Student Selection, Attrition, and Replacement at KIPP Middle Schools

April 9, 2011

Presentation to the 2011 AERA Annual Meeting
Ira Nichols-Barrer • Christina Clark Tuttle • Brian Gill • Philip Gleason
Compared to district schools:

- What are the characteristics of students entering KIPP schools?
- What does attrition look like from KIPP?
- To what extent do KIPP schools admit students “late” to fill empty slots?
Defining Mobility

- Student mobility encompasses both attrition and late arrivals (replacement).

- Attrition = Early leavers
  - Student moves to different school in year 2
  - Comprises within-district and out-of-district transfers

- Late arrivals: students moving into a school after the entry grade
Analytic Approach

- Obtained administrative data from states and districts for students
  - Grades 3 through 8
  - Typically 2003-04 through 2007-08

- Defined three comparison groups:
  - **Feeder**: students in ES also attended by KIPP students at baseline
  - **Comparison**: students in MS most often attended by students from feeder ES
  - **District**: all students within the district
Location of KIPP Schools in Sample

- **KIPP state in study**
- **Other KIPP state (as of 2005)**
- **Recent KIPP state (as of 2011)**
Demographic Characteristics

★ Difference from KIPP is statistically significant at the 5% level
Baseline Achievement

**Mean Percentile**

- **KIPP**
  - Math: 46
  - Reading: 47

- **Feeder**
  - Math: 47
  - Reading: 47

- **District**
  - Math: 51
  - Reading: 51

★ Difference from KIPP is statistically significant at the 5% level
Attrition Rates, by Grade

Difference from KIPP is statistically significant at the 5% level
Attrition Rates, by Subgroup

★ Difference from KIPP is statistically significant at the 5% level
Average Baseline Achievement in Math, by Attrition Type

- **Non-Transfers**
  - KIPP: 49
  - Comparison: 50

- **Transfers**
  - KIPP: 40
  - Comparison: 41
### Incidence of Late Arrivals

#### Average Number of Attriters, New Arrivals, and Total Enrollment by Grade

<table>
<thead>
<tr>
<th></th>
<th>Grade 6</th>
<th>Grade 7</th>
<th>Grade 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIPP</td>
<td>11</td>
<td>13</td>
<td>69</td>
</tr>
<tr>
<td>Comparison</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

- KIPP schools replace more students than they lose in grade 6, but fewer in grades 7 and 8
- District comparison schools replace more students than they lose in both grades 7 and 8
Late Arrivals as a Proportion of Enrollment

Tests of statistical significance were not conducted.
Conclusions

- KIPP students are:
  - More likely to be a racial minority, eligible for FRPL
  - Less likely to be limited English proficiency or special education
  - Lower-achieving at baseline than the district overall but equivalent to other students at the same ES

- Rates of attrition are similar in KIPP and district schools

- Late arrivals present a mixed picture
  - Proportion of late arrivals relative to enrollment is similar at KIPP and comparison schools
  - KIPP schools are less likely to replace in later grades
  - Future work will examine characteristics of late arrivals
For More Information

- Please contact:
  - Christina Clark Tuttle
    • ctuttle@mathematica-mpr.com
  - Brian Gill
    • bgill@mathematica-mpr.com
  - Philip Gleason
    • pgleason@mathematica-mpr.com

- View report online at: [URL pending]