

# TOOLS TO MEASURE TEACHER PERFORMANCE AND SKILLS



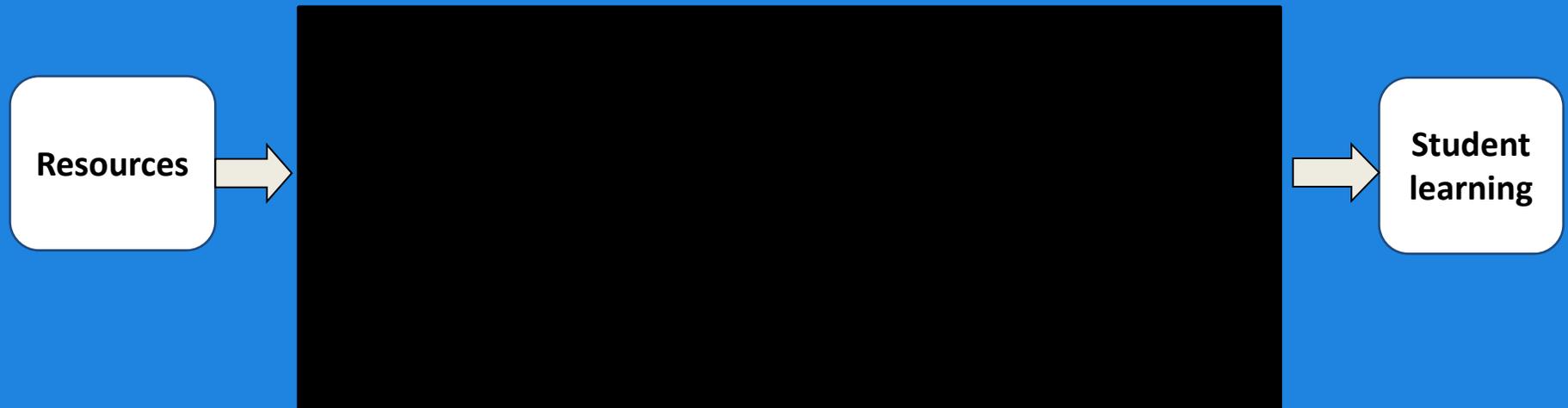
**WORLD BANK GROUP**

**Halsey Rogers**

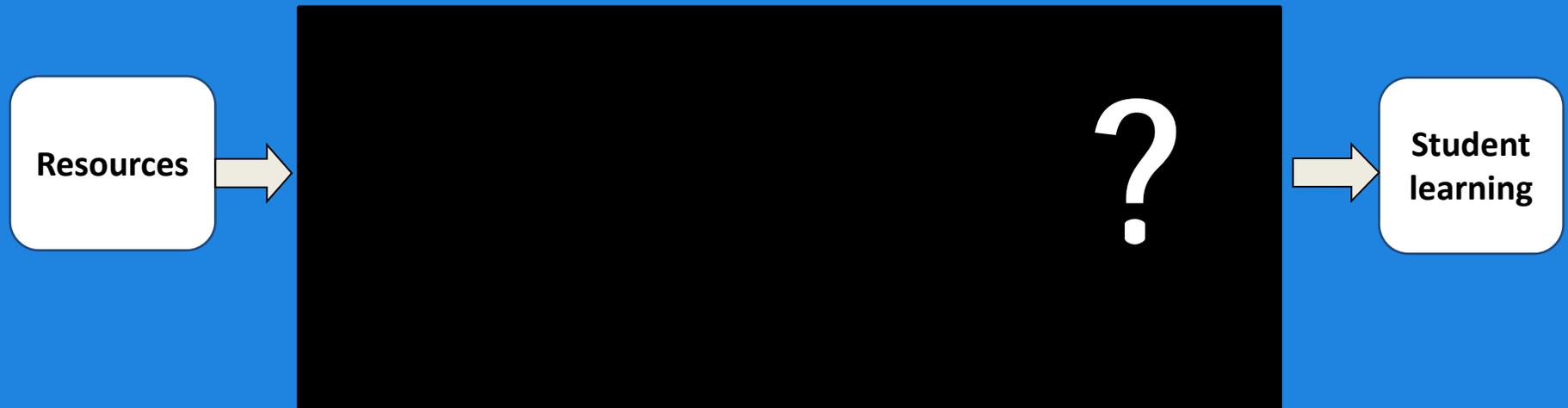
Lead Economist  
Education Global Practice

Education Innovations for 21<sup>st</sup> Century Skills  
Bishkek, June 2015

# 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

SDI At a Glance	Mozambique 2014	Tanzania 2014	Kenya 2012	Uganda 2013	Nigeria* 2013	Togo 2013
<b>PROVIDER EFFORT</b>						
School absence rate (teacher)	45%	15%	15%	27%	14%	18%
Classroom absence rate	56%	47%	42%	56%	22%	34%
Classroom teaching time	1h 41m	2h 47m	3h 40m	2h 55m	3h 44m	2h 52m
<i>(nb: official teaching time)</i>	4h 17m	5h 55m	5h 40m	7h 20m	4 h 53m	5h 29m
Director absence rate	44%	N/A	N/A	N/A	N/A	N/A

Source: <http://www.sdindicators.org>

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

# *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

SDI At a Glance	Uganda 2013	Kenya 2012	Nigeria* 2013	Togo 2013
<b>PROVIDER KNOWLEDGE</b>				
<b>Minimum knowledge</b> (at least 80% in math & language)	19%	39%	4%	3%
<b>Test score</b> (in math, language, and pedagogy)	45	57	34	36

\* 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:

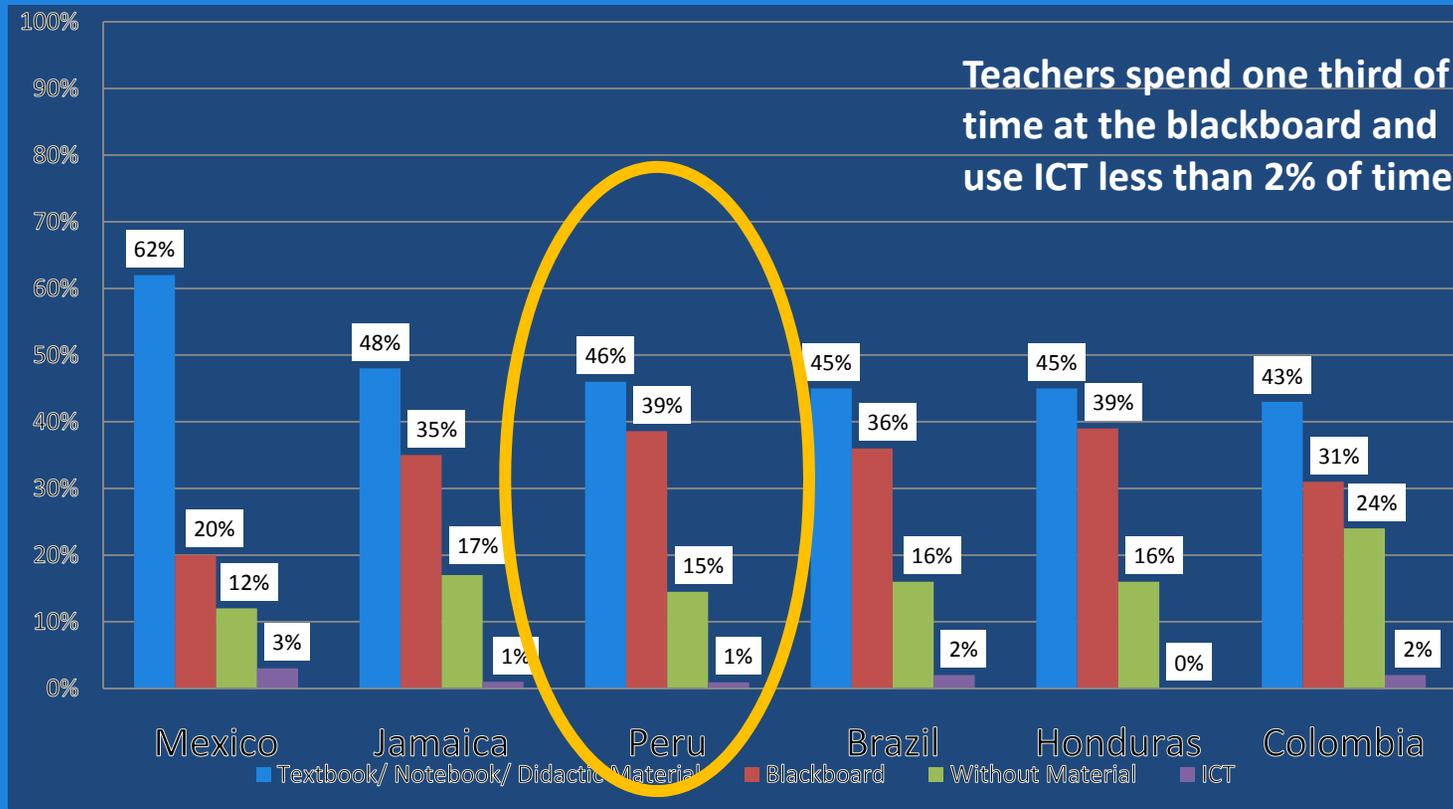
- Allows teachers to show how they can use the skills they have

### 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



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:**

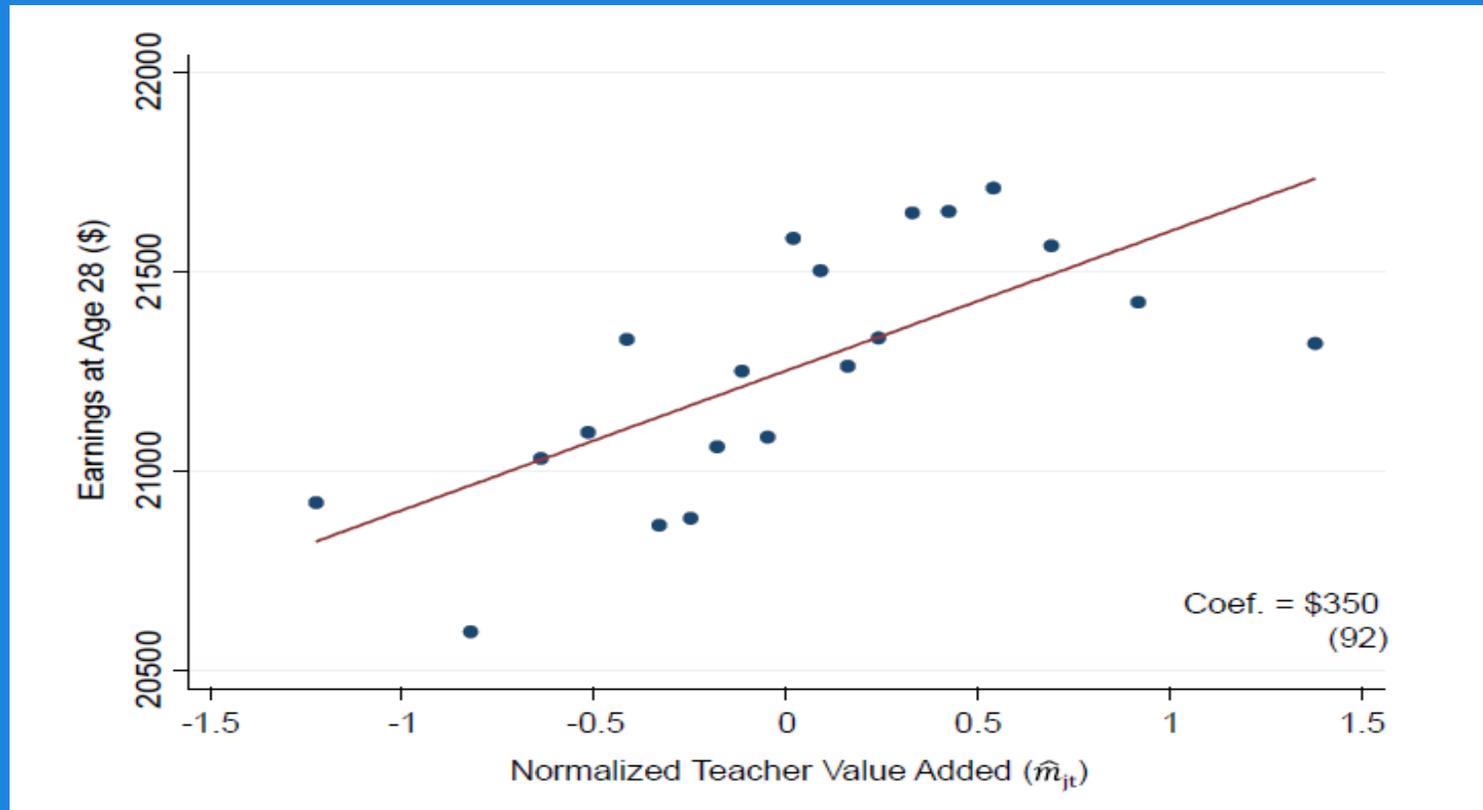
- Measures what we care most about: is the teaching effective?
- TVA controls for many non-teacher factors that influence learning

**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

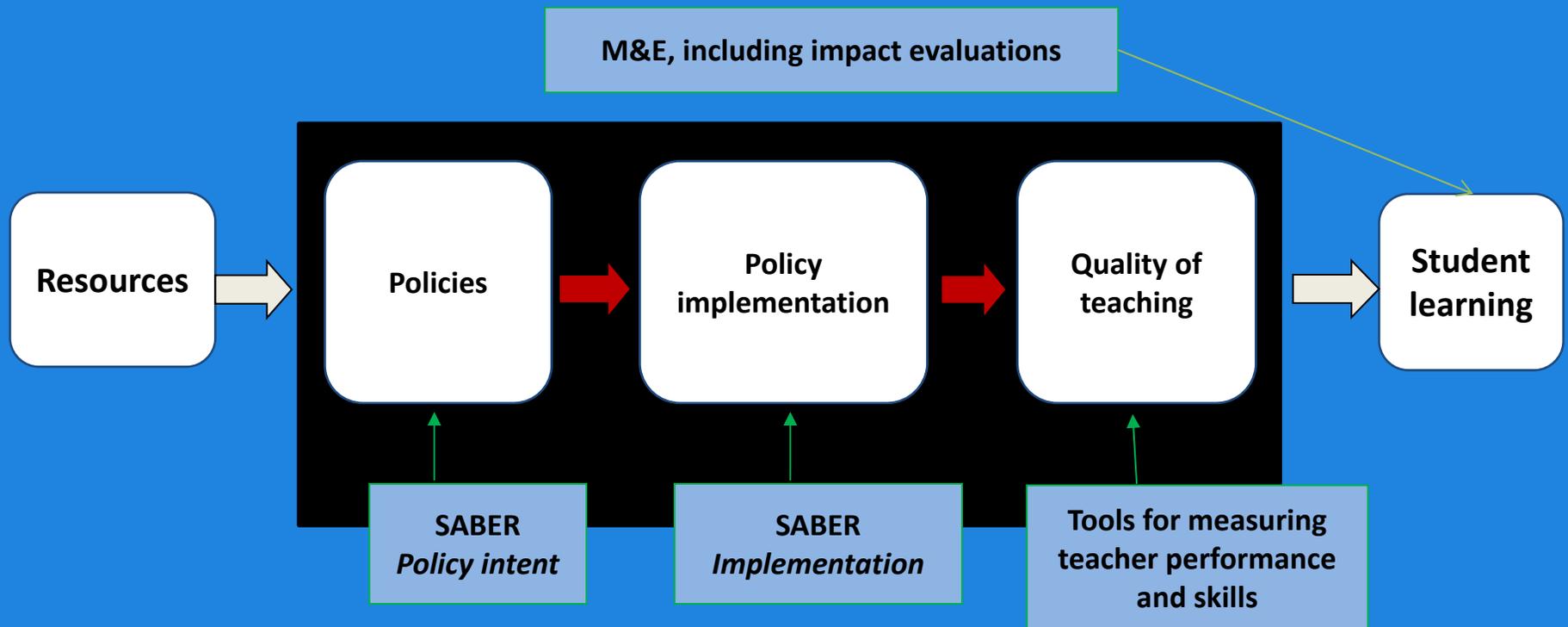
- Are teachers in school and teaching?
- Do teachers know enough?
- How well do teachers teach?
- How well do teachers promote learning?

**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



# What do we do with this information?

## Beyond using it for teacher evaluation and professional development

### Assess the quality of policies

- SABER

**Kazakhstan** 

**TEACHERS** SABER Country Report  
2013

Policy Goals	Status
<b>1. Setting Clear Expectations for Teachers</b> There are clear expectations for what students should learn and what teachers are supposed to do. There are also clear guidelines regarding the proportion of school time dedicated to instructional improvement.	Advanced ●●●●
<b>2. Attracting the Best into Teaching</b> Entry requirements and teacher pay may not be appealing for talented candidates, signaling teaching as a low-status profession. Despite substantial increases in teacher pay since 2000, it remains one of the lowest-paid skilled professions in the country.	Emerging ●●●○
<b>3. Preparing Teachers with Useful Training and Experience</b> Current initial teacher education programs may not be best suited to building a strong teaching corps. Teachers-in-training have the opportunity to develop practical teaching skills. There is more than one pathway to becoming a secondary school teacher, which provides opportunities for skilled candidates who may wish to join the profession.	Emerging ●●●○
<b>4. Matching Teachers' Skills with Students' Needs</b> There are official systems in place to address teacher shortages in hard-to-staff schools, but no official policies to attract teachers to teach critical-shortage subjects.	Established ●●●○
<b>5. Leading Teachers with Strong Principals</b> Principals are expected to monitor teacher performance and provide support to teachers to improve instructional practice, but their performance is not rewarded. At present, there are no specific training requirements to ensure that principals have the necessary skills to act as either instructional leaders or school administrators.	Limited ●○○○
<b>6. Monitoring Teaching and Learning</b> There are systems in place to assess student learning in order to inform policy, but the results are not used to inform teaching. Teacher performance is evaluated annually using criteria that assess effective teaching.	Established ●●●○
<b>7. Supporting Teachers to Improve Instruction</b> There are multiple opportunities for teacher professional development that are aligned with global best practices.	Established ●●●○
<b>8. Motivating Teachers to Perform</b> There are mechanisms in place to hold teachers accountable. Career opportunities and salaries are linked to teacher performance but high-performing teachers do not receive monetary bonuses or recognition for their efforts.	Emerging ●●●○

 Systems Approach for Better Education Results  THE WORLD BANK

### Assess whether policies are being implemented

- Surveys of teachers and principals
- Surveys of community members
- School observation

### Evaluate new programs and policies

- Impact evaluations



# Resources

***Great Teachers (2014): Classroom observation and other tools***

[link to publication](#)

**Service Delivery Indicators: Tools for measuring teacher knowledge & effort**

[www.sdindicators.org](http://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](http://saber.worldbank.org) → topic: Teachers

# TOOLS TO MEASURE TEACHER PERFORMANCE AND SKILLS



**WORLD BANK GROUP**

**Halsey Rogers**

Lead Economist  
Education Global Practice

Education Innovations for 21<sup>st</sup> Century Skills  
Bishkek, June 2015