

## Standardized Testing and Classroom Interactions

Results from a Large-scale Study of "Successful" Schools in Peru



A national policy for **standardized testing** has been in place in Peru since 2006. The Censal Evaluation of Students (ECE) evaluates reading comprehension and math skills in 2<sup>nd</sup> grade.

Schools in some regions are consistently improving their results in the ECE while others are underperforming. <a href="http://umc.minedu.gob.pe/wp-content/uploads/2015/02/ECE-2014-Web-270215-27febv2.pdf">http://umc.minedu.gob.pe/wp-content/uploads/2015/02/ECE-2014-Web-270215-27febv2.pdf</a>

Which factors explain this?



IEP conducted a study for Peru's Ministry of Education in **360 public schools in 8 regions** during 2014. The sample was focused on successful schools and incorporated struggling schools for comparison.

**Successful school**: upward tendency (G5) or fluctuating upward tendency (G4) in the ECE results from 2011 to 2013.

**Unsuccessful school**: downward tendency (G1) or fluctuating downward tendency (G2) in the ECE results from 2011 to 2013.



#### **3 SUB STUDIES**

#### **SUB STUDY 1**

Aragón, Eguren, González & Vásquez

Which factors at the student, family, teacher, principal, school, and classroom level have an impact in students' achievement?

**Approach**: Quantitative



**Sample**: 360 public schools (one 3rd grade section per school) in 8 regions (Apurímac, Cajamarca, Callao, Lima Metropolitana, Loreto, Moquegua, Piura, San Martín)

	Apurímac	Cajamarca	Callao	Lima Metro.	Loreto	Moquegua	Piura	San Martín	Total
G5	12	11	17	18	5	16	14	14	107
G4	16	15	20	18	14	30	15	15	143
G2	10	10	1	6	11	1	10	10	59
G1	10	10	0	1	10	0	10	10	51
Total	48	46	38	43	40	47	49	49	360



#### **SUB STUDY 2**

González & Cuenca

# Which institutional factors at the level of regional governments have an impact in students' achievement?

**Approach**: Qualitative

Sample: 4 regions

Moquegua: sustained and significant improvement

Apurímac: sustained improvement

San Martín: irregular improvement

Loreto: very slow improvement



#### **SUB STUDY 3**

De Belaunde & Eguren

Which factors at the school, classroom and family level have an impact in students' achievement?

**Approach**: Qualitative

Sample: 12 schools (one 3rd grade section per school) in 4

regions (Moquegua, Apurímac, San Martín, Loreto)



#### **Instruments:**

- Surveys for principals, teachers, students, and families
- Cognitive test for teachers
- Reading comprehension evaluation for students
- School observation instrument
- Interviews with regional presidents or vice presidents, regional educational administrators, local educational units officers, community leaders
- Regional policy analysis
- Interviews with principals, teachers, students, and parents
- Classroom observation



## **FINDINGS**

## Significant factors at the regional level

The most successful region (Moquegua)	The least successful region (Loreto)		
More urban schools	More rural (multigrade) schools		
Territorial integration	Territorial dispersion		
Cultural homogeneity	Cultural heterogeneity		
Less poverty	More poverty		
Strong presence of the State	Weak presence of the State		
Institutions are more solid, articulated, efficient	Institutions are weak and not articulated		
Strong political leadership (capacity to build alliances, political will to prioritize education, long term policies)	Weak political leadership (lack of continuity in educational policies, lack of a unifying vision, poor alliances)		
"Positive" impact of the ECE (regional authorities implement measures to improve results, community is proud of the achievements)	Results in the ECE have not driven special measures		



## Significant factors at the school level

Successful schools (G5 & G4)	Unsuccessful schools (G2 & G1)
"Positive" discipline	"Negative" discipline (or no discipline)
Maximization of learning time is high	Maximization of learning time is medium
Some schools participate in State-run poverty reduction programs	All schools participate in State-run poverty reduction programs
Breakfast: 15 minutes	Breakfast: 30 minutes
More non State-run educational interventions	Less non State-run educational interventions
Schools implement coordinated actions to improve results in the ECE (meetings with parents, extra hours for training, best teachers in 1 <sup>st</sup> and 2 <sup>nd</sup> grade)	Schools implement some actions to improve their results in the ECE (sending report cards to parents)



## Significant factors at the principals' level

Successful schools (G5 & G4)	Unsuccessful schools (G2 & G1)	
Older (59.2)	Younger (48)	
Postgraduate studies (30%)	Non-college degree (49%)	
[P] Adequately trained for the job (self-perception) (34%)	[P] Insufficiently trained for the job (20%)	
[P] Students go to school to become citizens (64% - G5)	[P] Students go to school to learn to read and write (41% - G1)	
[P] Students will go to college (49%)	[P] Students will go to high school and maybe get a technical degree (67%)	
Computer at home (90%)	Computer at home (64% - G1)	
Internet at home (67%)	Internet at home (35% - G1)	



## Significant factors at the teachers' level

Successful schools (G5 & G4)	Unsuccessful schools (G2 & G1)		
Women (80%)	Men (49%)		
Head of household (41%)	Head of household (68%)		
Postgraduate studies (32%)	Non-college degree (66%)		
Higher scores in the PMA (Primary Mental Abilities) Test, especially when women and young	Lower scores in the PMA Test		
[P] Students go to school to become citizens (57%)	[P] Students go to school to learn to read and write (42%)		
[P] Students will go to college (48%)	[P] Students will go to high school and maybe get a technical degree (70%)		
Computer at home (84%)	Computer at home (52% - G1)		
Internet at home (65%)	Internet at home (29% - G1)		



## Significant factors at the students' and families' level

Successful schools (G5 & G4)	Unsuccessful schools (G2 & G1)		
Age: most students between 8 and 9 years old	20% of students older than 9 (10-12 years old)		
Fewer students do housework: do laundry, caring for younger children or the elderly, carrying firewood and/or water (20-47%)	More students do housework (32-69%)		
Fewer students help with parents' job (63%) or have a paid job 29%)	More students help with parents' job (81%) or have a paid job (42%)		
[SP] "The teacher hits me if I don't behave" (22%)	[SP] "The teacher hits me if I don't behave" (45%)		
[SP] Less teacher absenteeism (18%)	[SP] More teacher absenteeism (30%)		
More parents with postsecondary education (16%)	Fewer parents with postsecondary education (3%)		
Higher monthly income (USD 187-677)	Lower monthly income (USD 37-150)		
[FP] Family perceives education quality as good or average (87%)	[FP] Family perceives education quality as very good or good (80%)		
[FP] The best teacher is the teacher that shows up to school (19%- G5)	[FP] The best teacher is the teacher that shows up to school (40%- G1)		
Computer at home (53%)	Computer at home (28%)		
Internet at home (48%)	Internet at home (20%)		



## Significant factors at the classroom level

## No significant differences between successful and unsuccessful schools!!!

- Classroom climate: relatively positive (aggression among students, not between teacher and students; children participate in class; noise level is high)
- Time on task: 70% instructional activities (30% without any educational material)
- Pedagogical practices: work in small groups, presentations to the class, copying, closed questions, emphasis on formal aspects (spelling). Cognitive demand is very low.
- Quality of interactions is low.



#### **CONCLUSIONS**

- 1. "Success" depends mainly on factors **outside** of the school and of the classroom:
  - Poverty
  - State presence
  - Urban-rural gap
  - But there is also a strong link between high performing schools and positive expectations from teachers and principals



2. The policy of **standardized testing** has had a huge impact on schools and regional educational systems:

### **Negative aspects**:

- "Teaching to the test"
- Impoverished curriculum
- Teacher incentive policies linked almost exclusively to tests results



#### Positive aspects:

- Schools processes and actors are reinvigorated
- Principals and teachers take initiative, plan extra classes, teach extra hours, take advantage of curricular materials provided by the Ministry of Education
- Principals and teachers have realized that students can learn if the former do a systematic and conscious effort towards it



- 3. Is there an impact of testing in **classroom interactions**?
  - Training activities for the ECE are not held in regular school time
  - Regular classroom interactions are homogeneous across schools: low quality, although slightly better climate and time on task in better performing schools



- 4. It's imperative to **define a successful school** in broader terms. A successful school should level students' entry factors so that everybody has the same educational opportunities.
  - Is it possible for a testing policy to impact positively in classroom interactions? How?

