



## THE WHOLE PICTURE OF PUBLIC EDUCATION IN NEW HAMPSHIRE

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New Hampshire School Boards Association

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## WHAT INFLUENCES STUDENT LEARNING AND SUCCESS?

*The Whole Picture of Public Education* looks beyond individual classrooms and schools to explore the **family, community, and statewide factors** that impact learning, and begins to unpack how we can best support our students.

Student Outcome Indicators	Student & Teacher Indicators	Community Indicators	School Finance Indicators
<ul style="list-style-type: none"> <li>• Student proficiency rates for Grades 4, 8, and 11 (SY17)</li> <li>• Attendance rates (SY08, SY12, SY17)</li> <li>• Graduation rates (SY10, SY14, SY17)</li> <li>• Dropout rates (SY10, SY14, SY17)</li> </ul>	<ul style="list-style-type: none"> <li>• Enrollment trends (SY08, SY12, SY17)</li> <li>• Student-to-teacher ratios (SY08, SY12, SY17)</li> <li>• Class size (SY08, SY12, SY17)</li> <li>• Teacher salary (SY08, SY12, SY17)</li> </ul>	<ul style="list-style-type: none"> <li>• Income &amp; poverty (SY08, SY12, SY17)</li> <li>• Property wealth &amp; housing costs (2006-2016)</li> <li>• Unemployment (2006-2016)</li> <li>• Educational attainment (2012-2016)</li> <li>• Health indicators (2010-2017)</li> </ul>	<ul style="list-style-type: none"> <li>• State &amp; local funding sources (SY08, SY17)</li> <li>• Spend per student (SY08, SY12, SY17)</li> <li>• Town-level property tax data (SY17)</li> </ul>
<p>Sources Used: U.S. Census Bureau, NH Department of Education, NH Department of Revenue Administration, Vital Records Administration</p>			
<p>REACHING HIGHER NH <span style="float: right;">3</span></p>			

## Project Limitations

- Student Outcomes: We measure “student learning” using district performance on statewide assessments.
  - We fully acknowledge that one test cannot fully capture student learning and growth. However, the **assessment results are common yardsticks for district performance.**
- Availability and Reporting of Data

## Key Findings

- Fourth grade outcomes were most strongly associated with the concentration of families navigating poverty in a community.
- As students get older, the predictors of their academic outcomes expand to include both family income **and** the educational attainment of the broader community.
- In high school, districts with higher teacher salaries outperformed their counterparts in academic outcomes and graduation rates.

Fourth grade outcomes were most strongly associated with the concentration of families navigating poverty in a community.



Source: NH Department of Education, 2017

## Why might family income be crucial to 4th graders?

- When considering fourth grade students, their access to the outside world is based on their family and household.
- We also analyzed student-to-teacher ratios, district size, and the relative wealth of the community, but they fell flat when compared to family income.

## This **does not mean** that students are not capable of scoring proficient on these tests.

- The unique challenges that many students navigate – food insecurity, housing instability, and lack of basic needs like a healthy environment and access to doctors when they are sick – have proven to be particularly difficult to overcome.
- There are family, school, and community-based interventions that can **help remove barriers to learning** and create environments where students can thrive.

How many New Hampshire students could possibly be affected by poverty?

Isn't the economy booming? And, isn't unemployment at a historic low?

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## Poverty in New Hampshire

The percentage of students navigating poverty in New Hampshire **increased by 40% in nearly a decade.**

Year	Percentage
2008	19.5%
2017	27.3%

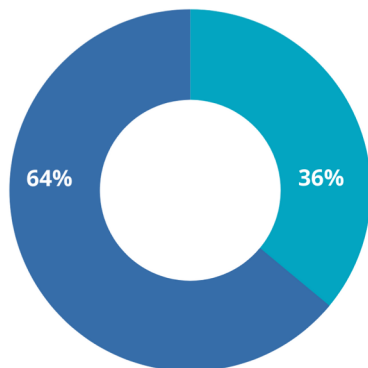
Source: NH Department of Education

- In every county in New Hampshire, children are significantly more likely than senior citizens to live in poverty.
- The percentage of students living in poverty has increased, even as the overall student population has decreased 12% since 2008.

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**As students get older, the predictors of their academic outcomes expand to include both family income **and** the educational attainment of the broader community.**

**IN DISTRICTS WHERE MOST COMMUNITY MEMBERS HAVE UP TO AN ASSOCIATE'S DEGREE, 36% OF EIGHTH GRADE STUDENTS WERE PROFICIENT IN MATH**



Source: NH Department of Education, 2017

As students get older, the predictors of their academic outcomes expand to include both family income **and** the educational attainment of the broader community.

We offer two **hypotheses**.

## Educational Attainment of the Community

### Hypothesis 1:

Older students have the opportunity to engage with the community-at-large, both with and without the aid of their parents or guardians. They may have mentors who encourage their interests and passions, who can help guide them in choosing classes, finding internships, or seeking other opportunities to develop and pursue their goals and also support them in staying on track as they experience challenges along the way.



## Educational Attainment of the Community



### Hypothesis 2:

We suspect that the educational attainment variable indirectly reflects other community-level factors for which we do not have data.

For example, we were unable to collect community-level data on health and wellness outcomes, environmental factors, community violence, substance use, mental health, and childhood trauma, abuse, and neglect, but research shows clear relationships between these factors and student learning.

**In high school, districts with higher teacher salaries outperformed their counterparts in academic outcomes and graduation rates.**



## Average Teacher Salary and Graduation Indicators, 2017

	High School Graduation Rate	High School Dropout Rate	K-12 Student Enrollment
Bottom 20% (<\$48,132)	87.4%	3.0%	13,305
Top 20% (>\$62,970)	94.5%	0.8%	37,014

Source: NH Department of Education, 2017



## Average Teacher Salary, by Upper (Blue) and Lower (Green) Quartiles of Economic Advantage



Source: NH Department of Education, 2017





# Concord School District Profile

County: Merrimack County

## Overview

This report examines the overall picture of public education in your district, including community indicators that can affect a child's learning.

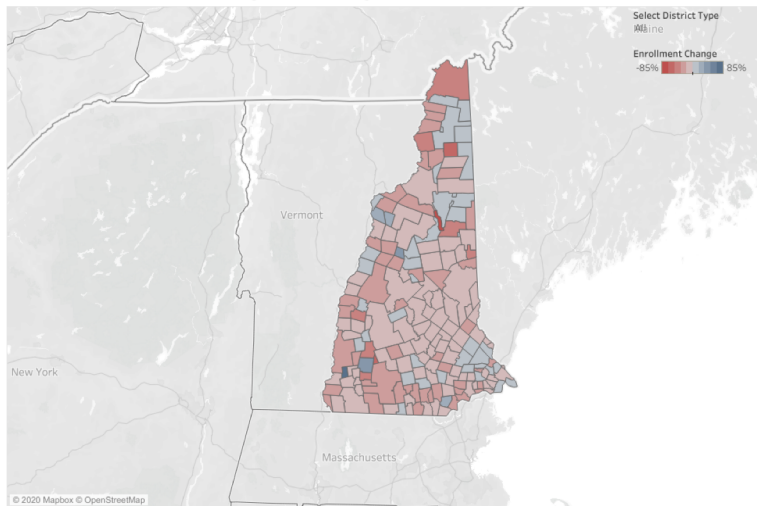
**Questions to consider:** What do these key indicators show about the context and environment in which children are learning in my district? How has my district changed over time? How might these changes affect student outcomes and how we educate all of our children?

## Student Outcome Indicators

This section explores district performance on the 2017 statewide annual assessment for Grades 4, 8, and 11. This section also includes three other outcome measures: high school graduation rates, high school dropout rates, and attendance rates. Districts that do not operate a high school do not report Grade 11 assessment results, high school graduation rates, or high school dropout rates. Please see the Data Glossary for more information.



Which districts have had the greatest changes in enrollment between 2008 and 2017?



Fourth grade reading proficiency scores are not included for the twelve districts that participated in the Performance Assessment of Competency Education (PACE) program in 2017. These districts included: Bethlehem, Concord, Epping, Lafayette Regional, Landaff, Lisbon Regional, Monroe, Pittsfield, Profile, Rochester, and Sanborn Regional. Learn more about PACE at <http://www.ReachingHigherNH.org/PACE>



## Contact Us

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