Organizing Schools
to Improve Student Achievement

• Education reform debates often focus on issues that are controversial and/or political
  – Vouchers, charter schools, merit pay, etc.
• Yet there are many less “glamorous” reforms with high benefit-cost ratios
  – Start times, middle school conversations, teacher assignments
• Our message: Untapped potential for improvement by changing organization and/or management practices in schools
Start Times

• Adolescents/teenagers biologically need later sleep/wake times than young kids and adults
  – “7am for adolescents is like 4am for adults”
  – Yet most adolescents start school by 8:00am

• Several high-quality studies show large impacts of start times on student learning
  – Moving start times one hour later → +0.175 s.d.

• What is the cost of starting school later?
  – Financial vs. non-financial costs
Grade Configurations

• Middle/junior high schools are popular in U.S.
  – Three-quarters of 7th and 8th graders nationwide
  – Force students to adapt to new teachers/peers in a much larger, less personalized setting, at a particularly difficult period in their lives

• Mounting evidence of lower student growth in these schools relative to the K-8 structure
  – Concern with middle school is not new
  – Recent research shows large negative effects, ~-0.1 s.d.
Teacher Assignments

• Teachers are key “input” in educational process
  – Large variation in effectiveness among teachers
  – Debates focus on certification, evaluation, pay
• Evidence that teacher assignments have important influence on effectiveness
  – Practice makes perfect (e.g., ELL students)
  – Large returns to grade and subject experience
    • Every year, 20-40% of teachers switch grade levels
• We believe assignments could be managed in a way that improves student achievement
In Conclusion

- Organization and managerial practice is an important area for cost-effective reform

<table>
<thead>
<tr>
<th>Organizational Reform</th>
<th>Lifetime Earnings Gains Per Student</th>
<th>Cost per student</th>
<th>Benefit/Cost Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convert K-5/6-8 to K-8</td>
<td>$10,000</td>
<td>$50 to $250</td>
<td>40:1 to 200:1</td>
</tr>
<tr>
<td>Middle/Upper Grades Start 1 Hour Later</td>
<td>$17,500</td>
<td>$0 to $1,950</td>
<td>9:1 or more</td>
</tr>
<tr>
<td>Managing Teacher Assignments</td>
<td>$2000</td>
<td>$0 financial, but other costs hard to measure</td>
<td></td>
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</tbody>
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