Minnesota’s education achievement gaps and early care & education markets

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*The views expressed here are those of the author and not necessarily those of the Federal Reserve Bank of Minneapolis or the Federal Reserve System.
A Statewide Crisis:
Minnesota’s Education Achievement Gaps
Key takeaways

- Minnesota has some of the largest education achievement gaps in the nation by race and socioeconomic status.

- Disparities span all parts of the state and all types of schools, whether district or charter schools.

- Racial and income gaps in standardized test scores and college readiness have increased over time, while gaps in graduation rates have decreased.

- Minnesota is graduating an increasing proportion of students who fall short of college readiness benchmarks.
Large racial disparities in test scores across students...

Grade 4 Reading Score by Race

Source: Authors’ calculations based on data from the National Center for Education Statistics (NCES)
... and across schools

Grade 4 Reading Score by % Minority Students (2018)

Source: Authors’ calculations based on MCA III data from the Minnesota Department of Education
Schools with a higher proportion of minority students have lower test scores across both charter and district public schools.

**Grade 4 Reading by % Minority Students (2018)**

- **Charter Schools**
  - 0-10%
  - 20-30%
  - 40-50%
  - 60-70%
  - 80-90%

- **District Public Schools**
  - 10-20%
  - 30-40%
  - 50-60%
  - 70-80%
  - 90-100%
Schools with a higher proportion of low-income students have lower test scores across both charter and district public schools.

**Grade 4 Reading Score by FRPL Eligibility**

Source: Authors’ calculations based on data from the National Center for Education Statistics (NCES)
Grade 4 Reading Score by FRPL Eligibility (2018)

Source: Authors’ calculations based on MCA III data from the Minnesota Department of Education
Grade 4 Reading Score by % FRPL-Eligible Students (2018)

Source: Authors’ calculations based on MCA III data from the Minnesota Department of Education
School districts with a high percentage of low-socioeconomic students are located in both urban and rural areas.
Graduation rate gaps look similar across rural and urban areas

Graduation Rate by FRPL Eligibility (2018)

Source: Authors’ calculations based on data from the Minnesota Department of Education; urban school districts defined as having more than 80% in urban area.
Minnesota ranks high on college readiness assessments ...

**College Readiness: Reading**

<table>
<thead>
<tr>
<th>State</th>
<th>% Meeting College Readiness Benchmarks</th>
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<tbody>
<tr>
<td>MN</td>
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... but has one of the worst gaps by race and ethnicity

**White-Black Gap in College Readiness: Reading**

<table>
<thead>
<tr>
<th>State</th>
<th>Difference in Percentage of Students Meeting Benchmarks</th>
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Difference in Percentage of Students Meeting Benchmarks
Fewer students prepared for college over time and gaps across race and income larger.

College Readiness by Race

% Meeting College Readiness Threshold

2014 | 2015 | 2016 | 2017 | 2018

| White | 80 | 70 | 60 | 50 | 40 |
| Asian | 40 | 30 | 20 | 10 | 0 |
| Hispanic | 20 | 10 | 0 | 0 | 0 |
| American Indian | 0 | 0 | 0 | 0 | 0 |
| African American | 0 | 0 | 0 | 0 | 0 |

Source: ACT Research
Minnesota ranks high in achievement gap levels and persistence.

Grade 4 Reading Score Gap - White-Black

Source: Authors’ calculations based on data from the National Center for Education Statistics
Family child care declines ...

Capacity of family child care providers by state (2012=100)

Source: Minnesota Department of Human Services
... as centers catch up

Source: Minnesota Department of Human Services; Wisconsin Department of Health Services; North Dakota Childcare Resources and Referral
... although overall capacity declines in Minnesota

Number of slots for children under 6, across all providers types (2002=100)

Source: Minnesota Department of Human Services
Minnesota child care capacity as a share of young children under age 6

- Total: 42%
- Infants: Under 30%

Source: Child Care Aware of America and American Community Survey, 2013-2017 5-Year Estimates
Minnesota median market child care rates, 2018

Child care center
(58% of child care capacity)

- Infant
- Toddler
- Preschool

Family child care
(42% of child care capacity)

- Infant
- Toddler
- Preschool

Source: Results of the 2018 Child Care Market Rate Survey, Minnesota Department of Human Resources
Median family income by presence of young children

Family income, children under age 6, 2012-2016*

*Standard error estimates indicated at the top of each bar.
Minnesota Children Under Age 6 Living with Two Parents, Mother, or Father

- Two Parents: 73%
- Mother: 20%
- Father: 7%

Total: 410,000

Minnesota Children Under Age 6, Percent of Parents in Labor Force by Living Arrangement

Productivity and Performance at Work

As a result of child care (age 0-2) problems have you ever:

- Had problems participating in work-related education/training: 25%
- Been reprimanded by a supervisor: 20%
- Had your pay or hours reduced: 13%
- Been let go or fired: 8%
- Been demoted or transferred to a less desirable position: 7%

Career Pathways

As a result of child care (age 0-2) problems have you ever:

- Reduced your regular work hours: 25%
- Turned down further education/training: 25%
- Turned down a new job offer: 25%
- Turned down a promotion/reassignment: 16%
- Changed from full-time to part-time work: 15%
- Quit a job: 13%

Source: Belfield (2018)
Based on the parent survey results, a model generates the following annual average cost estimates:

- Working parents lose $37 billion (lost earnings and extra costs of job search)
- Businesses lose $13 billion (lost revenues and extra costs to rehire)
- Taxpayers lose $7 billion (lower income tax and sales tax)

Source: Belfield (2018)