

## Measures of Schools and Students in Manchester School District January 2024

Inequitable education funding in New Hampshire affects far more than the property taxpayer. Students' educational experiences can be drastically different all over the state. Below is some helpful information about the schools in the Manchester School District and how they compare to the rest of the state.

### Students and Student Characteristics

Manchester Schools have grades from pre-school through 12<sup>th</sup> grade. Table 1 shows enrollment in October of the 2022- 2023 school year by grade, including one postgraduate student.

**Table 1**

School Name	Pre	K	1	2	3	4	5	6	7	8	9	10	11	12	PG	Total
Bakersville School	75	43	51	47	60	49	0	0	0	0	0	0	0	0	0	325
Beech Street School	0	73	89	69	86	74	82	0	0	0	0	0	0	0	0	473
Gossler Park School	0	64	53	67	62	54	0	0	0	0	0	0	0	0	0	300
Green Acres School	6	85	62	63	82	59	78	0	0	0	0	0	0	0	0	435
Henry J. McLaughlin Jr. Middle School	0	0	0	0	0	0	0	232	207	221	0	0	0	0	0	660
Henry Wilson Elementary School	0	60	75	73	75	76	75	0	0	0	0	0	0	0	0	434
Highland-Goffes Falls School	13	56	61	65	68	62	0	0	0	0	0	0	0	0	0	325
Hillside Middle School	0	0	0	0	0	0	0	259	235	252	0	0	0	0	0	746
Jewett School	31	72	90	74	89	97	0	0	0	0	0	0	0	0	0	453
Manchester Central High School	0	0	0	0	0	0	0	0	0	0	360	331	272	198	0	1,161
Manchester Memorial High School	0	0	0	0	0	0	0	0	0	0	404	389	314	279	0	1,386
Manchester School of Technology	0	0	0	0	0	0	0	0	0	0	110	80	70	72	0	332
Manchester West High School	0	0	0	0	0	0	0	0	0	0	218	190	200	142	1	751
McDonough School	28	65	62	71	68	85	67	0	0	0	0	0	0	0	0	446
Middle School At Parkside	0	0	0	0	0	0	218	220	232	188	0	0	0	0	0	858
Northwest Elementary School	0	96	110	91	102	88	0	0	0	0	0	0	0	0	0	487
Parker-Varney School	56	62	79	60	65	74	0	0	0	0	0	0	0	0	0	396
Smyth Road School	27	74	60	74	50	63	78	0	0	0	0	0	0	0	0	426
Southside Middle School	0	0	0	0	0	0	163	195	180	212	0	0	0	0	0	750
Webster School	47	42	60	64	55	60	61	0	0	0	0	0	0	0	0	389
Weston Elementary School	78	75	70	67	61	77	55	0	0	0	0	0	0	0	0	483
<b>TOTAL</b>	<b>361</b>	<b>867</b>	<b>922</b>	<b>885</b>	<b>923</b>	<b>918</b>	<b>877</b>	<b>906</b>	<b>854</b>	<b>873</b>	<b>1,092</b>	<b>990</b>	<b>856</b>	<b>691</b>	<b>1</b>	<b>12,016</b>

**Table 2**

District Name	American Indian or Alaskan	Asian or Pacific Islander	Hispanic	Black Non-Hispanic	White Non-Hispanic	Multi-Race	Total
<b>Number of students</b>							
Manchester	19	471	3,575	1,311	5,957	683	12,016
State Total	360	5,271	13,557	3,494	138,647	5,949	167,278
<b>Percent of students</b>							
Manchester	0.2%	3.9%	29.8%	10.9%	49.6%	5.7%	100.0%
State Total	0.2%	3.2%	8.1%	2.1%	82.9%	3.6%	100.0%

Table 2 displays racial enrollments for all students in Manchester Schools as of October 1, 2022.

White non-Hispanic students constituted slightly less than 50% of the students. Manchester had the most racially diverse student body among all school districts in the state.

In the 2021-22 school year, 12,204 public school students attended Manchester Schools. Of these, 5,907 were eligible for free/reduced-price school meals, meaning their family’s income was below 185% of the Federal Poverty Line. The state average was only 23%, less than half that of Manchester.

Also in the 2021-22 school year, 2,490 students were receiving special education services with an Individual Education Plan (IEP). This was 20% of the students, near the statewide average of 19%.

As shown in Table 3, nearly 20% of the students were not native English speakers in 2022-23.

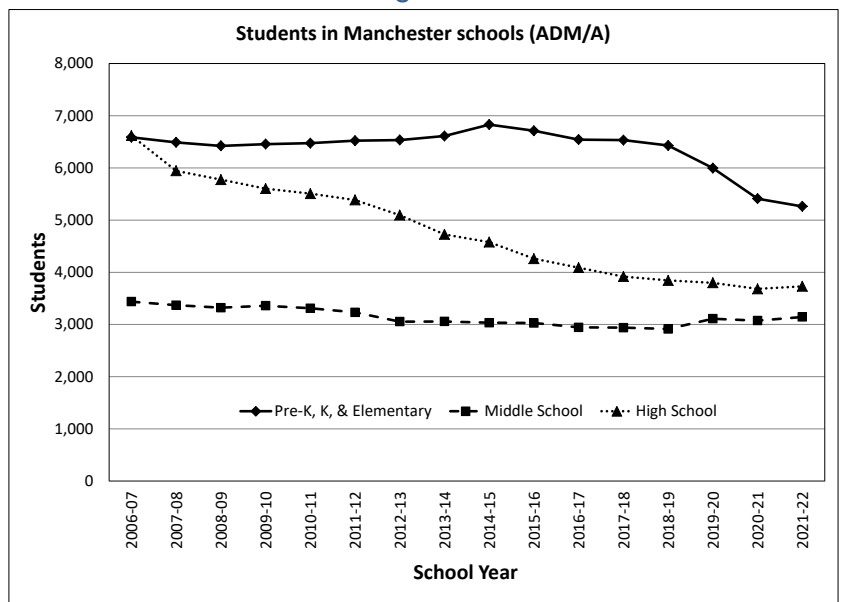
Table 3

District Name	Enrollment	English Language Learners	% ELL
Manchester	12,016	2,358	19.6%
State Total	167,278	7,063	4.2%

## How Has Enrollment Changed Over Time in Manchester Schools?

Average Daily Membership in Attendance (ADM/A) is one way in which enrollment is measured. It measures the number of public school students attending a district’s schools. ADM/A has been in slow decline in New Hampshire in recent years, attributable to declining birth rates. In Manchester, there has been a decrease of 27 percent from 2006-07. Figure 1 displays ADM/A trends in Manchester’s elementary, middle, and high schools for the past sixteen years. During this period, the number of elementary students decreased by 20 percent, middle school students decreased by 8 percent, and high school students decreased by 37 percent.

Figure 1



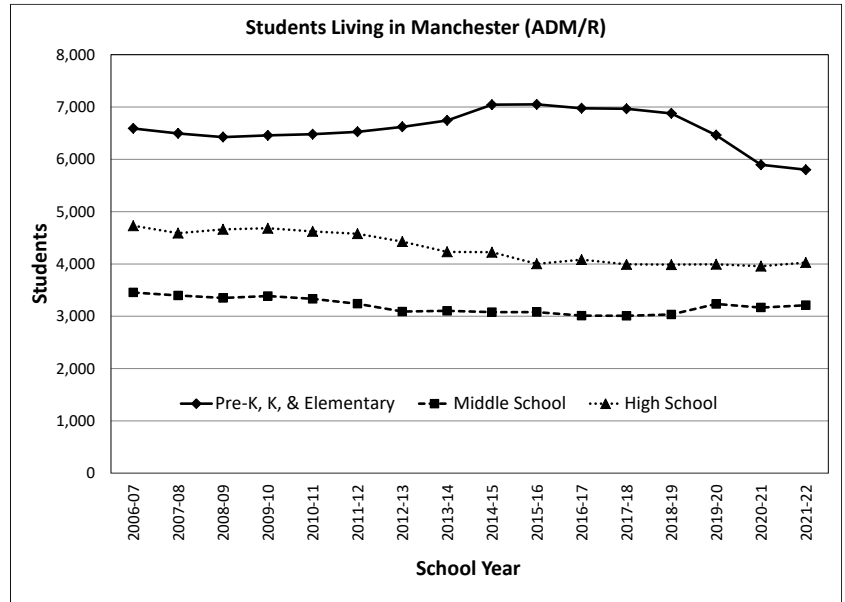
This decline in attendance at Manchester public schools can be misleading. Much of it is due to decisions made by surrounding districts to no longer tuition their students into Manchester’s schools. Figure 2 displays the number of students who were residents of Manchester only.

The decline in Manchester resident elementary students was 12 percent, all of it in the last three years. The decline in Manchester-resident middle school students was 7%. For high school students, it was 12%.

The total decline in high school students over this period was 2,888. Of this, the decline of 703 was due to fewer Manchester-resident students while 2,185

was due to fewer tuitioned students. Only 25 percent of the decline in high school students was due to fewer Manchester students attending the high schools.

Figure 2



## What Sports Have Been Available to Manchester High School Students?

The New Hampshire Interscholastic Athletic Association (NHIAA) organizes high school sports competitions in New Hampshire.

Of the 33 sports listed by NHIAA for the school year 2019-20, 26 were available to students at Central High School, 27 at Memorial High School, and 23 at West High School. There were only 5 sports that were not available to students at any of Manchester’s high schools: bass fishing, co-ed unified soccer, boys volleyball, ski jumping, and unified track. While the Manchester School of Technology was not listed by NHIAA as having any interscholastic sports teams, their students may have participated in teams at the three main high schools. The specific sports at each high school are listed in Table 4.

Interscholastic sports available at any high school in any particular year will depend, of course, on the availability of coaches and whether enough students sign up.

Table 4

NHIAA Sport 2019-20	Central	Memorial	West
Bass Fishing			
Boys & Girls Cross Country	x	x	x
Field Hockey	x	x	
Football	x	x	x
Boys & Girls Golf	x	x	
Boys Soccer	x	x	x
Girls Soccer	x	x	x
Coed Unified Soccer			
Spirit	x	x	x
Girls Volleyball	x	x	x
Boys Volleyball			
Boys Basketball	x	x	x
Girls Basketball	x	x	x
Boys Ice Hockey	shared	x	shared
Girls Ice Hockey	shared	shared	shared
Boys & Girls Indoor Track	x	x	x
Boys & Girls Alpine Skiing	x	x	x
Boys & Girls Nordic Skiing	x	x	x
Ski Jumping			
Swimming & Diving	x	x	x
Girls Gymnastics	x	x	
Boys Wrestling	x	x	x
Ten-Pin Bowling			x
Unified Basketball	x	x	x
Baseball	x	x	x
Softball	x	x	x
Boys Lacrosse	x	shared	shared
Girls Lacrosse	x	shared	shared
Outdoor Track	x	x	x
Girls Tennis	x	x	
Boys Tennis	x	x	x
Unified Track			
Unified Volleyball		x	
Count of Sports	26	27	23

## How Many Credits are Required to Graduate from Manchester High Schools?

The State of New Hampshire sets 20 credits as the minimum that each student must accumulate before they are allowed to graduate. In 2021 those credits were distributed across multiple subjects as shown in Table 5.

Most school districts in New Hampshire have higher graduation requirements than the 20 unit minimum set by the state. A few require as many as 28 units to graduate. Manchester has four high schools and uses the state minimum as its criterion for graduation at each of its high schools.

### What Has Been the High School Graduation Rate?

Manchester graduated 5,840 students in graduating classes from 2015 through 2021. The graduation rate over those seven years averaged 74.6%. This was considerably below the state average of 88.9%. In 2021 the graduation rate was only 67.8%

There are differences among the Manchester high schools as shown in Figure 4. The average graduation rate of 80.5% was highest at the Manchester School of Technology. The rate was 74.9% at Central, 79.7% at Memorial, and only 64.1% at West.

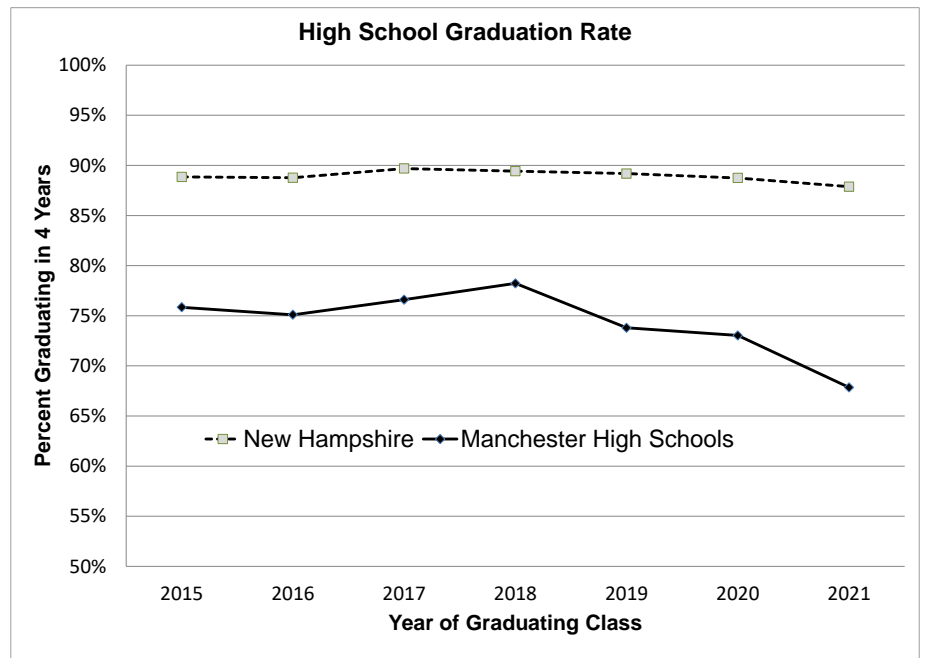
Ranking the 81 public high schools in New Hampshire with the highest graduation rate as (1) and the high school with the

lowest graduation rate as (81), Manchester School of Technology ranked 72, Memorial as 73, Central as 77, and West as 80.

Table 5

State Requirement	Units
Arts	0.5
Information & Communications	0.5
English	4.0
Mathematics	3.0
Physical Science	1.0
Biological Science	1.0
Other Science	
US/NH History	1.0
US/NH Government & Civics	0.5
Other Social Studies	
Economics	0.5
World History, Global Studies, Geography	0.5
Health	0.5
Physical Education	1.0
Electives	6.0
<b>TOTAL</b>	<b>20.0</b>

Figure 3



## How Well Have High School Students Done on the Annual SAT Exam?

One of the standardized exams used by New Hampshire to measure student achievement in high school is the SAT of the College Board. There are two parts: Mathematics and Evidence-Based Reading and Writing. The possible range of combined scores is 400 to 1600.

Over the four years from 2018 through 2021, 2,762 Manchester high school students took the SAT exams in the spring of their junior year. The average score of those students was 952 while the New Hampshire average was 1038.

Among the Manchester high schools, there were considerable differences in the average SAT scores of tested students. These are shown in Figure 5.

Ranking the 79 public high schools for which data was available, the school with the highest average score (1) and the lowest as (79), Manchester Central ranked 62<sup>nd</sup>, Memorial 65<sup>th</sup>, School of Technology as 78<sup>th</sup>, and West as 79<sup>th</sup>.

The total October enrollment of juniors in Manchester high schools over the 4 years totaled 3,877. As a percentage of enrollment, 28.8% of juniors were not tested. The percentage of untested juniors statewide was only 12.2%.

This incomplete testing also varied across the high schools. 25.6% of Central students, 28.4% of Memorial students, 33.5% of West students, and 31.9% of students at Manchester School of Technology were not tested. For unknown reasons, many more Manchester students were excused or absent from these standardized tests than elsewhere in the state.

Figure 4

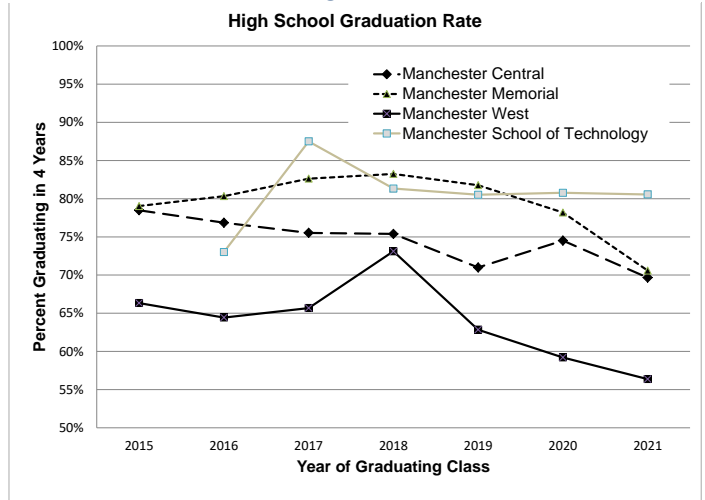


Figure 5

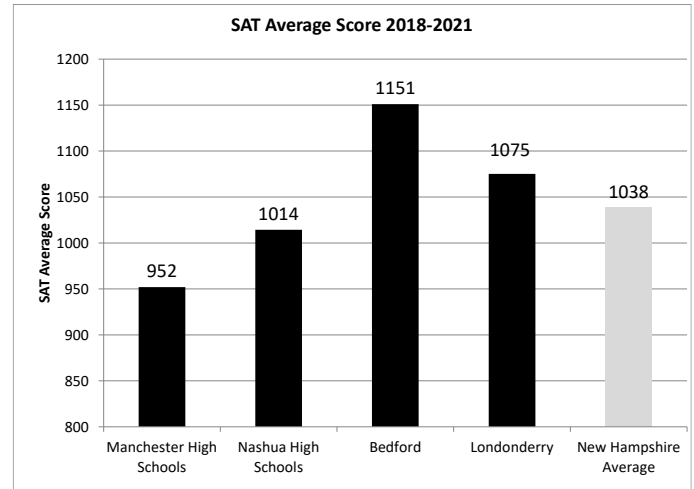
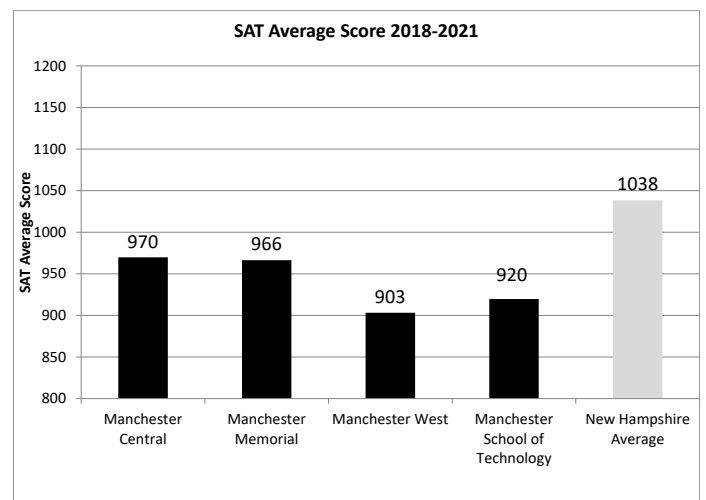


Figure 6



## What Courses are Available to High School Students in Manchester?

Course availability is an important measure of a student's educational opportunity. The Course of Studies documents for 2021-22 were collected from our public high schools. Counts of courses available in each subject area were compiled. Table 6 shows that Manchester high schools offer more courses in each subject area than the state average.

Table 6

Subject Areas	Number of Courses in 2021 Course Catalogs				Average Among All NH High Schools
	Manchester High Schools	Nashua High Schools	Londonderry High School	Bedford High School	
World Languages	21	26	23	23	14
Advanced Placement	15	23	17	14	9
English Electives	14	18	21	6	11
Math courses	25	28	22	26	17
Social Study Electives	14	26	19	7	10
Computer Technologies	10	7	14	11	6
Career tech	33	19	24	6	26
Arts & Performing Arts	50	26	23	36	23
Science Elective	15	35	16	6	13

The Course of Studies listing for Manchester high schools implies that a unique course taught by a special teacher in one high school is available to students who may be attending a different Manchester high school. The same is true in Nashua, the only other New Hampshire district with more than one high school.

The availability of courses is tied to several factors. The size of a school plays a large role. Larger schools have economies of scale, more teachers, and a student population with more diverse interests. With a high school student population of over 3,600, it is not unexpected that Manchester would be able to offer many more specialized courses than smaller districts and high schools. Other factors include transportation and teacher licensure.

## What Have Been Advanced Placement Results in Manchester?

The College Board offers Advanced Placement (AP) exams in 38 subjects every May. The exams are the culmination of students' participation in Advanced Placement courses in their high school. Those courses follow a standard syllabus and use nationally standard materials. There is no requirement for New Hampshire high schools to offer any AP courses, for students to take an AP course, or for those who do to take the associated exam at the end of the year.

One purpose of the courses and the exams is to allow students to get college credit in advance of entering college, thus potentially skipping certain introductory college courses. Among students who desire to attend a four year college after graduation there is considerable incentive to take AP courses and their associated exams.

The College Board grades each test on a scale from 1 to 5. Most colleges grant advanced credit to students whose score is a 3, 4, or 5. A few highly selective colleges may not accept scores of 3 or 4.

Table 7 lists the results in AP tests over the four year period 2018-2021.

Table 7

4 Years of AP Test Data (2018-2021)								
	Exam Takers	Exams Taken	Scored 3-5	Fall Enrollment	Takers as % of Enrollment	Exams per Taker	3+ as % of Exams	3+ per 100 Enrollment
Manchester Central	391	506	383	5,455	7.2%	1.29	75.7%	7.0
Manchester Memorial	233	352	224	5,563	4.2%	1.51	63.6%	4.0
Manchester School of Technology	10	11	1	1,500	0.7%	1.10	9.1%	0.1
Manchester West	91	142	53	3,132	2.9%	1.56	37.3%	1.7
New Hampshire Total & Average	22,966	36,355	25,108	216,266	10.6%	1.58	69.1%	11.6

Participation in Advanced Placement tests by the College Board is very low among Manchester high school students. It also varies greatly among the high schools. Manchester Central is closer to the state average than the other three high schools.

## How Likely Are Students from Manchester to Apply, Earn Admittance, and Enroll at The University of New Hampshire?

The University of New Hampshire (UNH) is one of New Hampshire’s public higher education institutions. The school is often a popular choice for many NH students graduating from public high schools.

The UNH Admissions Office provided counts of applications, admissions, and enrollments from each New Hampshire public high school for freshman years 2017 through 2021. By aggregating data over five years, the need to suppress small numbers was greatly reduced and year-to-year variations are smoothed, especially for smaller high schools. For comparisons among high schools of greatly varying sizes, senior year enrollments are used as the base for calculating what percentage of a school’s students have applied, been admitted an finally enrolled at UNH.

Students who plan to attend college after graduating from high school often apply to as many as 8 to 10 colleges. Thus, even when accepted to UNH, a vast majority of students will choose to go elsewhere and

a much smaller number will actually enroll. Understanding this, UNH (and other colleges and universities) offer admission to many more applicants than they could possibly accept.

On average, based on the years 2017-2021, 28.8% of New Hampshire’s public school senior class applied to UNH. From the Manchester high schools 23.4% applied. Statewide of the 18,455 who applied, UNH offered admission to 84.8%. Among the 954 Manchester students who applied, 76.7% were offered admission. Eventually enrolling for freshman year at UNH were 8.0% of all New Hampshire high school seniors but only 6.0% of Manchester seniors. Manchester was below the state average in all three categories. As shown in Table 8, there were also differences among Manchester’s high schools.

Table 8

High School Graduating Classes of 2017 - 2021			
	Applications to UNH as % of Senior Enrollment	Admissions as % of Applications	UNH Enrollment as % of Senior Enrollment
Manchester High Schools	23.4%	76.7%	6.0%
New Hampshire Average	28.8%	84.8%	8.0%
Manchester Central	29.6%	76.6%	7.2%
Manchester Memorial	22.6%	78.0%	6.5%
Manchester School of Technology	11.1%	77.4%	*
Manchester West	17.6%	74.0%	5.0%
Bedford	42.9%	88.8%	11.5%
Londonderry	30.4%	85.8%	7.8%

\* percent suppressed to avoid disclosure when count is under 5 students

## How Do Manchester 3<sup>rd</sup> Grade Students Do on State Standardized Tests?

Students first take state standardized tests when they are in third grade. One is a reading test. The other is a math test. The tests are part of the Statewide Assessment System (SAS)<sup>1</sup>. While these tests, like all standardized tests, are limited in what they cover or measure, they provide the earliest data on how well each New Hampshire student is doing. Each student’s test is given a scale score by SAS and those are grouped into four levels. Students at level 3 and 4 are considered proficient or above. In Table 9 we review results by average scores or percent proficient for Manchester and some surrounding districts.

<sup>1</sup> <https://nh.portal.cambiumast.com/>

Table 9

	3rd Grade			
	Average Scores		% of Students Proficient or Better	
	Math	Reading	Math	Reading
<b>New Hampshire</b>	429	578	51.0%	45.0%
<b>Manchester</b>	402	546	22.0%	20.0%
<b>Bedford</b>	457	608	84.0%	72.0%
<b>Goffstown</b>	432	583	55.0%	49.0%
<b>Hooksett</b>	442	590	69.0%	57.0%
<b>Londonderry</b>	435	584	61.0%	47.0%

In New Hampshire overall, about half of third grade students are considered proficient in both reading and math. Among third graders in Manchester fewer than one quarter are proficient.

Manchester operates 13 elementary schools. The SAS data in Table 10 show considerable differences in results among these schools.

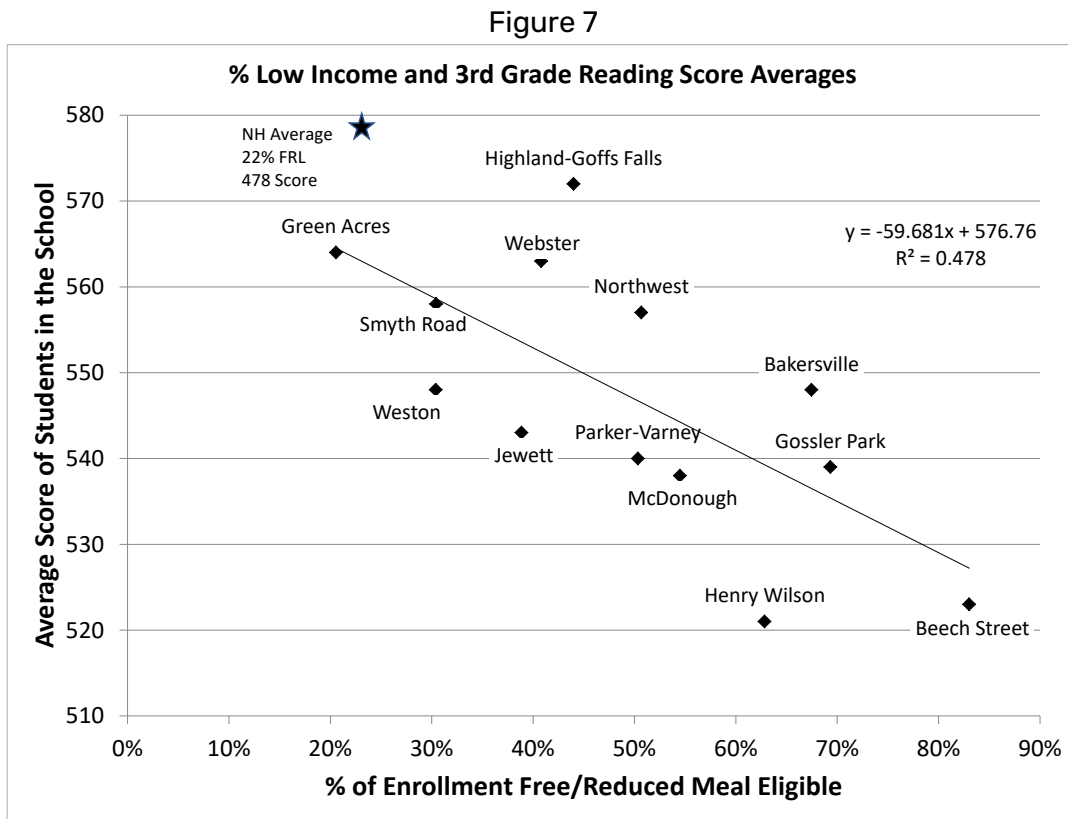
Table 10

Elementary School	3rd Grade			
	Math		Reading	
	Percent Proficient	Average Score	Percent Proficient	Average Score
Bakersville	27	399	27	548
Beech Street	< 10 %	385	< 10 %	523
Gossler Park	14	401	< 10 %	539
Green Acres	26	412	28	564
Henry Wilson	12	383	< 10 %	521
Highland-Goffs Falls	43	419	38	572
Jewett	30	412	14	543
McDonough	14	399	12	538
Northwest	21	401	28	557
Parker-Varney	18	396	10	540
Smyth Road	13	406	42	558
Webster	40	421	44	563
Weston	22	401	18	548

In no Manchester elementary school do students score at or above the state average.

Schools have different student bodies. Among other factors that are generally related to student performance are socio-economic factors among the student bodies. Students from lower income families tend to do poorer on standardized tests. Thus, schools with higher proportions of students from low income families tend to have lower proficiency results and lower average scores.

The eligibility of students for free and reduced price meals at school is based on their families' incomes. This data is collected annually and allows a calculation of the percentage of low income students in a student body. Figure 7 displays each Manchester elementary school based on its percentage of low income students and the average third grade reading score in that school. As the figure illustrates there is a clear relationship between socio-economic status of the student body and reading test results.



Fully 48% of the differences among average scores by school (R squared) is based on this relationship. Nevertheless, there are still differences. Highland-Goffs Falls School average result is considerably higher than might be expected for a school with 44% low income students. On the other hand, Henry Wilson School's average reading score is considerably lower than might be expected. Reasons for these differences might be related to other factors. Some of those factors may be related to school programs while others may be attributed to other measures of the student body.

As seen throughout this paper, educational experiences for New Hampshire students vary widely across the state. can make a large impact on the student population both during their time in public schools and in their post-secondary lives.

*Note: Data used in this report are taken from reports, spreadsheets, and websites of the NH Department of Education, University of New Hampshire, the College Board, and New Hampshire Interscholastic Athletic Association. Graduation requirements and number of courses offered was collected from Programs of Study from 79 New Hampshire public high schools.*