TOOLS TO MEASURE TEACHER PERFORMANCE AND SKILLS

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Education Innovations for 21st Century Skills
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Shining a light inside the “black box”
Shining a light inside the “black box”
Teacher performance (effort) measures: Are teachers at school and teaching?

Tools for measuring attendance and activity:

- Special-purpose teacher absenteeism surveys
  - Example: multicountry absence surveys
- Tools for measuring quality of service delivery
  - Example: Service Delivery Indicators initiative in Africa, Middle East

Advantages:
- Attendance is a clear, easy-to-understand indicator of system performance
- Teacher presence is essential for learning

Disadvantages:
- Teachers may resist unannounced survey visits
- Accurate indicator of average performance, but not that of individual teachers
### Teacher performance (effort) measures: Are teachers at school and teaching?

**Service Delivery Indicators measurement program**
Findings from surprise visits to representative samples of schools

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<tbody>
<tr>
<td>PROVIDER EFFORT</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>School absence rate (teacher)</td>
<td>45%</td>
<td>15%</td>
<td>15%</td>
<td>27%</td>
<td>14%</td>
<td>18%</td>
</tr>
<tr>
<td>Classroom absence rate</td>
<td>56%</td>
<td>47%</td>
<td>42%</td>
<td>56%</td>
<td>22%</td>
<td>34%</td>
</tr>
<tr>
<td>Classroom teaching time</td>
<td>1h 41m</td>
<td>2h 47m</td>
<td>3h 40m</td>
<td>2h 55m</td>
<td>3h 44m</td>
<td>2h 52m</td>
</tr>
<tr>
<td><em>(nb: official teaching time)</em></td>
<td>4h 17m</td>
<td>5h 55m</td>
<td>5h 40m</td>
<td>7h 20m</td>
<td>4h 53m</td>
<td>5h 29m</td>
</tr>
<tr>
<td>Director absence rate</td>
<td>44%</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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*Four states: Anambra, Bauchi, Ekiti, and Niger*

Source: [http://www.sdindicators.org](http://www.sdindicators.org)
Teacher skills measures:
Do teachers know enough?

Tools for measuring teacher knowledge and skills:

- **Tests of content & pedagogical knowledge from administrative processes**
  - Example: tests embedded in teacher certification or recruitment (e.g., Pakistan)

- **Tests of content & pedagogical knowledge from service delivery surveys**
  - Example: Service Delivery Indicators initiative in Africa, Middle East

Advantages:

- Teachers’ content knowledge often predicts student learning
- Teachers typically support measures to fill these gaps

Disadvantages:

- Will not capture everything a teacher needs to know to be effective
**Teacher skills measures:**
Do teachers know enough?

Service Delivery Indicators measurement program
Findings from tests of representative samples of teachers

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<tbody>
<tr>
<td><strong>PROVIDER KNOWLEDGE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minimum knowledge (at least 80% in math &amp; language)</td>
<td>19%</td>
<td>39%</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>Test score (in math, language, and pedagogy)</td>
<td>45</td>
<td>57</td>
<td>34</td>
<td>36</td>
</tr>
</tbody>
</table>

* Four states: Anambra, Bauchi, Ekiti, and Niger

Source: http://www.sdindicators.org
Teacher performance and skills measures:
How do teachers teach?

Tools for observing performance:

• **Systematic classroom observation by trained observers**
  • Example: Stallings method in Latin America, peer observation

• **Video-based observation:**
  • Examples: Teacher evaluation system in Chile, Best Foot Forward project in the US, TIMSS video studies in Indonesia

Advantage:

• Allows teachers to show how they can use the skills they have

Disadvantage:

• May not show **typical** performance of teachers (Hawthorne effect)
• Can be resource-intensive if applied to all teachers
Teacher performance and skills measures: How do teachers teach?

Systematic classroom observation by trained observers:
Findings from watching 15,000 teachers in 3000 classrooms in Latin America/Caribbean

Teachers spend one third of time at the blackboard and use ICT less than 2% of time

Source: Bruns and Luque, Great Teachers (2014)
Teacher performance measures:
How well do teachers promote learning?

Tools for measuring teachers’ effects on student learning:

- Simple metrics of student performance mapped to teachers
- Teacher value-added (TVA) calculations
  - Examples: TVA component of Washington DC teacher evaluation system

Advantages:
- Measures what we care most about: is the teaching effective?
- TVA controls for many non-teacher factors that influence learning

Disadvantages:
- Simple metrics are not fair to teachers
- TVA is better, but can be volatile at the individual level
- TVA calculations require a lot of data & are not transparent
Teacher performance measures: How well do teachers promote learning?

How TVA affects earnings many years later, at age 28

Source: Chetty, Friedman, and Rockoff (2014)
Summing up

Multiple approaches to measurement

- Are teachers in school and teaching?
- Do teachers know enough?
- How well do teachers teach?
- How well do teachers promote learning?

Which to use depends on capacity and context

. . . But a combination is likely to be most effective
What do we do with this information?
Beyond using it for teacher evaluation and professional development

Resources → Policies → Policy implementation → Quality of teaching → Student learning

M&E, including impact evaluations

SABER Policy intent
SABER Implementation
Tools for measuring teacher performance and skills
What do we do with this information?
Beyond using it for teacher evaluation and professional development

Assess the quality of policies
- SABER

Assess whether policies are being implemented
- Surveys of teachers and principals
- Surveys of community members
- School observation

Evaluate new programs and policies
- Impact evaluations

Kazakhstan

Policy Goals
1. Setting Clear Expectations for Teachers
   There are clear expectations for what students should learn and what teachers are expected to teach. Teachers are evaluated based on their ability to meet these expectations.

2. Attracting the Best into Teaching
   Strategies to attract high-quality teachers and improve teacher retention, including increasing salaries and providing professional development opportunities.

3. Preparing Teachers with Strong Principals
   Ensuring that principals are well-prepared and supported in their roles, through training and coaching.

4. Matching Teachers' Skills with Students' Needs
   Implementing strategies to match teachers' skills and qualifications with the needs of the students they serve.

5. Leadership with Strong Principals
   Developing strong leadership skills in principals, including effective communication and decision-making.

6. Monitoring Teaching and Learning
   Regular monitoring and evaluation of teaching quality and student learning outcomes.

7. Supporting Teachers to Improve Instruction
   Providing ongoing support and professional development to help teachers improve their instructional practices.

8. Motivating Teachers to Perform
   Creating an environment that recognizes and rewards high performance, including merit pay and other incentives.
Resources

Great Teachers (2014): Classroom observation and other tools
link to publication

Service Delivery Indicators: Tools for measuring teacher knowledge & effort
www.sdindicators.org → Methodology

Provider absence surveys in education and health: A Guidance note
link to publication

SABER-Teachers: Tools for assessing teacher policies
saber.worldbank.org → topic: Teachers
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