City Study 2019: Memphis
Acknowledgements

- Student-level data were provided by the Tennessee Department of Education (TDOE) in partnership with the Tennessee Education Research Alliance (TERA).
- The Memphis Education Fund assisted CREDO with verifying the list of Memphis public schools.
This report on *Memphis* is one in a series of studies examining school performance across selected U.S. cities.

Performance is defined as how much academic growth students made from one year to the next.

The performance of students in Memphis is benchmarked to the state average, accounting for student characteristics.

We first track the growth of Memphis overall and by sector over time.

• For the period ending in Spring 2015, we use student test scores from the 2013-14 school year as starting scores to calculate student growth.
• For the period ending in Spring 2017, we use student test scores from the 2014-15 school year as starting scores to calculate student growth because the Tennessee test score data for 2015-16 are incomplete.

We then further explore how one-year academic growth for the period ending in Spring 2017 differs by sector, school type, race, poverty status, English language learner (ELL) status, special education status, and gender.

Note: The Shelby County School District has asked to include the information that Tennessee changed the state standardized tests between the two growth periods under this study.
Types of Charters

• **CMO: Charter Management Organizations**
  • To qualify as a CMO, an organization must oversee the operation of at least three charter schools. Further, the CMO must be the charter holder for all of the schools operated by the CMO.

• **Independent Charter Schools**
  • To qualify as an independent charter school, an organization must oversee the operation of a single charter school. The charter-holding organization may run the school directly or they may contract with an organization which provides services to one or two charter schools.
The Memphis City Report includes analysis for a third sector: Innovation Zone Schools.

The Innovation Zone, or iZone, is a subset of Shelby County Schools that use key elements to improve low-performing schools including:

- Empowered, effective principals
- High performing teachers
- Extended learning days
- iZone District Support Team

Learn more at: https://www.scsk12.org/izone/
Presentation of Results

- The results display two sets of comparisons
  - The progress of Memphis students is **benchmarked against the state average learning gains, accounting for student characteristics**.
    - Positive numbers represent better than average performance.
    - Negative numbers represent worse than average performance.
    - Significance in the difference between students in the city and the average state performance is represented by black asterisks.
  - The progress of charter school students within Memphis is then **compared to the performance of similar TPS students within Memphis**.
    - Significance in the difference between a student group in charter schools and the same student group in TPS is represented by colored asterisks.
Results are graphically displayed on two axes:

- The left axis indicates learning gains of Memphis students relative to the average learning gains of students with similar characteristics in the state, measured in **standard deviation units**.
- The right axis displays the same learning gains measured in **days of learning**.
  - The baseline of 0.00 represents 180 days of learning.
  - Positive performance translates to more days of learning.
  - Negative performance represents fewer days of learning.

The table below shows a transformation of standard deviation units to days of learning.

<table>
<thead>
<tr>
<th>Standard Deviations</th>
<th>Days of Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.05</td>
<td>30</td>
</tr>
<tr>
<td>0.10</td>
<td>59</td>
</tr>
<tr>
<td>0.15</td>
<td>89</td>
</tr>
<tr>
<td>0.20</td>
<td>118</td>
</tr>
<tr>
<td>0.25</td>
<td>148</td>
</tr>
<tr>
<td>0.30</td>
<td>177</td>
</tr>
<tr>
<td>0.35</td>
<td>207</td>
</tr>
</tbody>
</table>
Roadmap for Graphs

This menu includes links to specific analyses throughout the report. In the following slides, the same menu is shown on the right-hand side.

All Students

Overall Memphis Results

Breakout by

Sector
- Charter Network
- School-Level

Further Breakout by

Comparison of Peers

Race
- Black Students
- Hispanic Students

Subgroup
- Poverty Status
- English Language Learner Status
- Special Education Status

Gender
- Female Students
- Male Students
Average One-Year Learning Gains for All Memphis Students Compared to the State Average Learning Gains, by Year and Subject

The 0.00 line represents the average learning gains of the entire state. These results capture academic growth from school year (SY) 2013-2014 to SY 2014-2015 and growth from SY 2014-2015 to SY 2016-2017.

* Significant at p < 0.05  
** Significant at p < 0.01
Click the buttons below for reading and math growth of Memphis schools relative to the state average learning gains by year and sector.
Sector Analysis: Reading

Learning Gains in Reading for Students in Memphis Charter Schools, Memphis Innovation Schools, Memphis Magnet Schools and Memphis TPS Compared to the State Average Learning Gains by Year

The 0.00 line represents the average learning gains of the entire state. These results capture academic growth from school year (SY) 2013-2014 to SY 2014-2015 and growth from SY 2014-2015 to SY 2016-2017.
Learning Gains in Math for Students in Memphis Charter Schools, Memphis Innovation Schools, Memphis Magnet Schools and Memphis TPS Compared to the State Average Learning Gains by Year

The 0.00 line represents the average learning gains of the entire state. These results capture academic growth from school year (SY) 2013-2014 to SY 2014-2015 and growth from SY 2014-2015 to SY 2016-2017.
Charter Network Analysis

Learning Gains for Students in Memphis Network-Affiliated Charter Schools and Independent Memphis Charter Schools Compared to the State Average Learning Gains, by Subject

The 0.00 line represents the average learning gains of the entire state. These results capture academic growth from SY 2014-2015 to SY 2016-2017.
School-Level Performance by Sector

Click the buttons below for reading and math growth of individual Memphis schools relative to the state average by sector. The top cluster of dots shows where individual charter schools lie on spectrum of growth, the middle cluster shows that of innovation schools, and the bottom cluster shows that of individual TPS.
School Growth by Sector - Reading

Distribution of Reading Learning Gains of Individual Memphis Schools Compared to the State Average Learning Gains

The 0.00 line represents the average learning gains of the entire state. These results capture academic growth from SY 2014-2015 to SY 2016-2017.
School Growth by Sector - Math

Distribution of Math Learning Gains of Individual Memphis Schools Compared to the State Average Learning Gains

The 0.00 line represents the average learning gains of the entire state. These results capture academic growth from SY 2014-2015 to SY 2016-2017.
Race Analysis

Click the buttons below for graphs showing the performance of Black students in Memphis or Hispanic students in Memphis relative to the statewide average learning gains for students of the same race.
Race Analysis: Black Students

Learning Gains for All Memphis Black Students Compared to the Average Learning Gains of Black Students Statewide, by Subject

The 0.00 line represents the average learning gains of Black students in the entire state. These results capture academic growth from SY 2014-2015 to SY 2016-2017.
Race Analysis:
Black Students by Sector

Learning Gains for Black Charter School Students and Black TPS Students in Memphis Compared to the Average Learning Gains of Black Students Statewide, by Subject

* Growth significantly stronger than that of TPS
• Growth significantly weaker than that of TPS

The 0.00 line represents the average learning gains of Black students in the entire state. These results capture academic growth from SY 2014-2015 to SY 2016-2017.
Race Analysis: Hispanic Students

Learning Gains for All Memphis Hispanic Students Compared to the Average Learning Gains of Hispanic Students Statewide, by Subject

The 0.00 line represents the average learning gains of Hispanic students in the entire state. These results capture academic growth from SY 2014-2015 to SY 2016-2017.
Race Analysis: Hispanic Students by Sector

Learning Gains for Hispanic Charter School Students and Hispanic TPS Students in Memphis Compared to the Average Learning Gains of Hispanic Students Statewide, by Subject

* Growth significantly stronger than that of TPS
* Growth significantly weaker than that of TPS

The 0.00 line represents the average learning gains of Hispanic students in the entire state. These results capture academic growth from SY 2014-2015 to SY 2016-2017.
Click the buttons below for graphs showing the performance of Memphis students in poverty, Memphis students with English Language Learner designation, or Memphis students receiving special education services relative to average learning gains of students of the same subgroup statewide.
Subgroup Analyses: Poverty Status Analysis

Learning Gains for All Memphis Students in Poverty Compared to the Average Learning Gains of Students in Poverty Statewide, by Subject

The 0.00 line represents the average learning gains of students in poverty in the entire state. These results capture academic growth from SY 2014-2015 to SY 2016-2017.

- **Poverty Status by Sector**
  - Roadmap for Graphs
  - Overall Memphis
  - Sector Analysis
    - Charter Network
    - School-Level
  - Race Analysis
    - Black Students
    - Hispanic Students
  - Subgroup Analysis
    - Poverty Status
    - ELL Status
    - Special Ed. Status
  - Gender Analysis
    - Female Students
    - Male Students
Subgroup Analyses: Poverty Status by Sector

Learning Gains for Memphis Charter School Students in Poverty and Memphis TPS Students in Poverty Compared to the Average Learning Gains of Students in Poverty Statewide, by Subject

- **Memphis Charter Students in Poverty**
  - Reading: 0.04 (significant at p < 0.05)
  - Math: -0.03

- **Memphis TPS Students in Poverty**
  - Reading: -0.03
  - Math: -0.07 (significant at p < 0.01)

The 0.00 line represents the average learning gains of students in poverty in the entire state. These results capture academic growth from SY 2014-2015 to SY 2016-2017.

* Growth significantly stronger than that of TPS
* Growth significantly weaker than that of TPS

Roadmap for Graphs

- Overall Memphis
- Sector Analysis
  - Charter Network
  - School-Level
- Race Analysis
  - Black Students
  - Hispanic Students
- Subgroup Analysis
  - Poverty Status
  - ELL Status
  - Special Ed. Status
- Gender Analysis
  - Female Students
  - Male Students
Subgroup Analyses: English Language Learner Status Analysis

Learning Gains for All ELL Students in Memphis Compared to the Average Learning Gains of ELL Students Statewide, by Subject

The 0.00 line represents the average learning gains of ELL students in the entire state. These results capture academic growth from SY 2014-2015 to SY 2016-2017.
Subgroup Analyses: English Language Learner Status by Sector

Learning Gains for ELL Students in Memphis Charter Schools and ELL Students in Memphis TPS Compared to the Average Learning Gains of ELL Students Statewide, by Subject

The 0.00 line represents the average learning gains of ELL students in the entire state. These results capture academic growth from SY 2014-2015 to SY 2016-2017.
Subgroup Analyses: Special Education Status Analysis

Learning Gains for All Memphis Students in Special Education Compared to the Average Learning Gains of Students in Special Education Statewide, by Subject

The 0.00 line represents the average learning gains of students in Special Ed. in the entire state. These results capture academic growth from SY 2014-2015 to SY 2016-2017.
Subgroup Analyses: Special Education Status by Sector

The 0.00 line represents the average learning gains of students in Special Ed. in the entire state. These results capture academic growth from SY 2014-2015 to SY 2016-2017.
Gender Analysis

Click the buttons below for graphs showing the performance of female students in Memphis or male students in Memphis relative to statewide average learning gains for the same gender.

- Female Students
- Male Students
Gender Analysis: Female Students

Learning Gains for All Memphis Female Students Compared to the Average Learning Gains of Female Students Statewide, by Subject

The 0.00 line represents the average learning gains of female students in the entire state. These results capture academic growth from SY 2014-2015 to SY 2016-2017.
Gender Analysis: Female Students by Sector

Learning Gains for Female Charter School Students and Female TPS Students in Memphis Compared to the Average Learning Gains of Female Students Statewide, by Subject

The 0.00 line represents the average learning gains of female students in the entire state. These results capture academic growth from SY 2014-2015 to SY 2016-2017.
Gender Analysis: Male Students

Learning Gains for All Memphis Male Students Compared to the Average Learning Gains of Male Students Statewide, by Subject

The 0.00 line represents the average learning gains of male students in the entire state. These results capture academic growth from SY 2014-2015 to SY 2016-2017.
Gender Analysis: Male Students by Sector

Learning Gains for Male Charter School Students and Male TPS Students in Memphis compared to the Average Learning Gains of Male Students Statewide, by Subject

The 0.00 line represents the average learning gains of male students in the entire state. These results capture academic growth from SY 2014-2015 to SY 2016-2017.

* Significant at p < 0.05
** Significant at p < 0.01
The summary of the findings from the analysis of Memphis schools is presented here.