K-12 Teachers—Effectiveness by Years of Experience

Program description:
This analysis examines improvements in student test scores at different points in a teacher’s career, in comparison with a beginning teacher. The estimate in the table below represents students’ average annual test score gains from teachers with one to five years of teaching experience (in comparison to the initial year). The chart below shows how teacher effectiveness changes by years of experience from years 1 through 30. The evidence shows that teacher effectiveness, as measured by changes in student test scores, increases steadily in the first 5 to 10 years and then levels off.

Typical age of primary program participant: N/A
Typical age of secondary program participant: N/A

Meta-Analysis of Program Effects

<table>
<thead>
<tr>
<th>Outcomes Measured</th>
<th>Primary or Secondary Participant</th>
<th>No. of Effect Sizes</th>
<th>Unadjusted Effect Sizes (Random Effects Model)</th>
<th>Adjusted Effect Sizes and Standard Errors Used in the Benefit-Cost Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>ES</td>
<td>SE</td>
</tr>
<tr>
<td>Test scores</td>
<td>P</td>
<td>50</td>
<td>0.06</td>
<td>0.01</td>
</tr>
</tbody>
</table>

Benefits and costs were not estimated.

Multiplicative Adjustments Applied to the Meta-Analysis

<table>
<thead>
<tr>
<th>Type of Adjustment</th>
<th>Multiplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Less well-implemented comparison group or observational study, with some covariates.</td>
<td>1.00</td>
</tr>
<tr>
<td>2- Well-implemented comparison group design, often with many statistical controls.</td>
<td>1.00</td>
</tr>
<tr>
<td>3- Well-done observational study with many statistical controls (e.g., instrumental variables).</td>
<td>1.00</td>
</tr>
<tr>
<td>4- Random assignment, with some implementation issues.</td>
<td>1.00</td>
</tr>
<tr>
<td>5- Well-done random assignment study.</td>
<td>1.00</td>
</tr>
<tr>
<td>Program developer = researcher</td>
<td>0.5</td>
</tr>
<tr>
<td>Unusual (not “real-world”) setting</td>
<td>0.5</td>
</tr>
<tr>
<td>Weak measurement used</td>
<td>0.5</td>
</tr>
</tbody>
</table>
Studies Used in the Meta-Analysis


Studies Used in the Meta-Analysis


