Measures of Effective Teaching (MET)

Vicki Phillips
Director, College Ready
@drvickip
Why did we choose to focus on teaching?
The impact of teachers is undeniable.

Students with highest-performing teachers (top 20%)

Students with lowest-performing teachers (bottom 20%)

53 percentage point gap in 3 years!

Student performance by percentile

Top-quartile teachers

Bottom-quartile teachers
What gets in the way?

- **Teacher isolation** impedes skill and strategy development
- Teachers need far more **opportunities to engage in collaborative analysis** of teaching
- Teachers need far more **growth-oriented feedback** than they receive
- Our **proxies for effectiveness** are outdated
Why start with measurement?

- Elevated teaching profession
- Improved student outcomes
- Targeted support & PD
- Meaningful retention
- Strategic placement of teachers
- Useful and actionable feedback
- Differentiated roles
- Multiple measures of effectiveness
What we knew…(U.S.)

- Master’s degrees are **NOT** related to student learning
- Certifications **DON’T** make a difference
- After three years seniority **DOESN’T** really matter
- Past performance has **HUGE** value
Past Performance Math Major Alternative Certifications Masters Degree in Education

...and is the best predictor.
Teaching is both an art and a science.
Fair, respectful development and evaluation systems that teachers could trust.
We invested in two simultaneous approaches.

MET Project

Partnership Sites to Empower Effective Teaching
The MET Project is unique...

☑️ in the **variety of indicators** tested,
  - 5 instruments for classroom observations
  - Student surveys (Tripod Survey)
  - Student growth on state tests
  - Teacher content knowledge
  - Classroom conditions

☑️ in its **scale**,
  - 3,000 teachers
  - 22,500 observations scores (7,500 lesson videos x 3 scores)
  - 900+ trained observers
  - 44,500 students completing surveys and supplemental assessments
  - 3,120 additional observations by principals/peer observers in Florida

☑️ in the **variety of student outcomes** studied,
  - Gains on state math and ELA tests
  - Gains on supplemental tests (BAM & SAT9 OE)
  - Student-reported outcomes (effort and enjoyment in class)

☑️ and, in the **random assignment** of teachers.
Table 1: Demographic Data on Participants

<table>
<thead>
<tr>
<th>Variable</th>
<th>Education Group (x = 75)</th>
<th>Menarche Group (x = 75)</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field age (months)</td>
<td>47.3 (14.4)</td>
<td>46.1 (14.4)</td>
<td>1.48</td>
</tr>
<tr>
<td>Child gender (% male)</td>
<td>61.2%</td>
<td>49.0%</td>
<td>1.77</td>
</tr>
<tr>
<td>No. of children in family</td>
<td>2.4 (0.6)</td>
<td>2.0 (0.6)</td>
<td>0.02</td>
</tr>
<tr>
<td>Mother's age (years)</td>
<td>43.5 (9.8)</td>
<td>39.9 (9.7)</td>
<td>0.0001</td>
</tr>
<tr>
<td>Father's age (years)</td>
<td>45.9 (9.7)</td>
<td>57.5 (7.5)</td>
<td>0.0001</td>
</tr>
<tr>
<td>Mother's education (years)</td>
<td>15.7 (2.3)</td>
<td>12.3 (2.3)</td>
<td>5.73</td>
</tr>
<tr>
<td>Father's education (years)</td>
<td>13.7 (2.4)</td>
<td>12.3 (2.3)</td>
<td>45.9 (9.7)</td>
</tr>
<tr>
<td>Mother's education (years)</td>
<td>7.6 (1.1)</td>
<td>6.9 (1.1)</td>
<td>11.27</td>
</tr>
<tr>
<td>Father's education (years)</td>
<td>12.3 (2.4)</td>
<td>8.8 (2.4)</td>
<td>0.0001</td>
</tr>
</tbody>
</table>

Descriptive statistics for family involvement questionnaire factors as a function of demographic data.

Evidence + Wisdom of Practice
A set of school districts led the way.

- Improving teacher evaluation systems
- Strengthening teacher supports
- Strategic staffing for student success
- Recognizing and rewarding effective teaching
Results
We can clearly & fairly identify effective teachers.

Key Findings:

- The teachers who demonstrated greater measured effectiveness in Year 1 and were randomly assigned in Year 2 did produce higher student achievement.
- The magnitude of the impacts were consistent with predictions.
- They also produced higher achievement on supplemental (more performance and conceptually based) assessments as well as state tests.
There is a clear path to high-quality classroom observations.

Tools:
- Validation engine
- Certification tool for observers
Some assumptions were validated; some proved wrong.

- Adding an observation by a **second observer** increases reliability twice as much as having the same observer score an additional lesson.

- **Short observations** provide a time-efficient way to incorporate more than one observer per teacher.

- **School leaders rate their own teachers higher** than do outside observers. However, (1) their ratings are highly correlated with others and (2) administrators discern bigger differences between teachers than peers do (which increases reliability).

- Letting **teachers choose** which lessons are observed **does not make it harder to identify the teachers who are struggling**. In fact, it is easier.

- **Assessments of teacher knowledge** as currently configured **are not predictive** of performance.
Student perceptions matter.

Sample survey questions:

- Students in this class treat the teacher with respect.
  - Totally Untrue
  - Mostly Untrue
  - Somewhat True
  - Mostly True
  - Totally True

- Our class stays busy and doesn’t waste time.
  - Totally Untrue
  - Mostly Untrue
  - Somewhat True
  - Mostly True
  - Totally True

- In this class, we learn a lot almost every day.
  - Totally Untrue
  - Mostly Untrue
  - Somewhat True
  - Mostly True
  - Totally True

- In this class, we learn to correct our mistakes.
  - Totally Untrue
  - Mostly Untrue
  - Somewhat True
  - Mostly True
  - Totally True
There is power in the combination.

<table>
<thead>
<tr>
<th>Measure</th>
<th>Predictive Power</th>
<th>Reliability</th>
<th>Potential for Diagnostic Insight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measures of Student Growth</td>
<td><strong>H</strong></td>
<td><strong>M</strong></td>
<td><strong>L</strong></td>
</tr>
<tr>
<td>Student survey</td>
<td><strong>M</strong></td>
<td><strong>H</strong></td>
<td><strong>M</strong></td>
</tr>
<tr>
<td>Observation</td>
<td><strong>L</strong></td>
<td><strong>M/H</strong></td>
<td><strong>H</strong></td>
</tr>
</tbody>
</table>
Impact
Major policy shifts have occurred.

- Number of states that have made teacher evaluation policy changes since 2009: 37
- Number of states that require observations as part of teacher evaluations: 39
- Number of states that require annual evaluations of all new teachers: 43
- Number of states that require teacher evaluation systems to include multiple categories of rating teacher performance: 25
- Number of states that require teacher evaluations to include objective evidence of student learning: 30
Evaluation systems are becoming more improvement-focused.

Measure Effective Teaching
- Set expectations
- Use multiple measures
- Balance weights

Invest in Improvement
- Make meaningful distinctions
- Prioritize support and feedback
- Use data for decisions at all levels

Ensure High-Quality Data
- Monitor validity
- Ensure reliability
- Assure accuracy
Professional Development is becoming more focused and innovative.

- Focus
- Models
- Tools
- Networks
The research gave us clues.
Observation Score Distributions: UTOP
Seeing what others do is **growth producing.**

New technologies can aid in conducting multiple observations and can help make isolation a thing of the past.....

- Video taping one’s practice
- Forming video clubs for collaborative analysis
- Annotating video for collaborative discussion
- Social networks expand the capacity for wide ranging, growth oriented feedback.
New models and tools are emerging.
New models and tools are emerging.

TeachScape

BloomBoard

PD 360°
New models and tools are emerging.

- Ear Bud Coaching
- TeachLive
- MyLivePD
New networks are forming and teachers are leading the way.
Change the game!
Work the curve!

1. **NEW TEACHER EFFECTIVENESS**
   More newly recruited teachers are effective, as measured by student growth (Preservice-3)

2. **PROFESSIONAL GROWTH**
   Retained teachers improve over time
   - Current Teacher Performance
   - Potential Teacher Performance

3. **RETAIN/LEVERAGE HIGH IMPACT TEACHERS**
   Teacher leaders support peers and school

4. **EQUITABLE DISTRIBUTION**
   More high-poverty students have effective teachers

5. **EXITING TEACHERS**
   Persistently less effective teachers leave...

Source: TNTP
What we choose to focus on matters.
Thank you!
@drvickip