School Autonomy and Accountability

- Alternative strategies to address service delivery failures in education
- Empower parents and hold providers accountable
- Accountability reforms: change environment and incentives for education system actors
Autonomy

Accountability

Assessment
Transfer Authority of Activities

- Budget
- Hiring & firing
- Curriculum
- Infrastructure

- School calendar
- Monitoring
- School grants
- Dissemination
Goals & Objectives

(1) Increase participation

(2) Empower principals & teachers

(3) Build local capacity

(4) Improve school quality & efficiency
Autonomy-Participation Nexus

- Netherlands
- Madagascar
- Rwanda
- Ghana
- Qatar
- Niger
- New Zealand
- El Salvador
- Guatemala
- Indonesia
- Kenya
- Mozambique
- Mexico AGES
- Mexico PEC
- Chicago, USA
- Senegal
- Indonesia
- Mexico AGES
- Mexico PEC
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Time to Impact

Evidence from USA

Source: Borman et al (2003), based on 232 studies
## Non-Experimental Evidence: Mexico

<table>
<thead>
<tr>
<th>Country</th>
<th>Authors</th>
<th>Intervention</th>
<th>Methodology</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEXICO</td>
<td>Murnane et al 2006</td>
<td>Schools given resources for implementing a school plan in consultation with parents (funding goes to both infrastructure &amp; teaching resources; \textit{PEC})</td>
<td>Difference-in-difference (w/systematic check of equal trends treatment &amp; control)</td>
<td>Positive impact on dropout rates; No effect on repetition</td>
</tr>
<tr>
<td>MEXICO</td>
<td>Skoufias &amp; Shapiro 2006</td>
<td>\textit{PEC}</td>
<td>Matching estimation w/ DiD (one year pre-trend)</td>
<td>Positive impact on dropout, failure, and repetition rates</td>
</tr>
<tr>
<td>MEXICO</td>
<td>Lopez-Calva &amp; Espinosa 2006</td>
<td>Parent associations given small amounts for small civil works; \textit{AGE}</td>
<td>Matching, cross section</td>
<td>Positive impact on test scores</td>
</tr>
<tr>
<td>MEXICO</td>
<td>Gertler, Patrinos, Rubio-Codina 2008</td>
<td>\textit{AGE}</td>
<td>Quasi-experimental panel data &amp; DiD</td>
<td>Reduction (by 4-5%) in grade repetition and failure rates</td>
</tr>
</tbody>
</table>
# More non-experimental evidence

<table>
<thead>
<tr>
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<tr>
<td>NICARAGUA</td>
<td>King &amp; Ozler 1998</td>
<td>Govt establishment of consultative school councils (1991); councils transformed into monitoring boards, wide scope of decisions (teachers vote to enter program; 1993; ASP)</td>
<td>Matching, panel data</td>
<td>De jure autonomy yielded no impact. Real autonomy (to hire and fire teachers) yielded a positive impact on test scores</td>
</tr>
<tr>
<td>NICARAGUA</td>
<td>Parker 2005</td>
<td>ASP</td>
<td>Matching, panel data</td>
<td>Positive impact on test scores</td>
</tr>
<tr>
<td>NICARAGUA</td>
<td>Arcia, Porta, Laguna 2004</td>
<td>ASP</td>
<td>Heckman model</td>
<td>Positive impact on test scores</td>
</tr>
<tr>
<td>BRAZIL</td>
<td>Paes de Barros &amp; Mendonca 1998</td>
<td>Direct transfers to schools, election of principals, creation of local school councils</td>
<td>Difference-in-difference, no pre-intervention trends</td>
<td>Positive impact on repetition and dropout rates; No impact on test scores</td>
</tr>
</tbody>
</table>


## More non-experimental evidence II

<table>
<thead>
<tr>
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<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EL SALVADOR</strong></td>
<td>Jimenez &amp; Sawada 1999 &amp; 2003</td>
<td>Community associations responsible for administering funds, hiring/firing teachers, monitoring &amp; maintaining infrastructure <em>(EDUCO)</em></td>
<td>Heckman model; exclusion restriction: gov’t prioritizing targeting formula</td>
<td>Increases reading scores &amp; decreases absenteeism (1999); Increases retention (2003)</td>
</tr>
<tr>
<td><strong>HONDURAS</strong></td>
<td>Di Gropello &amp; Marshall 2005</td>
<td>School councils have autonomy over hiring &amp; firing teachers, monitoring attendance, managing funds, &amp; maintaining infrastructure <em>(PROHECO)</em></td>
<td>Heckman model; exclusion restriction: presence of potable water &amp; community services</td>
<td>No effect on test scores; Small changes in dropout rates</td>
</tr>
<tr>
<td><strong>SEVERAL COUNTRIES</strong></td>
<td>King et al 2003 &amp; 2004</td>
<td>School-based management interventions across several countries, spanning several years</td>
<td>IV: principal’s attributes &amp; legal structure</td>
<td>No effect on test scores (2003 &amp; 2004); Positive impact on parental participation (2004)</td>
</tr>
<tr>
<td>Country</td>
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<td>Intervention</td>
<td>Methodology</td>
<td>Findings</td>
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<tr>
<td>NEPAL</td>
<td>Chaudhury 2011</td>
<td>Communities express desire to take over management of schools (receive 1-time incentive grant)</td>
<td>Quasi-experimental randomization approach (IV &amp; DD)</td>
<td>Reduction in out of school children; reduction in repetition; increased progression; equity (disadvantaged caste perform better)</td>
</tr>
<tr>
<td>PAKISTAN</td>
<td>Das et al. forthcoming</td>
<td>School councils constituted following certain rules; NGO hired to manage school w/ school council, receive $4000</td>
<td>Randomized (not upheld), used intention to treat</td>
<td>Thus far, no change in enrollment or teacher absenteeism More forthcoming</td>
</tr>
<tr>
<td>KENYA</td>
<td>Duflo, Dupas &amp; Kremer 2007</td>
<td>Training of school committees to monitor teachers on performance &amp; committee-based hiring of teachers (versus headmaster hiring of new teachers)</td>
<td>Randomized trial</td>
<td>Higher student test scores, lower teacher absenteeism, small change in student dropout</td>
</tr>
<tr>
<td>INDONESIA</td>
<td>Pradhan et al. 2010</td>
<td>School-based management</td>
<td>Randomized trail</td>
<td>Positive effect on learning outcomes; strongest for elections in combination with linkage, increases scores in language by 0.51 standard deviations, math by 0.46</td>
</tr>
</tbody>
</table>
# Experimental evidence from Mexico

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<tbody>
<tr>
<td>MEXICO</td>
<td>Gertler, Patrinos and Rodriguez 2010</td>
<td>Doubling of school grant (AGE)</td>
<td>Randomized trial</td>
<td>Increased participation in 1st year; reduced dropout, increased test scores 0.25 SD, esp. for grade 3 cohort</td>
</tr>
<tr>
<td>MEXICO</td>
<td>Gertler, Patrinos, Rubio &amp; Garcia 2010</td>
<td>SBM grants in Colima (PEC)</td>
<td>Randomized trail</td>
<td>Improved learning for all; 0.16 SD for grade 3 cohort</td>
</tr>
</tbody>
</table>
Teaching is improving, but slowly. Getting parents involved could speed things up.
### Comparative Costs of interventions in Mexico (cost per student)

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGEs</td>
<td>$7</td>
</tr>
<tr>
<td>Student assessment</td>
<td>$6</td>
</tr>
<tr>
<td>Annual school building cost</td>
<td>$160</td>
</tr>
<tr>
<td>Contract teacher &amp; salary increase</td>
<td>$240</td>
</tr>
<tr>
<td>Computers (10 students)</td>
<td>$500</td>
</tr>
<tr>
<td>PRIMARY</td>
<td>$828</td>
</tr>
<tr>
<td>SECONDARY</td>
<td>$1,276</td>
</tr>
</tbody>
</table>
From Weak to Strong Programs...

- **Autonomy**: from small grants to school budget
- **Autonomy**: from monitoring to hiring/firing
- **Participation**: from passive to active parents
- **Assessment**: need information, assessments, dissemination, use
- **Accountability**: clear rules & responsibilities, with consequences
How can we measure the 3 elements?

World Bank designed an instrument with objective of measuring these using five indicators.
Measuring School Autonomy and Accountability Policies

Autonomy

1. Budget
2. Personnel

Assessment

3. Measuring student outcomes

Accountability

4. Participation
5. Accountability mechanisms
## Policy Alignment

Figure 3. Are accountability policies aligned with autonomy?

<table>
<thead>
<tr>
<th>Parents have some influence over hiring and firing teachers</th>
<th>Parent have some influence over budget decisions</th>
<th>Parents do not have influence over specified autonomy</th>
</tr>
</thead>
<tbody>
<tr>
<td>No autonomy over budget or hiring and firing teachers</td>
<td>School has autonomy to allocate its budget</td>
<td>School has autonomy to hire and fire teachers</td>
</tr>
</tbody>
</table>

- Shanghai

- Malaysia
- Korea
- Lao PDR
- Thailand
- Cambodia

- Singapore
- China
- Philippines
- Japan

- Vietnam

- Indonesia
- Mongolia
School autonomy, accountability and student performance

Impact of school autonomy on performance in systems with and without accountability arrangements

PISA score in reading

- **School autonomy in resource allocation**
- **Schools with more autonomy**
- **Schools with less autonomy**

**Systems with more accountability**
- 493

**Systems with less accountability**
- 495
  - Source: OECD
Linkages

Information

School-based management

Teacher incentives
School-based management...

• **Can** improve school performance by empowering parents, giving communities voice, and making participation more effective
  
  – *Inexpensive* and cost-effective
  
  – *But* models with low levels of autonomy and weak accountability not likely to produce large gains, especially in learning outcomes

• **Design** matters
  
  – *Focus on what works, measure, evaluate*

• **Need** to integrate with other programs
  
  – better information flows, higher levels of autonomy, strong accountability mechanisms; most importantly, need to affect teacher hiring/firing to obtain large gains
Thank you!

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