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 \rightarrow +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

Estimated Cost-Benefit Ratios for Organizational Reforms

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