A Closer Look at Private School Student Performance

Using National Assessment of Educational Progress (NAEP) Data to Understand the Composition and Performance of Catholic School Students

Ebony Walton, Statistician
National Center for Education Statistics
Available data on national private school achievement

• Grades 4 and 8 mathematics and reading: 1990/2–2019
  o Private school data reportable through 2013
  o Catholic school data reportable throughout the trendlines

• Grades 4 and 8 science: 2009–2019
  o Private school data not reportable
  o Catholic school data reportable only (also reportable at grade 12 in 2015)

• Other national-level assessments
  o Civics, U.S. history, geography — private school data reportable until 2014; Catholic school data available in 2018
  o Technology and engineering literacy — only Catholic school data reportable
Larger proportions of White and urban students in Catholic schools; smaller percentages of students with disabilities and English learners

Percentage of fourth- and eighth-grade public and Catholic school students, by selected characteristics: 2019

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Catholic Grade 4</th>
<th>Public Grade 4</th>
<th>Catholic Grade 8</th>
<th>Public Grade 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>64</td>
<td>46*</td>
<td>65</td>
<td>48*</td>
</tr>
<tr>
<td>Black</td>
<td>9</td>
<td>15*</td>
<td>7</td>
<td>15*</td>
</tr>
<tr>
<td>Hispanic</td>
<td>17</td>
<td>28*</td>
<td>19</td>
<td>27*</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Two or more races</td>
<td>3</td>
<td>4*</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>City</td>
<td>44</td>
<td>30*</td>
<td>46</td>
<td>29*</td>
</tr>
<tr>
<td>Suburb</td>
<td>43</td>
<td>40</td>
<td>41</td>
<td>40</td>
</tr>
<tr>
<td>Town</td>
<td>10</td>
<td>10</td>
<td>6</td>
<td>12*</td>
</tr>
<tr>
<td>Rural</td>
<td>3</td>
<td>19*</td>
<td>7</td>
<td>19*</td>
</tr>
<tr>
<td>Students with disabilities</td>
<td>7</td>
<td>14*</td>
<td>6</td>
<td>14*</td>
</tr>
<tr>
<td>English learners</td>
<td>6</td>
<td>13*</td>
<td>2</td>
<td>7*</td>
</tr>
</tbody>
</table>

*Significantly different ($p < .05$) from Catholic.

Catholic school students outperform public school students on average

Average mathematics, reading, and science scores of fourth- and eighth-grade public and Catholic school students: select years, 1990–2019

**MATHEMATICS**

<table>
<thead>
<tr>
<th>Grade 4</th>
<th>Grade 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>219</td>
<td>293</td>
</tr>
<tr>
<td>246</td>
<td>281</td>
</tr>
</tbody>
</table>

**READING**

<table>
<thead>
<tr>
<th>Grade 4</th>
<th>Grade 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>229</td>
<td>278</td>
</tr>
<tr>
<td>235</td>
<td>262</td>
</tr>
</tbody>
</table>

**SCIENCE**

<table>
<thead>
<tr>
<th>Grade 4</th>
<th>Grade 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>164</td>
<td>167</td>
</tr>
<tr>
<td>149</td>
<td>153</td>
</tr>
</tbody>
</table>

KEY: ○ Public    ▲ Private: Catholic    ■ Significant difference

Grade 4 mathematics score for Catholic school students on par with results from 2003

Average mathematics scores of fourth-grade public and Catholic school students: 1990–2019

*Significantly different (p < .05) from 2019.

---Accommodations not permitted.

Grade 8 mathematics score for Catholic school students also unchanged from 2003

Average mathematics scores of eighth-grade public and Catholic school students: 1990–2019

*Significantly different (p<.05) from 2019.
---Accommodations not permitted.

Grade 4 reading score for Catholic school students not changed compared to 2002

Average reading scores of fourth-grade public and Catholic school students: 1992–2019

*Significantly different (p<.05) from 2019.
---Accommodations not permitted.

Grade 8 reading score for Catholic school students declined recently

Average reading scores of eighth-grade public and Catholic school students: 1992–2019

*Significantly different (p<.05) from 2019.
---Accommodations not permitted.

No change in grades 4 and 8 science scores for Catholic school students

Average science scores of fourth-grade public and Catholic school students: 2009–2019

Average science scores of eighth-grade public and Catholic school students: 2009–2019

No change across the performance distribution in grade 4 mathematics for Catholic school students over the last decade, while diverging trends appear for public school students.

Fourth-grade mathematics scores, by selected percentiles and school type: selected years, 1990–2019

*Significantly different (p<.05) from 2019.

¹Accommodations not permitted.

Score decline at the 10th percentile in grade 8 mathematics for Catholic school students


*Significantly different (p<.05) from 2019.

¹Accommodations not permitted.
No change across the performance distribution in grade 4 reading for Catholic school students over the last decade, while diverging trends appear for public school students.

<table>
<thead>
<tr>
<th>Year</th>
<th>10th Percentile</th>
<th>25th Percentile</th>
<th>50th Percentile</th>
<th>75th Percentile</th>
<th>90th Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Public</td>
<td>Catholic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>167</td>
<td>193</td>
<td>216</td>
<td>238</td>
<td>257</td>
</tr>
<tr>
<td>2009</td>
<td>173*</td>
<td>196</td>
<td>224</td>
<td>247</td>
<td>265</td>
</tr>
<tr>
<td>2000</td>
<td>157*</td>
<td>187*</td>
<td>215*</td>
<td>241*</td>
<td>260*</td>
</tr>
<tr>
<td>1992¹</td>
<td>168</td>
<td>192*</td>
<td>217*</td>
<td>240*</td>
<td>259*</td>
</tr>
</tbody>
</table>

*Significantly different (p<.05) from 2019.

¹Accommodations not permitted.

Score decline at the 10th percentile in grade 8 reading for Catholic school students

Eighth-grade reading scores, by selected percentiles and school type: selected years, 1992–2019

*Significantly different (p<.05) from 2019.

¹Accommodations not permitted.

No change in grade 4 science scores for Catholic school students

*Significantly different (p<.05) from 2019.

Gains at the 50th and 75th percentiles in grade 8 science for Catholic school students

Summary

- Catholic schools were made up of more White and urban students than public schools and have smaller proportions of students with disabilities and English learners.
- Catholic school students outperformed public school students on average in grades 4 and 8 mathematics, reading, and science.
- Recent Catholic school student performance was similar to results from almost two decades ago.
- Lower-performers in Catholic schools had score declines in grade 8 mathematics and reading over the last decade, while there were gains made by middle- and higher-performers in grade 8 science.
Thank you

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