Overview of Findings to Date from the Vanderbilt Study of the Tennessee Voluntary Pre-K Program

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Some Things to Keep in Mind

- There are different parts to this study focusing on:
  - Effects of TN-VPK on readiness for kindergarten
  - How classroom quality relates to pre-k gains
  - Long-term effects on achievement and behavior

- Strong prospective methodology (RCT, RDD)

- Independent evaluation but collaborative with TN Department of Education

- The study is not finished yet!
  - Only complete for effects on K readiness
  - Near complete for classroom quality relationships
  - Far from complete for long-term effects
Background: What Prior Early Childhood Education Research Has Found

- Positive effects of high quality preschool on school readiness—cognitive skills & behavior
- Effects on achievement fade in later grades
- Effects on “non-cognitive” outcomes emerge after pre-k and are sustained into adulthood (e.g., retention, graduation, employment, antisocial behavior)
- But no rigorous longitudinal studies of the effects of state-funded public pre-k
Pre-K Effects on Achievement
Large Pre-K Effects on Early Achievement

WJ Composite Achievement Scores

Standard Deviation Units

- TN-VPK Participants
- TN-VPK Nonparticipants

Pretest | End of Pre-K Posttest

45% increase
Overall Achievement Effects Fade by End of K
Achievement Effects for Higher Performing Classroom are Sustained Longer
Pre-K Effects on Non-cognitive Outcomes
Higher Ratings from Kindergarten Teachers at the Beginning of the K Year

VPK children rated higher on:

- Readiness for kindergarten
- Work-related skills in the classroom
- Peer relations
- Behavior problems (fewer)

No differences in teacher ratings at the end of first grade
Fewer Children Retained in Kindergarten

- TN-VPK Nonparticipants: 8.0%
- TN-VPK Participants: 4.0%
Somewhat Higher Attendance in Kindergarten & 1st Grade

<table>
<thead>
<tr>
<th>Grade</th>
<th>TN-VPK Participants Mean Days</th>
<th>TN-VPK Nonparticipants Mean Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kindergarten</td>
<td>158.0</td>
<td>156.6</td>
</tr>
<tr>
<td>1st Grade</td>
<td>164.0</td>
<td>160.6</td>
</tr>
</tbody>
</table>

Note: Both differences are statistically significant
Other Non-Cognitive Outcomes for Which Data Are Still Being Collected from School Records

• Formal disciplinary actions
  – No significant differences in K and 1st grade

• Special education placements (IEPs)
  – Earlier start of services for VPK children; too early to know the results

• English Language Learner (ELL) status
  – Data collection still in process
Summary of TN-VPK Effects Found So Far

- **Achievement Outcomes**
  - Positive effects at the end of pre-k on all measures
  - Overall effects not sustained through kindergarten and first grade
  - Effects for higher performing classrooms sustained through K but not 1st

- **Non-Cognitive Outcomes**
  - Teacher ratings
    - Positive effects at beginning of K on school readiness, work related skills in the classroom, peer relations, and behavior problems
    - Effects not sustained through end of first grade
  - School records
    - Fewer TN-VPK participants retained in kindergarten
    - More days attended by TN-VPK participants in K and 1st grade
    - No difference for recorded disciplinary actions in K and 1st grade
    - Sufficient data on special education and ELL status not yet available
Still to Come ...

- Further longitudinal follow-up of pre-k effects through 3rd grade with state achievement tests added to outcomes
- Newly obtained funding will allow follow-up through middle school
- Results from a parallel study of pre-k effects on K readiness measures with a representative statewide sample of TN-VPK classrooms
- From that parallel study, analysis of the relationship of classroom, teacher, and school characteristics to the gains children make in pre-k
More information available at:
http://peabody.vanderbilt.edu/research/pri/projects/by_content_area/tennessee_state_pre-k_evaluation/

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