Methodology to Identify Successful Schools for Case Study

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Presentation to the Senate Committee on Education
and the House Committee on Education
Little Rock, Arkansas

Presentation Overview

• Data Sources
• Statistical Methodology
• School Identification
• Case Study Schools
Data Sources

• **Arkansas Department of Education**
  – Teacher experience, salary, and headcount
  – Revenues, expenditures, and district size

• **University of Arkansas - Office of Education Policy**
  – Combined value-added scores (growth measure)
    • Math, ELA, ELP scores
    • Accounts for how many (or few) EL students there are at a given school
  – School and district demographic data

Statistical Methodology

• **Carried out exploratory analyses**
  – Correlations between variables
  – Inform model specification

• **Fit a statistical model using 2018 data**
  – Mixed, or hierarchical linear model
  – Accounts for school and district factors

• **Predicted growth based on 2019 data**
  – Based predictions historical student data
  – Generated predictions for all accountability schools

• **Assessed the fit of our model**
  – Compared actual and predicted values
Case Study School Identification

• **Ranked schools based on performance**
  – The highest ranked schools outperformed expectations

• **Filtered list by selection criteria**
  – A letter grade of A, B, or C (if they improved between 2018 and 2019)
  – A higher than average low-income student percentage (63%); or
  – A higher than average LEP student percentage (8%)
  – Only schools that outperformed expectations*
  – 181 schools were eligible for selection

• **Grouped schools by region**
  – Northwest, Northeast, Central, Southwest, Southeast

* One selected school did not outperform expectations (predicted values) but was the highest performing school in the region.

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Case Study Schools: By Region

- **Northwest Region**
  - Lamar Elementary
  - Helen Tyson Middle School
  - Jasper High

- **Northeast Region**
  - Weiner Elementary
  - Paragould Junior High
  - Riverview High

- **Central Region**
  - Theodore Jones Elementary
  - Lisa Academy North Middle School
  - North Little Rock Center for Excellence

- **Southwest Region**
  - Oscar Hamilton Elementary
  - Mena Middle School
  - Lafayette County High

- **Southeast Region**
  - Des Ark Elementary
  - Crossett Middle School*
  - Lakeside High
2019 Arkansas School Enrollment

Case Study School Average Enrollment (361)

The reference line is the average enrollment of selected schools.

Case Study Schools:
2019 Low-Income Student Percentages

Theodore Jones Elementary 71.8%
Weiner Elementary 67.9%
Lamar Elementary 72%
Des Arc Elementary 74.7%
Oscar Hamilton Elementary 71.4%
Lisa Academy North Charter Middle 67%
Paragould Junior High 71.2%
Helen Tyson Middle 77.3%
Crossett Middle 64.6%
Mena Middle 69.9%
North Little Rock Center of Excellence 75.8%
Rivered High 65.3%
Jasper High 70.2%
Lakeview High 77.9%
Lafayette County High 85.7%

Percent of Students Qualifying for Free or Reduced-Price Lunch

Reference line at statewide average, 63%.
Case Study Schools: 2019 EL Student Percentages

- Theodore Jones Elementary: 11.5%
- Weiner Elementary: 3.6%
- Limer Elementary: 4.5%
- Des Arc Elementary: 5.7%
- Oscar Hamilton Elementary: 2.2%
- Lisa Academy North Charter Middle: 11%
- Paragould Junior High: 3.2%
- Helen Tyson Middle: 3.1%
- Crossley Middle: 7%
- Mena Middle: 11%
- North Little Rock Center of Excellence: 28.3%
- Riverview High: 0%
- Jasper High: 6.8%
- Lakeside High: 5.3%
- Lafayette County High: 0%

Reference line at statewide average, 8%