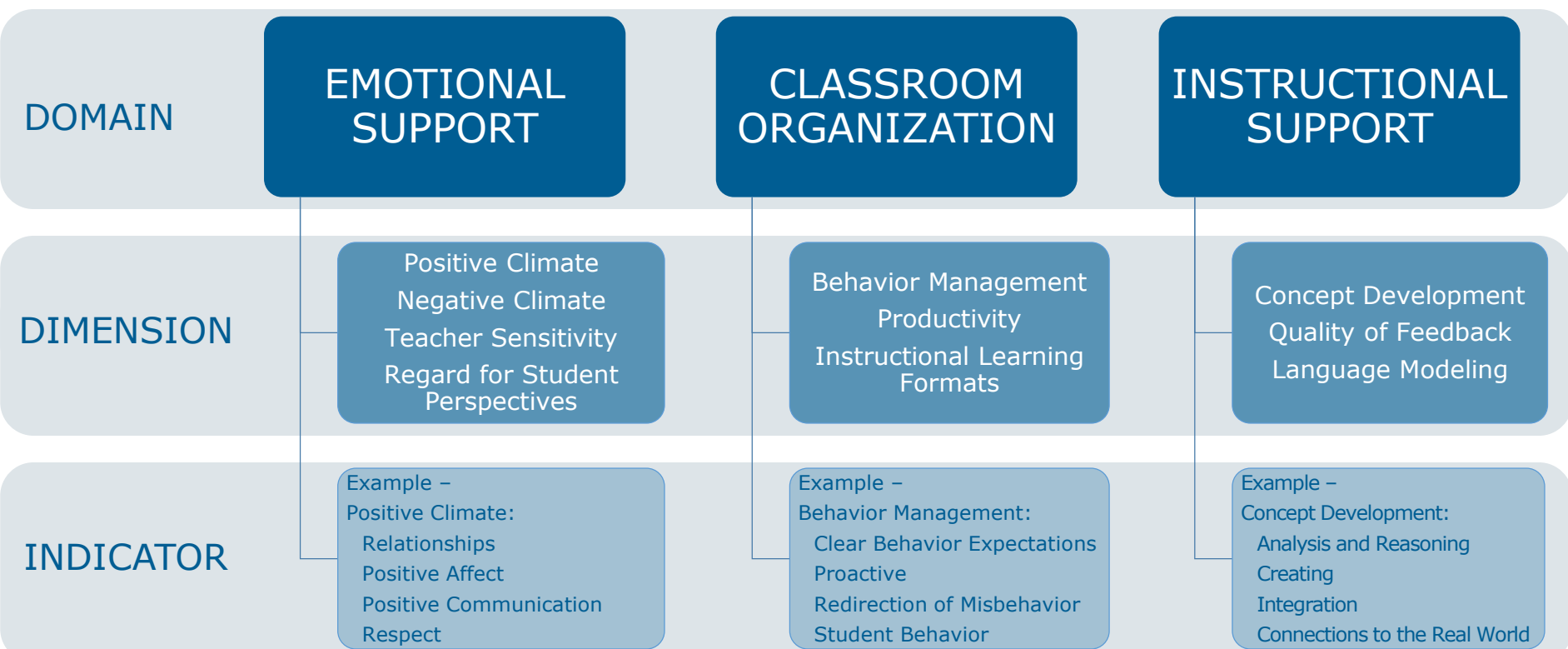
INSTRUCTIONAL
SUPPORT

DIMENSION

Positive Climate
Negative Climate
Teacher Sensitivity
Regard for Student
Perspectives

Behavior Management
Productivity
Instructional Learning
Formats

Concept Development
Quality of Feedback
Language Modeling

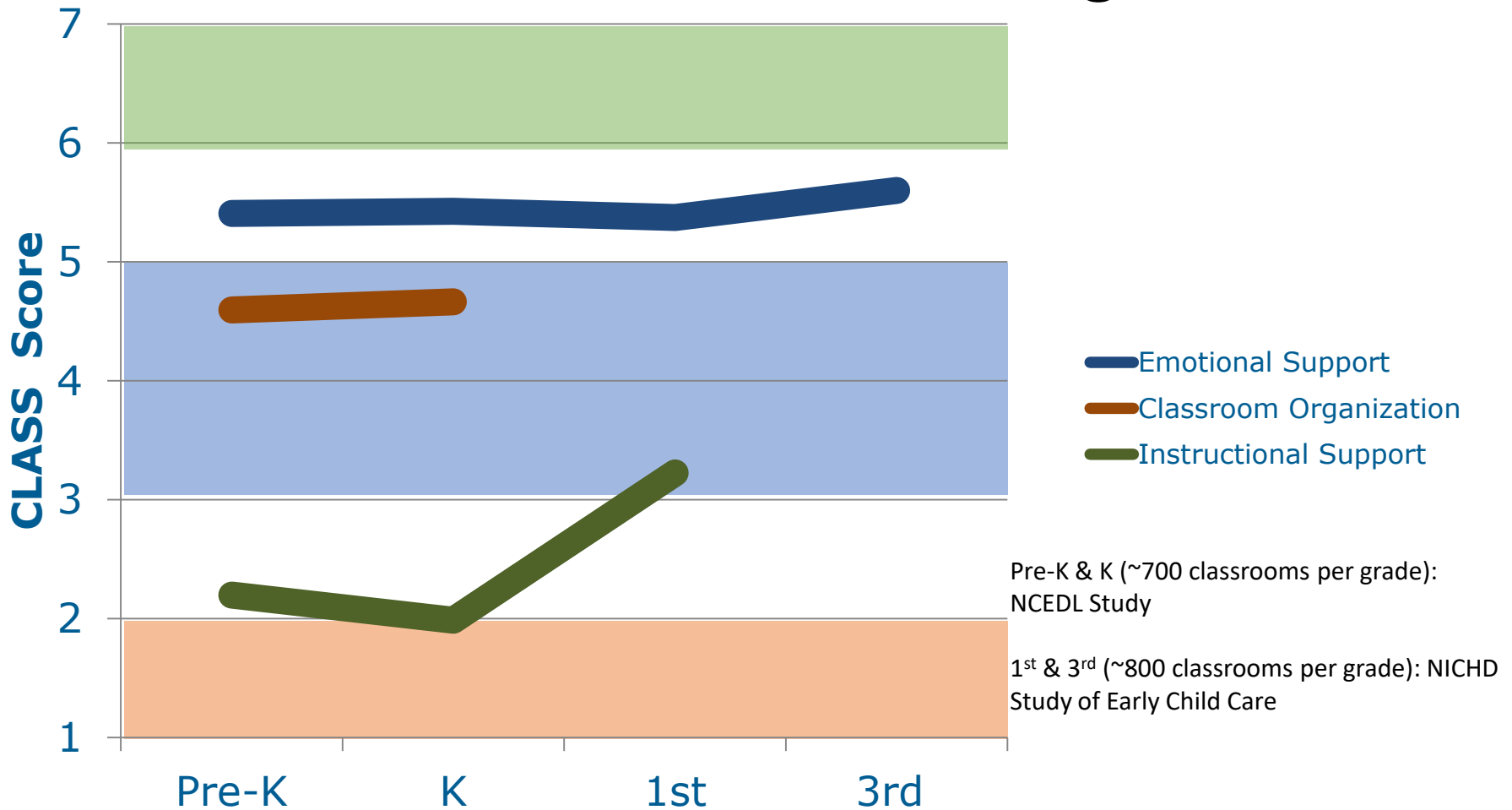


Low (1-2)	Mid (3-5)	High (6-7)
Low-level, ineffective Few if any indications No or few displays Rarely, if ever Does not	Sometimes effective Some indications Makes some attempt Somewhat Limited	Effective, meaningful Many indications Frequent displays Consistently

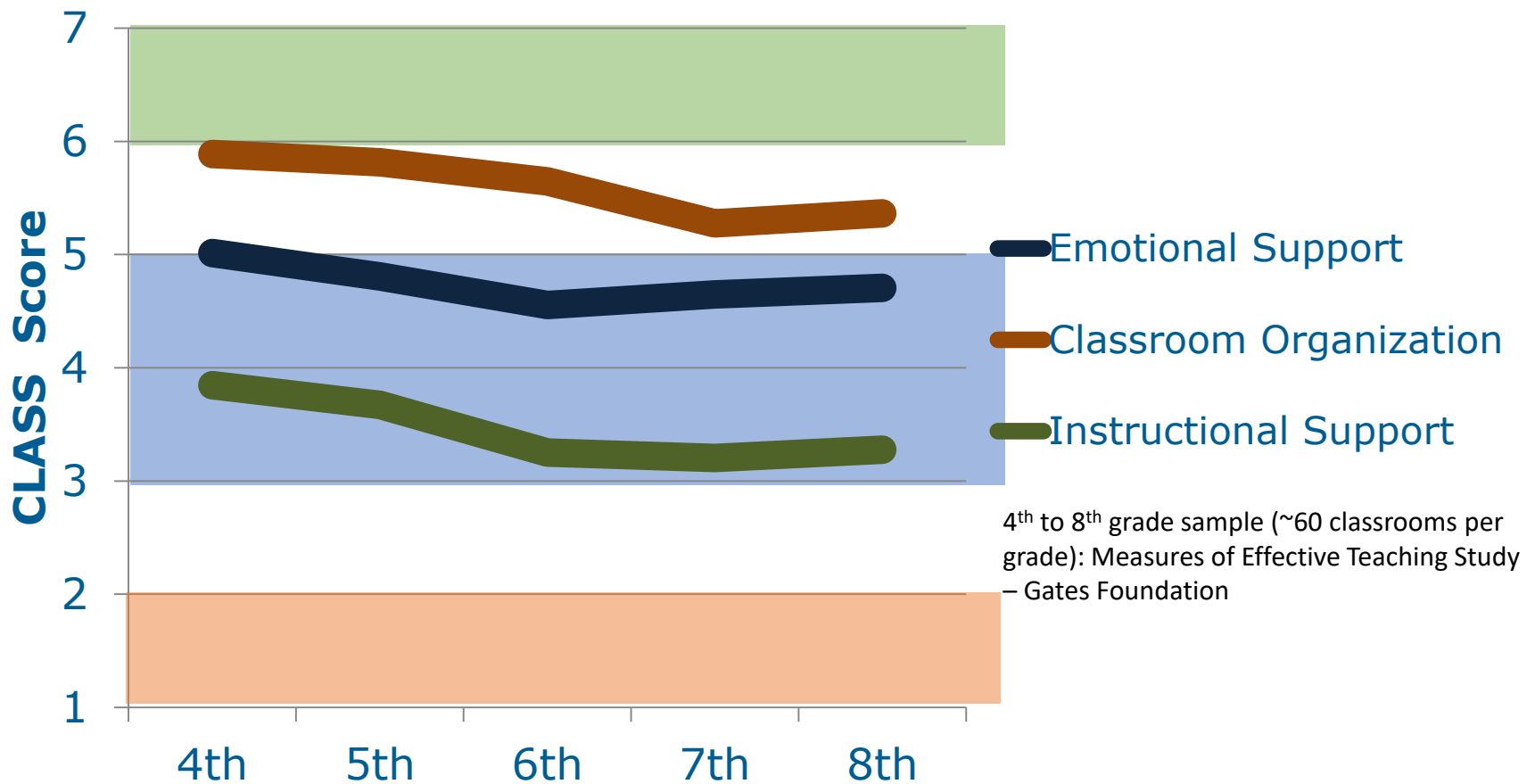
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Preschool to 3rd Grade – Average Levels



4th to 8th Grade – Mean Levels



Variability – 1,333 4th to 8th grade teachers

Observation Score Distributions: CLASS

Absence of a negative climate



Behavior management



Productivity



Student engagement



Positive climate



Instructional learning formats



Teacher sensitivity



Content understanding



Quality of feedback



Instructional dialogue



Regard for student perspectives



Analysis and problem solving



How do teacher-student interactions support learning and development?

<https://www.youtube.com/watch?v=2wBoHxqRPQU>

Emotional Support – Stronger Peer Relationships



Teachers' observed emotional support is associated with:

- higher rates of friendship sharing (Gest et al., 2011)
- sense of peer community (Madill et al., 2014)
- perceived peer support (Ruzek et al., 2016)

Emotional Support – More motivated and engaged students



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Teachers' observed emotional support is associated with students':

- motivation to understand subject (Ruzek et al., 2016)
- behavioral participation (Ruzek et al., 2016)
- self-reported effort in the class (Schenke., 2018)

CLASSROOM ORGANIZATION



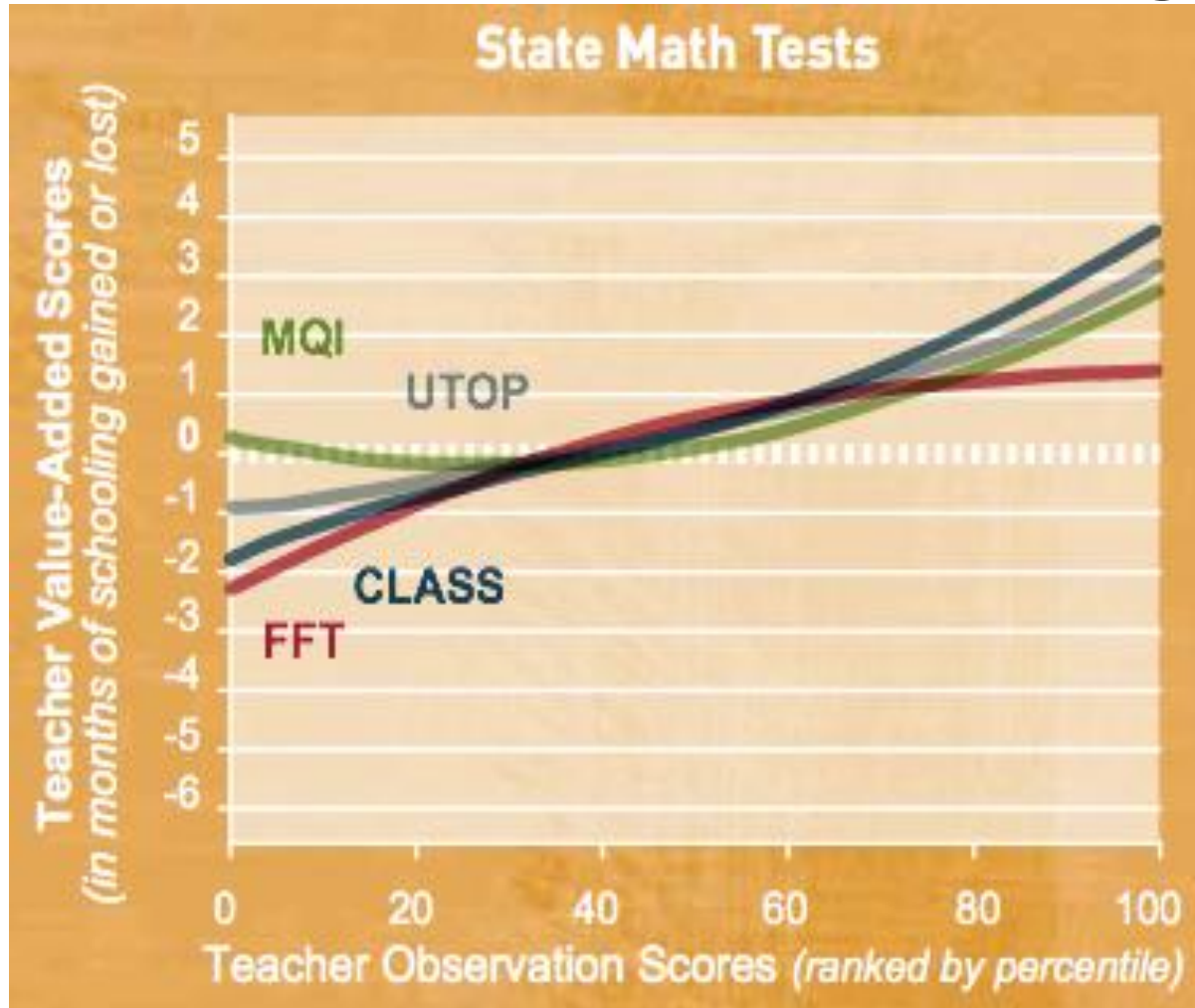
- Better task orientation
- Higher achievement

INSTRUCTIONAL SUPPORT



- Greater learning

Measures of Effective Teaching (MET) Study



Difference
between
students in
classrooms with
20th vs 80th
percentile
teacher is almost
**4 months of
learning!**

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- The Classroom Assessment Scoring System (CLASS)
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 - Research
 - Interventions
- Emerging applications in international settings

International Use of CLASS



Sobre que
Colombia?

Australia	France
Brazil	Germany
Canada	Israel
Chile	Kyrgyzstan
China	Mexico
Costa Rica	Norway
England	Portugal
Ecuador	Sweden
Finland	Turkey
	And more...

What are we learning?

	Portugal (Cadima et al., 2010)	Australia (Tayler et al, 2013)	Chile (Leyva et al, 2015)	Ecuador (Araujo et al., 2016)	China (Hu et al, 2016)
Sample	1 st - 64	PK - 250	PK - 90	K - 450	PK - 180

Similar factors

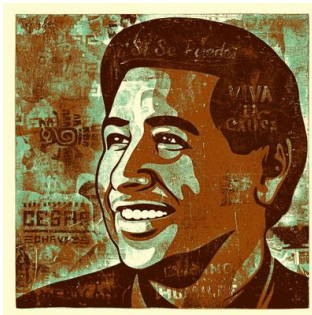
	Portugal (Cadima et al., 2010)	Australia (Tayler et al, 2013)	Chile (Leyva et al, 2015)	Ecuador (Araujo et al., 2016)	China (Hu et al, 2016)
Sample	1 st - 64	PK - 250	PK - 90	K - 450	PK - 180
Emotional Support					
Classroom Organization					
Instructional Support					

Similar factors, similar patterns

	Portugal (Cadima et al., 2010)	Australia (Tayler et al, 2013)	Chile (Leyva et al, 2015)	Ecuador (Araujo et al., 2016)	China (Hu et al, 2016)
Sample	1 st - 64	PK - 250	PK - 90	K - 450	PK - 180
Emotional Support	4.60(.88)	5.13(.92)	4.65(.54)	4.07(.33)	5.03(.69)
Classroom Organization	4.11(.90)	4.60(.92)	4.29(.63)	4.79(.47)	4.80(.81)
Instructional Support	3.04(1.13)	2.07(.76)	1.75(.55)	1.15(.18)	2.12(.61)

Related to children's development in these countries

Can we use the CLASS to help teachers improve their instruction?



“Si se puede”

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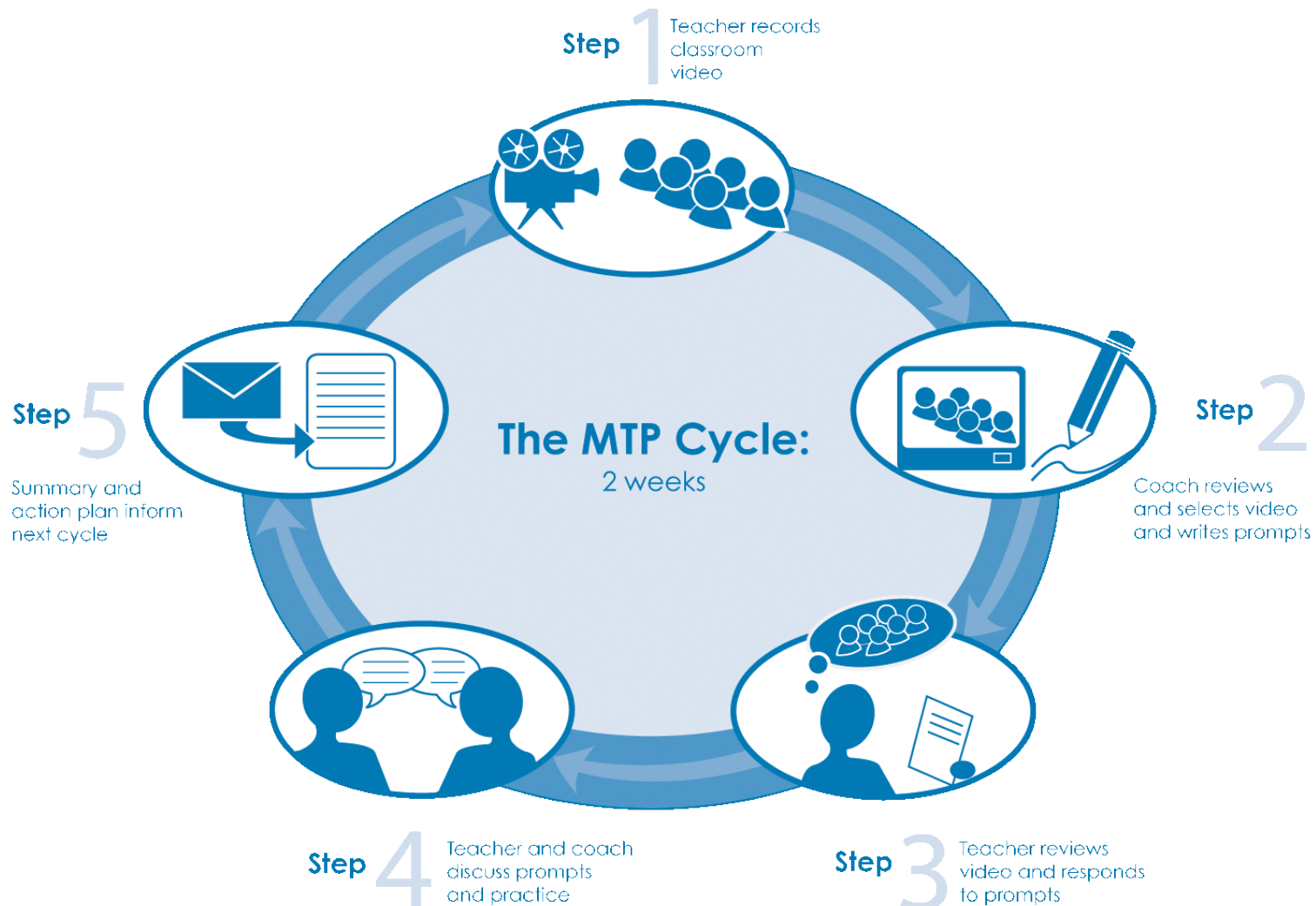
Borrow ideas from other fields

- Coaching or mentoring
 - Business
 - Sports
- Someone who helps you improve your skills
- Can we do it with teachers?

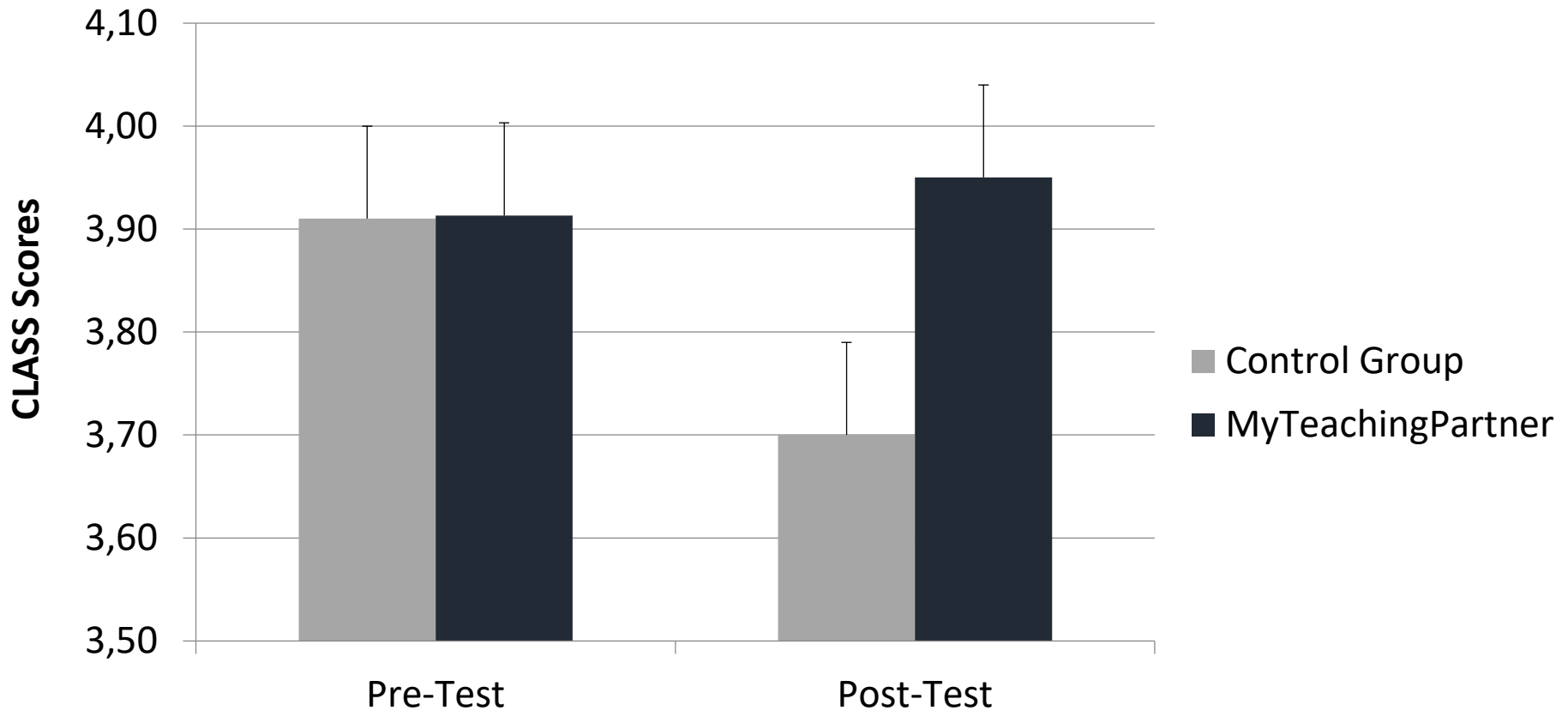


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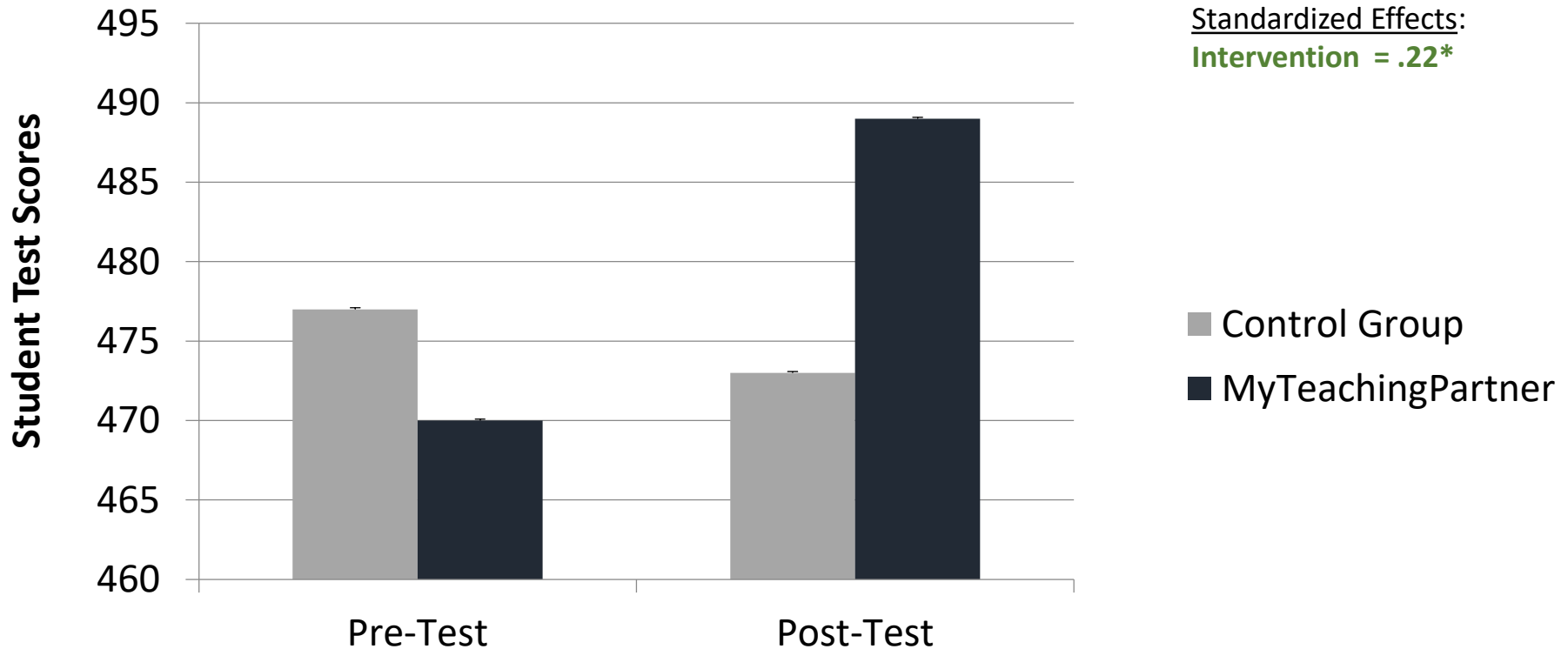
Intervention – MyTeachingPartner



Year 1 Change in CLASS



Year 2 Change in Achievement



Adaptation for Latin America – Ecuador

Could these interventions be meaningful and effective in a Latin American context?

HOW?

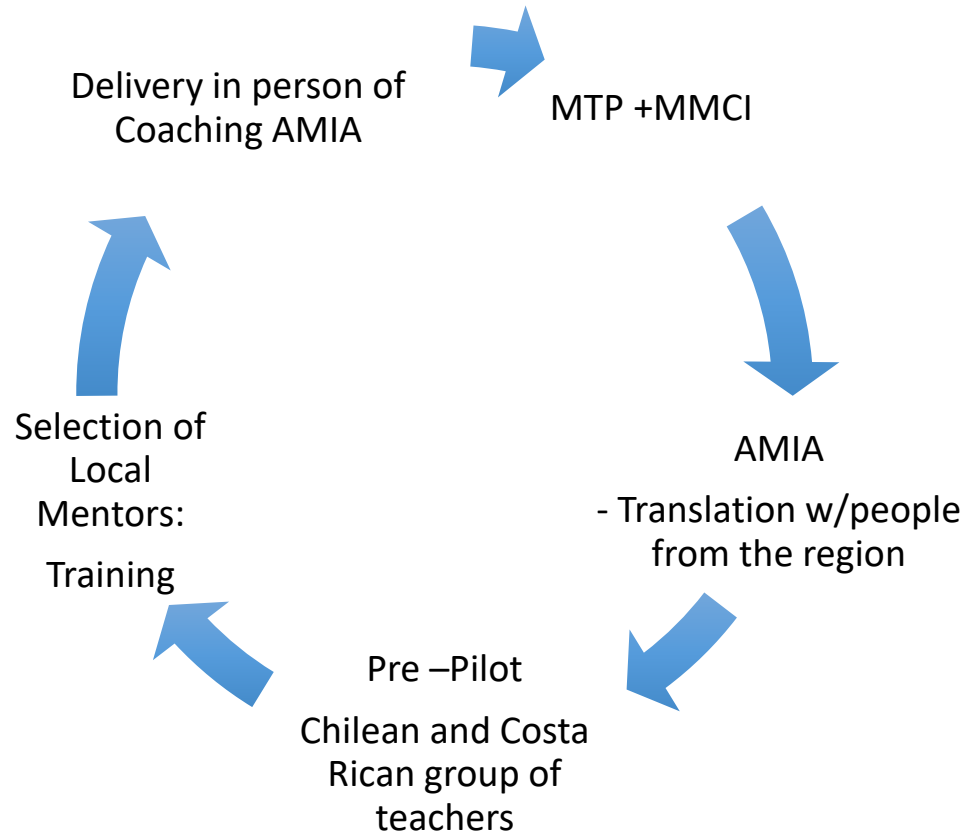
Specific adaptations made

- 1) Contextualized Resources
 - Local videos
 - Language translation and culturally sensitive examples

- 2) Contextualized Delivery
 - In person
 - Local Mentors

Process of AMIA – Acompañamiento Pedagógico ... in Ecuadorian Preschools

- AMIA- Aprovechando al máximo las interacciones en el aula



Summary takeaways and next steps

- Reliably measure teacher-student interactions
- Evidence of comparability across countries and contexts
- Generate useful information to inform where to focus resources
- Growing evidence points to how to improve those experiences
- Working with the Inter-American Development Bank, we ran a trial in Ecuador with 100 teachers, and the program has many more teachers in the full rollout

¡Muchas gracias!

- Contact me!
- Me: eruzek@virginia.edu
- My colleagues who have conducted CLASS work in Latin America :
- Jennifer Locasale-Crouch - jl3d@virginia.edu
- Maria (Fran) Romo Escudero - mfr4cb@virginia.edu



How can we help teachers best support students' learning and development?

Scoring - 20 min obs. cycles

1. Take extensive behavioral notes

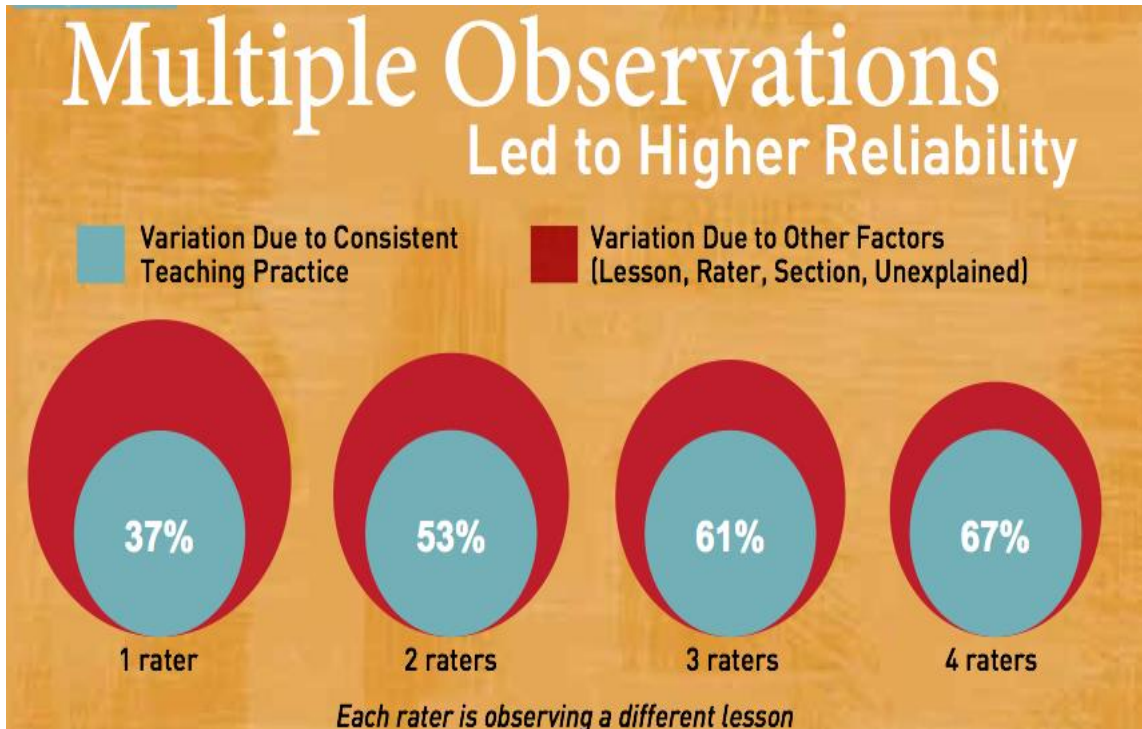
2. Read your manual

3. Assign a score



<p>Positive Climate</p> <p>Teacher smiles occasionally, kids return smile; teacher asks girl about her weekend; kids somewhat flat at beginning; no evidence of peer connections</p>	1	2	3	4	5	6	7
<p>Negative Climate</p> <p>None observed</p>	1	2	3	4	5	6	7
<p>Teacher Sensitivity</p> <p>Teacher doesn't notice or respond to child with hand raised; T. helps student having hard time tying shoe; S. seem comfortable – raise hands etc;</p>	1	2	3	4	5	6	7
<p>Regard for Student Perspectives</p> <p>Teacher (T.) directed lesson; T. gives frequent reminders for students (s.) to sit on squares; T. not flexible when s. asks about going outside; few opportunities for s. to lead</p>	1	2	3	4	5	6	7

Increasing Reliability of Observations



Important:

- Training & calibration
- Multiple raters (use of video)
- Rater characteristics

Reduction in Discipline Referrals

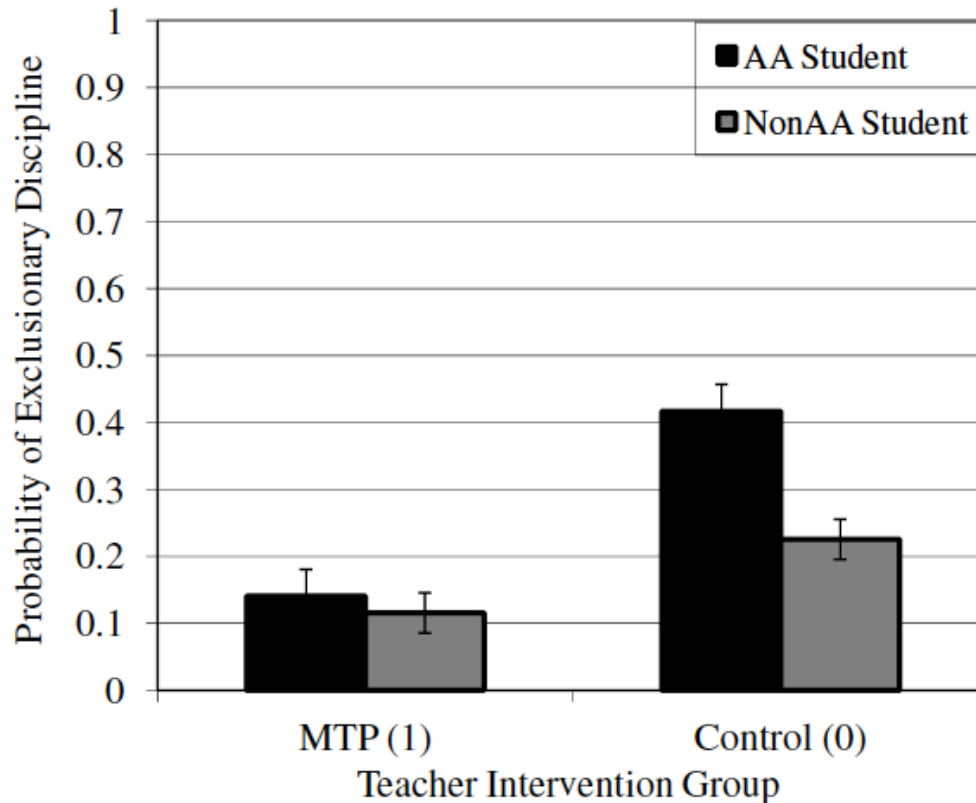


Figure 1. Intervention Group and Likelihood of Exclusionary Discipline as a Function of Student Race (AA = African American)

Gregory, A., Allen, J. P., Mikami, A. Y., Hafen, C. A., & Pianta, R. C. (2014).

DOMAIN	EMOTIONAL SUPPORT	CLASSROOM ORGANIZATION	INSTRUCTIONAL SUPPORT
DIMENSION	Positive Climate Negative Climate Teacher Sensitivity Regard for Student Perspectives	Behavior Management Productivity Instructional Learning Formats	Concept Development Quality of Feedback Language Modeling
INDICATOR	Example – Positive Climate: Relationships Positive Affect Positive Communication Respect	Example – Behavior Management: Clear Behavior Expectations Proactive Redirection of Misbehavior Student Behavior	Example – Concept Development: Analysis and Reasoning Creating Integration Connections to the Real World
BEHAVIORIAL MARKER	Example – Relationships: proximity, shared activities	Example – Clear Behavior Expectations: consistency, clarity	Example – Analysis and Reasoning: why/how questions