

**ASSESSING THE VALUE OF AN
AMHERST SCHOOL DISTRICT
K-8 EDUCATION:
MAIN REPORT**

A Report from the ASD Ways & Means Committee

NOVEMBER 2022

Table of Contents

Section 1: Introduction	3
Section 2: Assessing ASD Educational Outcomes	6
Section 3: Assessing ASD Financial Costs	19
Section 4: Assessing ASD Educational Value	28

SECTION 1: INTRODUCTION

The overarching role of the Amherst School District Ways & Means (W&M) Committee is to conduct due diligence into the strategic fiduciary decisions of the school district on behalf of the residents of Amherst. While our focus is on the proposed, upcoming annual school budgets, our perspective covers multiple years of expenditures (past and future) as well as insights into how the Amherst School District (ASD) schools compare with similar and aspirational ones in delivering educational value, i.e., academic outcomes achieved given the investments made.

This report represents the effort of our committee to assess the educational value of an ASD K-8 education. There is no simple calculation through which one divides academic outcomes by expended cost to arrive at a hard number. Rather, it's a process of gaining a good sense of academic outcomes achieved within the district and comparing them with those of comparable districts; calculating the costs expended to achieve those outcomes and comparing those costs with comparable districts; and making a general determination of where we fall on the spectrum of value.

To create a solid foundation for our analysis, we've done three things:

- First, for academic outcomes, we've used data compiled by the NH Department of Education (NHDOE) using data for the Amherst School District submitted by our SAU. We also use data compiled from other reputable sources such as NWEA, a highly regarded assessment and evaluation organization that SAU39 uses to help identify areas for academic improvement. We also use National Student Clearinghouse data that shows where our graduates attend college.
- Second, cost data has been similarly drawn from directly comparable data submitted to NHDOE by various districts, including SAU39.
- Third, we verified from the ASD Board and acting SAU39 superintendent what school districts from other communities represent valid candidates for academic and cost comparisons. That list follows:

Enrollment by School [2021_22]

SAU / District / School (Grades)	Elementary	Middle School	High School
Amherst SAU Office			
Amherst			
Amherst Middle School (5-8)		648	
Clark-Wilkins School (P K 1-4)	671		
Mont Vernon			
Mont Vernon Village School (K 1-6)	216		
Souhegan Coop			
Souhegan Coop High School (9-12)			702
Bedford SAU Office			
Bedford			
Bedford High School (9-12)			1,443
McKelvie Intermediate School (5-6)	678		
Memorial School (P K 1-4)	443		
Peter Woodbury School (K 1-4)	462		
Riddle Brook School (K 1-4)	520		
Ross A. Lurgio Middle School (7-8)		690	
Hanover SAU Office			
Dresden			
Frances C. Richmond School (6-8)	349		
Hanover High School (9-12)			688
Hanover			
Bernice A. Ray School (K 1-5)	497		
Hollis-Brookline SAU Office			
Brookline			
Captain Samuel Douglass Academy (4-6)	248		
Richard Maghakian Memorial School (P K R 1-3)	335		
Hollis			
Hollis Primary School (P K 1-3)	326		
Hollis Upper Elementary School (4-6)	287		
Hollis-Brookline Coop			
Hollis-Brookline High School (9-12)			830
Hollis-Brookline Middle School (7-8)		362	
Hopkinton SAU Office			
Hopkinton			
Harold Martin School (P K 1-3)	260		
Hopkinton High School (9-12)			321
Hopkinton Middle School (7-8)		135	
Maple Street Elementary School (4-6)	208		
Oyster River SAU Office			
Oyster River Coop			
Mast Way School (K 1-4)	323		
Moharimet School (K 1-4)	291		
Oyster River High School (9-12)			858
Oyster River Middle School (5-8)		629	
Windham SAU Office			
Windham			
Golden Brook Elementary School (P K R 1-2)	1,093		
Windham Center School (3-5)	424		
Windham High School (9-12)			1,058
Windham Middle School (6-8)	452		

This report starts with an assessment of academic outcomes achieved over time, followed by an assessment of investments made to enable those achievements. We have reviewed data covering several years and compared that data with those of comparable districts to draw our conclusions.

We are mindful that an ASD K-8 education is part of a longer public-education life cycle that also includes the Mont Vernon elementary education process and the 9-12 educational process at Souhegan Cooperative High School. As we collected academic

and cost data for ASD K-8, we also encountered and captured similar data for Mont Vernon and Souhegan, which we believe may be useful to others in our communities.

However, our charter focuses on ASD K-8, and that is where we have concentrated our efforts. We have encountered information in our work that underscores the interdependencies at play in fostering or hindering elementary, middle, and high school success. Where we uncover matters that are said to impact educational success at the high school level and beyond, we identify those.

SECTION 2: ASSESSING ASD EDUCATIONAL OUTCOMES

2.1 Introduction

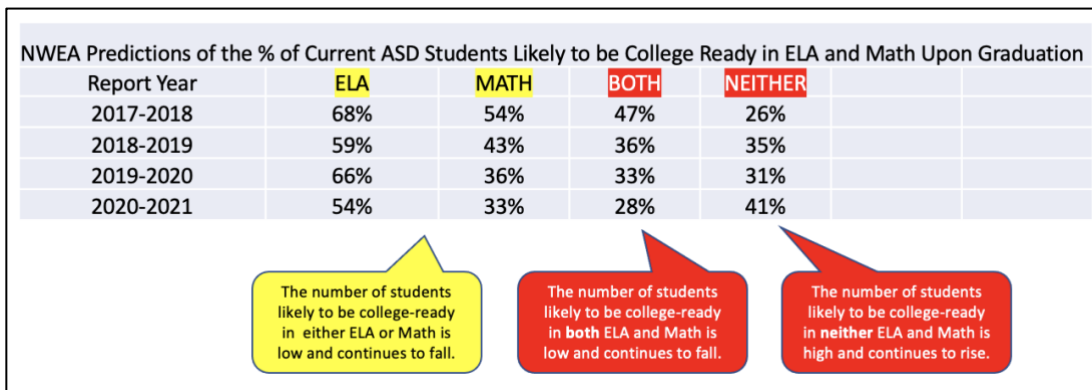
The Amherst School District (ASD) bears the responsibility of covering two-thirds of the public education life cycle of Amherst students. It is essential that, in these formative years, the district provides a strong educational foundation for all students upon which their future educational success so depends. Key to this to identify as early as possible emerging gaps in the achievement and growth of each student. This is especially important, because research shows that, once an educational gap opens for an ASD student, that gap never closes throughout the SAU education cycle, thereby stunting the educational prospects for that student over the longer term.

We looked at a variety of outcomes from NHDOE data to NWEA assessments both for the Amherst elementary and middle schools as well as for comparable districts. Educational outcomes can encompass many variables, e.g., creating life-long learners, students who go on to good colleges and/or lucrative careers, students with strong artistic skills, strong critical thinking skills, strong practical real-world skills, strong athletic skills, students who think globally and act locally, etc. We would have used such metrics along with test scores; however, SAU39 does not measure these kinds of outcomes, so there is no data on which to draw.

Also, these outcomes derive from proficiency in the fundamentals of reading, writing, and arithmetic. So, it is on these fundamental measures that we have focused our assessment.

Of the hundreds of data elements we reviewed from a variety of sources, one of the most impactful was the NWEA evaluation of ASD students tested over the past four years. This analysis uncovered meaningful performance shortcomings in ELA (English Language Arts) and math beginning as early as the third grade. Based on data covering the past previous years, NWEA predicts that:

1. Of today's ASD students, only about one third will be ready to do college-level work in *both* ELA and math upon graduation from high school.
2. About one third will *not* be ready to do college-level work in *either* ELA or math.
3. Other students will be college-ready in *one or the other*, but not both.



Source NWEA Insights Report to SAU39

The number of ASD higher-performing students (achieving college readiness in both Reading and Math) is falling, and the number of lower-performing ASD students (not achieving college readiness in either Reading or Math) is rising. (These two trends may also be true for some comparable schools, but that doesn't lessen the impact on our students.)

What is also disconcerting is the historical persistence of performance gaps. NWEA analysis shows that when ASD students begin to fall behind in a subject area, they do not close that gap throughout the rest of their public education.

We also reviewed several years of NHDOE (SAS) test scores for ASD and peer schools covering Math and English Language Arts proficiency. The data reveals that academic proficiency at ASD often falls below that of other comparable schools and districts.

We present this data in three ways:

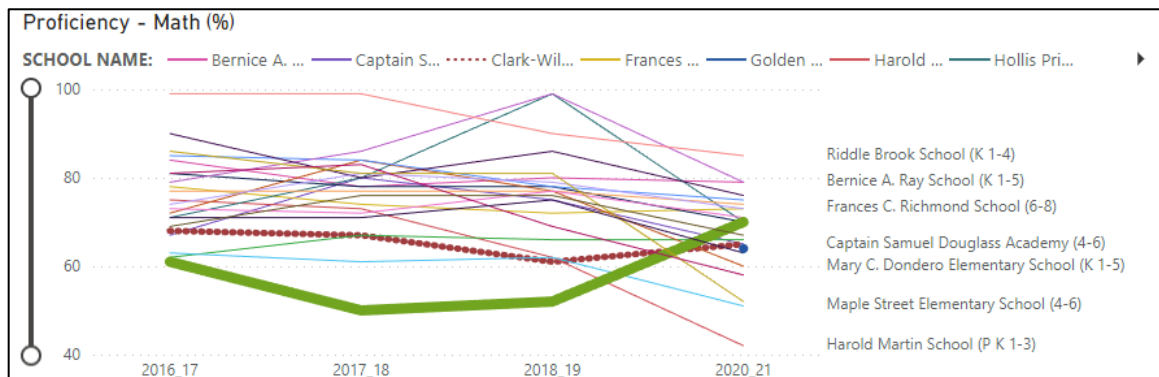
- The first graph shows proficiency over time for ASD and comparable schools.
- The second graph shows the percent-proficient distribution across comparable schools for the 2020-21 school year.
- The third chart presents color-coded trend details. We've divided range results into thirds. The lower third is noted with red highlights, the upper third with green highlights.

The color coding for schools or districts in SAU39 is this:

District Legend	
	Amherst
	Mont Vernon
	Souhegan Cooperative

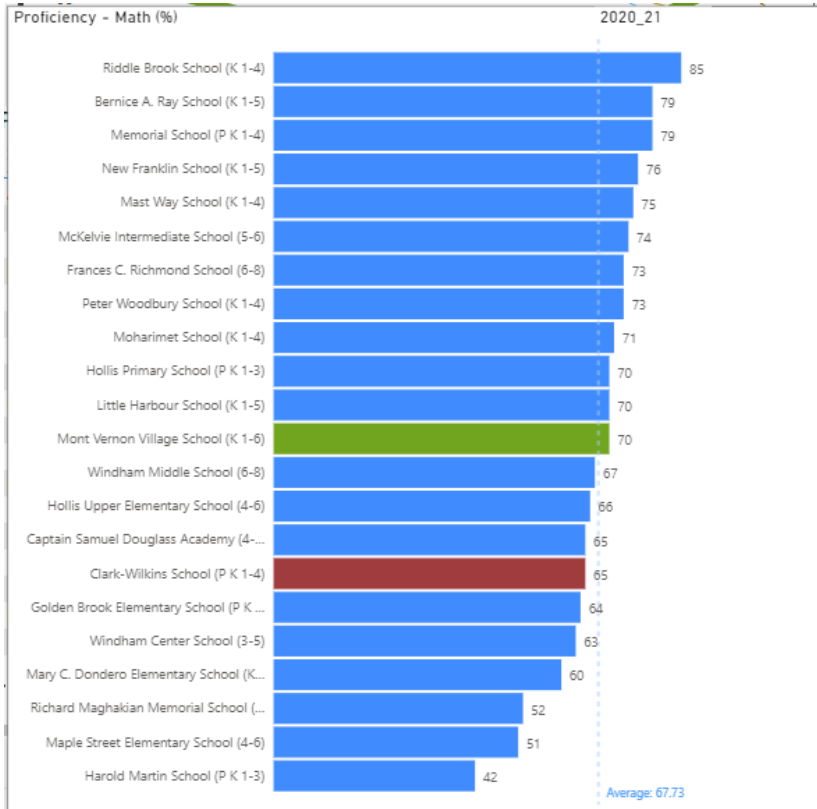
2.2 Math Proficiency Assessment

Math Proficiency - Elementary Schools



Until 2020-21 when it improved, Clark-Wilkins Math Proficiency has been the lowest of our peers and remains just below average (65% vs the average score of 67.8%).

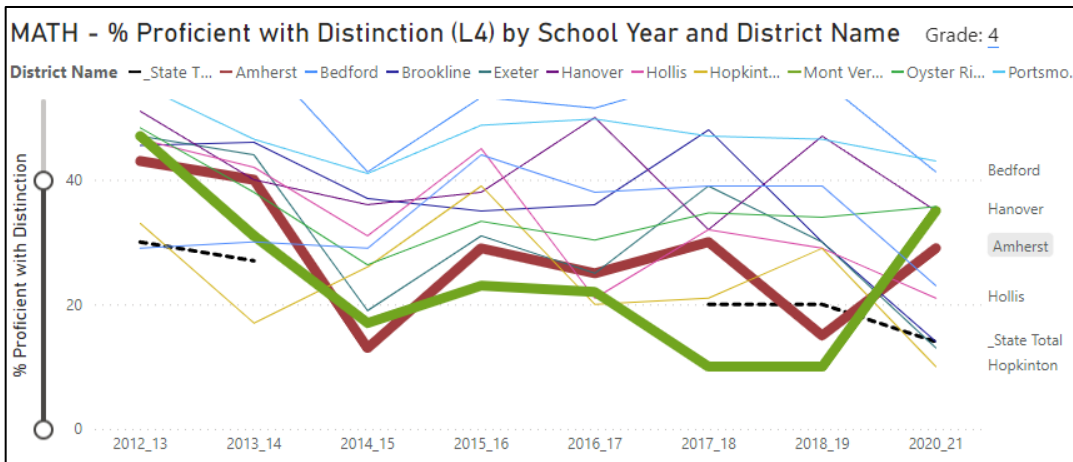
2020_21 Math Proficiency Distribution – Elementary Schools



2020-21 Math Proficiency Details – Elementary Schools

SAU Name / School (Grades)	2016_17	2017_18	2018_19	2019_20	2020_21
Amherst SAU Office					
Clark-Wilkins School (P K 1-4)	68.00%	67.00%	61.00%	*COVID	65.00%
Mont Vernon Village School (K 1-6)	61.00%	50.00%	52.00%	*COVID	70.00%
Bedford SAU Office					
McKelvie Intermediate School (5-6)	77.00%	77.00%	77.00%	*COVID	74.00%
Memorial School (P K 1-4)	79.00%	86.00%	>90.00%	*COVID	79.00%
Peter Woodbury School (K 1-4)	74.00%	81.00%	79.00%	*COVID	73.00%
Riddle Brook School (K 1-4)	>90.00%	>90.00%	90.00%	*COVID	85.00%
Hanover SAU Office					
Bernice A. Ray School (K 1-5)	84.00%	78.00%	80.00%	*COVID	79.00%
Frances C. Richmond School (6-8)	78.00%	74.00%	72.00%	*COVID	73.00%
Hollis-Brookline SAU Office					
Captain Samuel Douglass Academy (4-6)	67.00%	80.00%	75.00%	*COVID	65.00%
Hollis Primary School (P K 1-3)	71.00%	80.00%	>90.00%	*COVID	70.00%
Hollis Upper Elementary School (4-6)	62.00%	67.00%	66.00%	*COVID	66.00%
Richard Maghakian Memorial School (P K R 1-3)	86.00%	81.00%	81.00%	*COVID	52.00%
Hopkinton SAU Office					
Harold Martin School (P K 1-3)	75.00%	73.00%	62.00%	*COVID	42.00%
Maple Street Elementary School (4-6)	63.00%	61.00%	62.00%	*COVID	51.00%
Oyster River SAU Office					
Mast Way School (K 1-4)	85.00%	84.00%	78.00%	*COVID	75.00%
Moharimet School (K 1-4)	73.00%	72.00%	77.00%	*COVID	71.00%
Portsmouth SAU Office					
Little Harbour School (K 1-5)	81.00%	78.00%	78.00%	*COVID	70.00%
Mary C. Dondero Elementary School (K 1-5)	72.00%	84.00%	77.00%	*COVID	60.00%
New Franklin School (K 1-5)	90.00%	80.00%	86.00%	*COVID	76.00%
Windham SAU Office					
Golden Brook Elementary School (P K R 1-2)	NA	NA	NA	*COVID	64.00%
Windham Center School (3-5)	71.00%	71.00%	75.00%	*COVID	63.00%
Windham Middle School (6-8)	69.00%	76.00%	76.00%	*COVID	67.00%

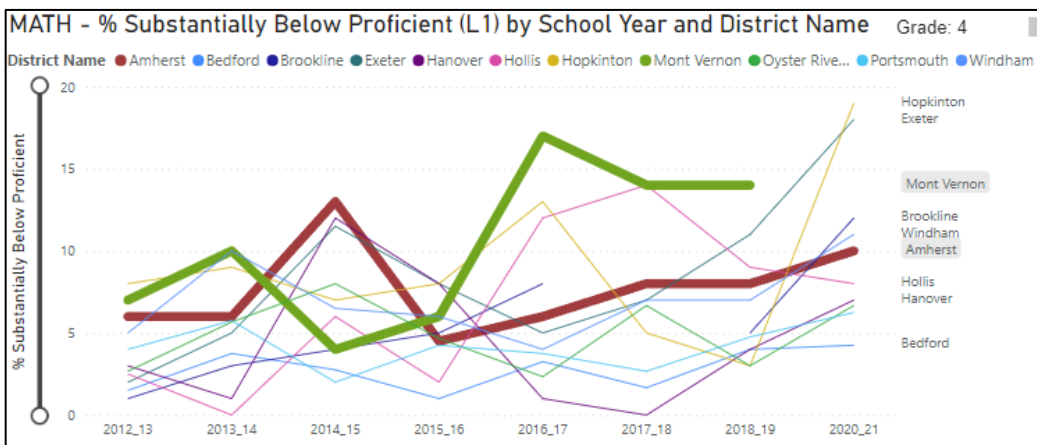
Proficient with Distinction (L4) – GRADE 4



Clark-Wilkins - Grade 4 has historically produced fewer 'Proficient with Distinction' Math students. The improvements in 2020-21 have brought C-W to up to average.

District Name	2012_13	2013_14	2014_15	2015_16	2016_17	2017_18	2018_19	2020_21
Amherst								
Clark-Wilkins School (P K 1-4)	43	40	13	29	25	30	15	29
Bedford								
Memorial School (P K 1-4)	54	62	42	57	43	61	49	43
Peter Woodbury School (K 1-4)	67	61	38	51	56	47	58	39
Riddle Brook School (K 1-4)	40	60	44	52	55	63	60	42
Brookline								
Captain Samuel Douglass Academy (4-6)	46	46	37	35	36	48	30	14
Hanover								
Bernice A. Ray School (K 1-5)	51	40	36	38	50	32	47	35
Hollis								
Hollis Upper Elementary School (4-6)	47	42	31	45	21	32	29	21
Hopkinton								
Maple Street Elementary School (4-6)	33	17	26	39	20	21	29	10
Mont Vernon								
Mont Vernon Village School (K 1-6)	47	31	17	23	22	10	10	35
Oyster River Coop								
Mast Way School (K 1-4)	45	41	27	42	35	50	41	39
Moharimet School (K 1-4)	52	35	26	26	26	20	28	32

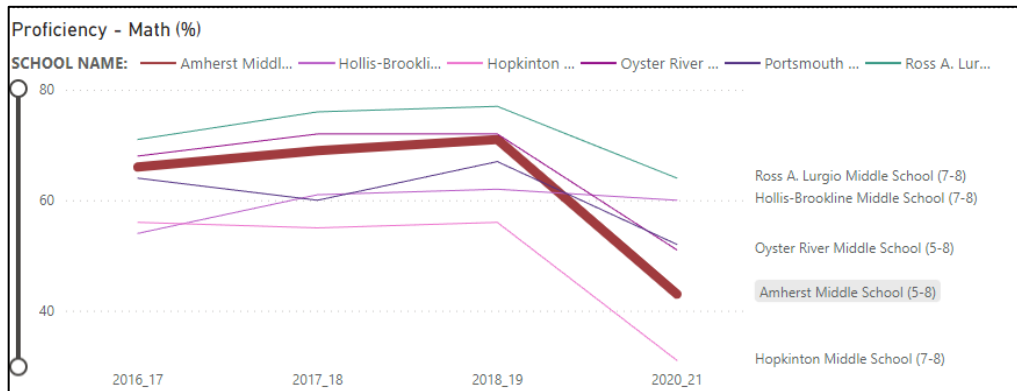
Substantially Below Proficient (L1) – GRADE 4



Clark-Wilkins - Grade 4 has a growing number of 'Substantially Below Proficient' Math students.

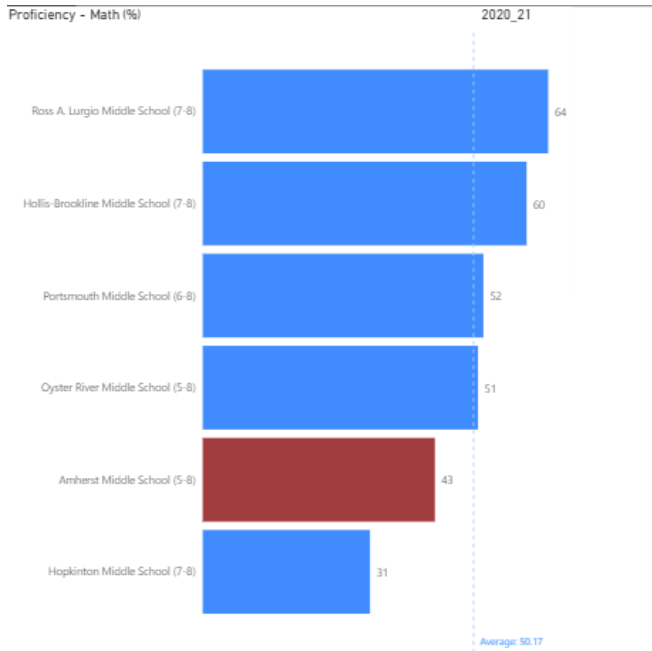
District Name	2012_13	2013_14	2014_15	2015_16	2016_17	2017_18	2018_19	2020_21
Amherst								
Clark-Wilkins School	6.0	6.0	13.0	4.0	6.0	8.0	8.0	10.0
Bedford								
Memorial School	3.0	3.0	0.0	0.0	5.0	2.0		8.0
Peter Woodbury School	1.0	7.0	5.0	2.0	5.0	2.0		4.0
Riddle Brook School	1.0	1.0	3.0	1.0	0.0		4.0	1.0
Brookline								
Captain Samuel Douglass Acad	1.0	3.0						
Captain Samuel Douglass Academy			4.0	5.0	8.0		5.0	12.0
Exeter								
Lincoln Street Elementary Sch	2.0	5.0						
Lincoln Street Elementary School			11.0	8.0	5.0	7.0	11.0	18.0
Hanover								
Bernice A. Ray School	3.0	1.0	12.0	8.0	1.0	0.0	4.0	7.0
Hollis								
Hollis Upper Elementary School	2.0	0.0	6.0	2.0	12.0	14.0	9.0	8.0
Hopkinton								
Maple Street Elementary School	8.0	9.0	7.0	8.0	13.0	5.0	3.0	19.0
Mont Vernon								
Mont Vernon Village School	7.0	10.0	4.0	6.0	17.0	14.0	14.0	
Oyster River Coop								
Mast Way School	5.0	10.0	10.0	8.0	0.0	3.0	3.0	5.0
Moharimet School	0.0	2.0	6.0	2.0	4.0	10.0	3.0	9.0
Portsmouth								
Little Harbour School	3.0	2.0	5.0	1.0	4.0	2.0	3.0	4.0
Mary C. Dondero Elementary Sch	9.0	10.0						
Mary C. Dondero Elementary School			0.0	9.0	2.0	2.0	2.0	6.0
New Franklin School	0.0	6.0	0.0	3.0	5.0		10.0	9.0
Windham								
Golden Brook Elementary School								11.0
Windham Center School	5.0	10.0	6.0	6.0	4.0	7.0	7.0	

Math Proficiency – Middle Schools



Until 2020-21, Amherst Middle School had ranked above average in developing 'Proficient' Math students then dropped to below peer averages (43% vs an average of 50.2%).

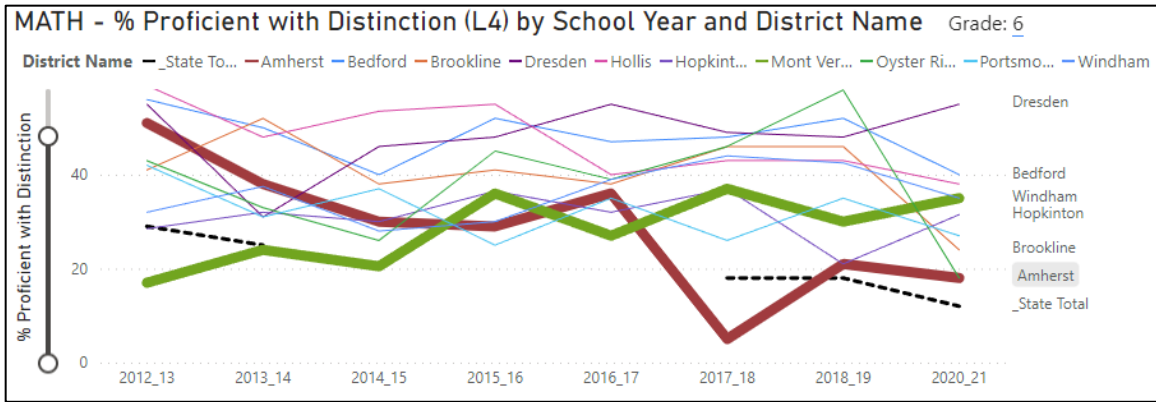
2020_21 Math Proficiency Distribution – Middle Schools



2020_21 Math Proficiency Details – Middle Schools

SAU Name / School (Grades)	2016_17	2017_18	2018_19	2019_20	2020_21
Amherst SAU Office					
Amherst Middle School (5-8)	66.00%	69.00%	71.00%	*COVID	43.00%
Bedford SAU Office					
Ross A. Lurgio Middle School (7-8)	71.00%	76.00%	77.00%	*COVID	64.00%
Hollis-Brookline SAU Office					
Hollis-Brookline Middle School (7-8)	54.00%	61.00%	62.00%	*COVID	60.00%
Hopkinton SAU Office					
Hopkinton Middle School (7-8)	56.00%	55.00%	56.00%	*COVID	31.00%
Oyster River SAU Office					
Oyster River Middle School (5-8)	68.00%	72.00%	72.00%	*COVID	51.00%
Portsmouth SAU Office					
Portsmouth Middle School (6-8)	64.00%	60.00%	67.00%	*COVID	52.00%

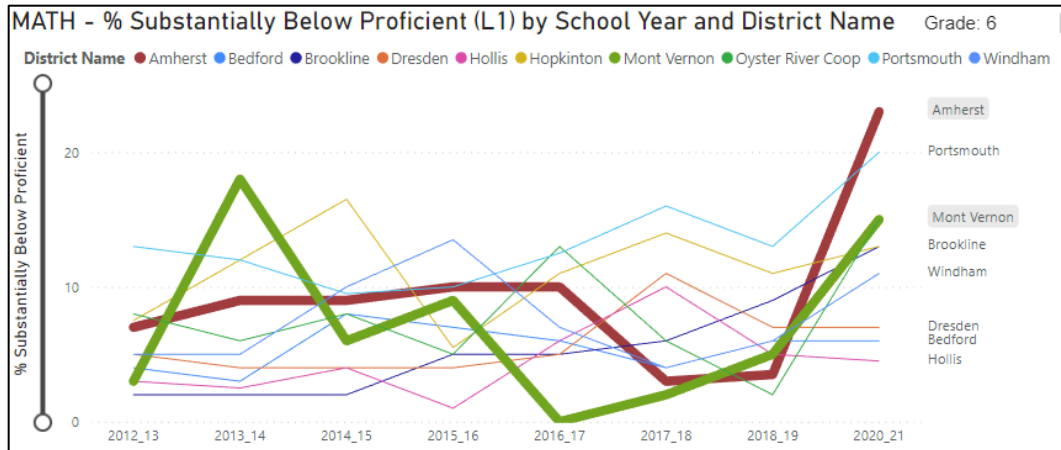
Proficient with Distinction (L4) – GRADE 6



AMS (Grade 6) has lost its moderately-high to average ranking in producing 'Proficient with Distinction' Math students, now ranking lowest of its peers in doing so.

District Name	2012_13	2013_14	2014_15	2015_16	2016_17	2017_18	2018_19	2020_21
Windham								
Windham Middle School (6-8)	32	38	28	30	39	44	43	
Windham Center School (3-5)								35
Oyster River Coop								
Oyster River Middle School (5-8)	43	33	26	45	39	46	58	18
Mont Vernon								
Mont Vernon Village School (K 1-6)	17	24	21	36	27	38	30	35
Hopkinton								
Maple Street Elementary School (4-6)	29	32	30	37	32	37	21	32
Hollis								
Hollis Upper Elementary School (4-6)	59	48	54	55	40	43	43	38
Dresden								
Frances C. Richmond School (6-8)	55	31	46	48	55	49	48	55
Brookline								
Captain Samuel Douglass Academy (4-6)	41	52	38	41	38	46	46	24
Bedford								
McKelvie Intermediate School (5-6)	56	50	40	52	47	48	52	40
Amherst								
Amherst Middle School (5-8)	51	38	30	29	36	5	21	18

Substantially Below Proficient (L1) – GRADE 6

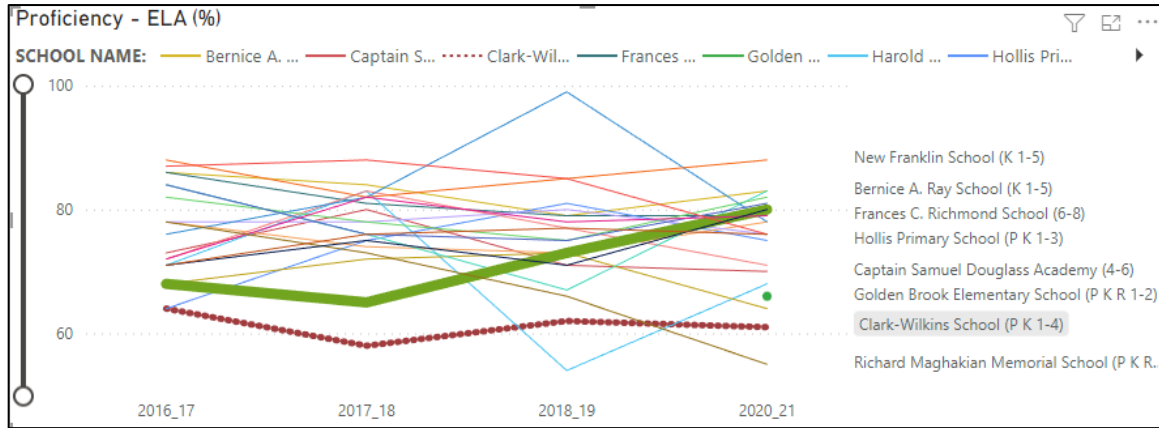


In 2020-21 AMS produced a higher percentage of Math students who are 'Substantially Below Proficient' – a major change from previous years.

District Name	2012_13	2013_14	2014_15	2015_16	2016_17	2017_18	2018_19	2020_21
Amherst								
Amherst Middle School (5-8)	7.0	9.0	9.0	10.0	10.0	3.0	3.0	23.0
Bedford								
McKelvie Intermediate School (5-6)	4.0	3.0	8.0	7.0	6.0	4.0	6.0	6.0
Brookline								
Captain Samuel Douglass Academy (4-6)	2.0	2.0	2.0	5.0	5.0	6.0	9.0	13.0
Dresden								
Frances C. Richmond School (6-8)	5.0	4.0	4.0	4.0	5.0	11.0	7.0	7.0
Hollis								
Hollis Upper Elementary School (4-6)	3.0	2.0	3.0	1.0	6.0	10.0	5.0	4.0
Hopkinton								
Maple Street Elementary School (4-6)	7.0	12.0	16.0	5.0	11.0	14.0	11.0	12.0
Mont Vernon								
Mont Vernon Village School (K 1-6)	3.0	18.0	4.0	9.0	0.0	0.0	5.0	15.0
Oyster River Coop								
Oyster River Middle School (5-8)	8.0	6.0	8.0	5.0	13.0	6.0	2.0	15.0
Portsmouth								
Portsmouth Middle School (6-8)	13.0	12.0	9.0	10.0	12.0	16.0	13.0	20.0
Windham								
Windham Center School (3-5)								11.0
Windham Middle School (6-8)	5.0	5.0	10.0	13.0	7.0	4.0	5.0	

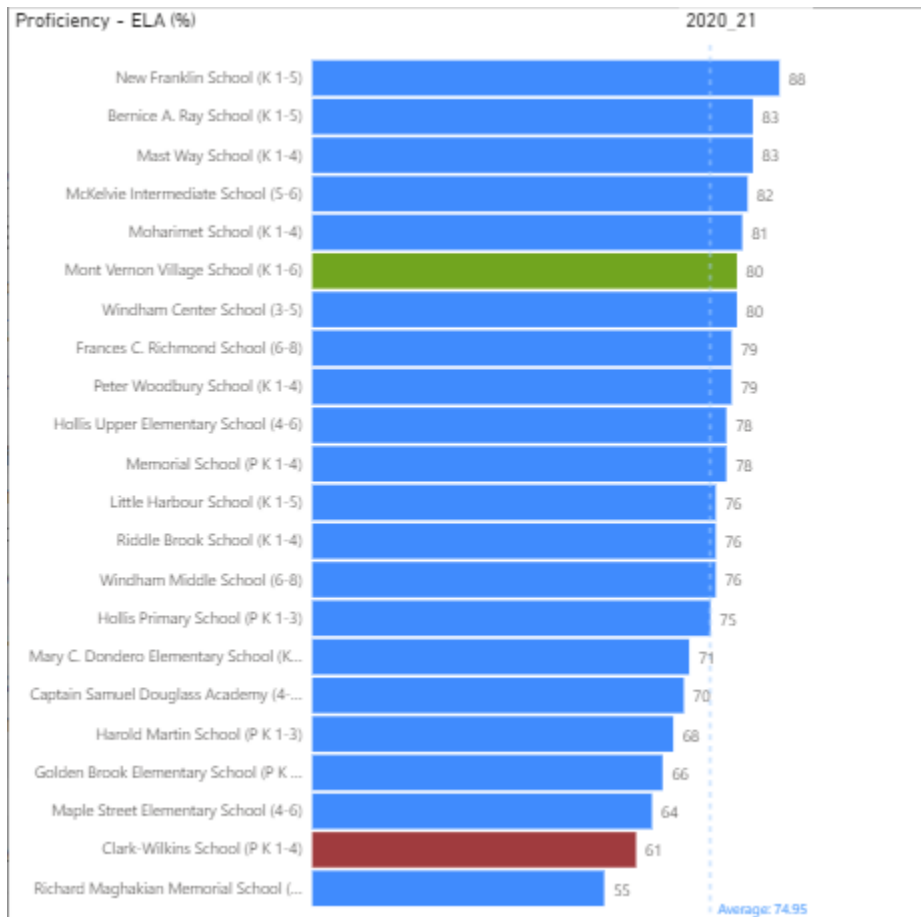
2.3 English Language Arts (ELA) Proficiency Assessment

ELA Proficiency – Elementary Schools



Historically, C-W ELA Proficiency has been the lowest, or among the lowest, of its peers.

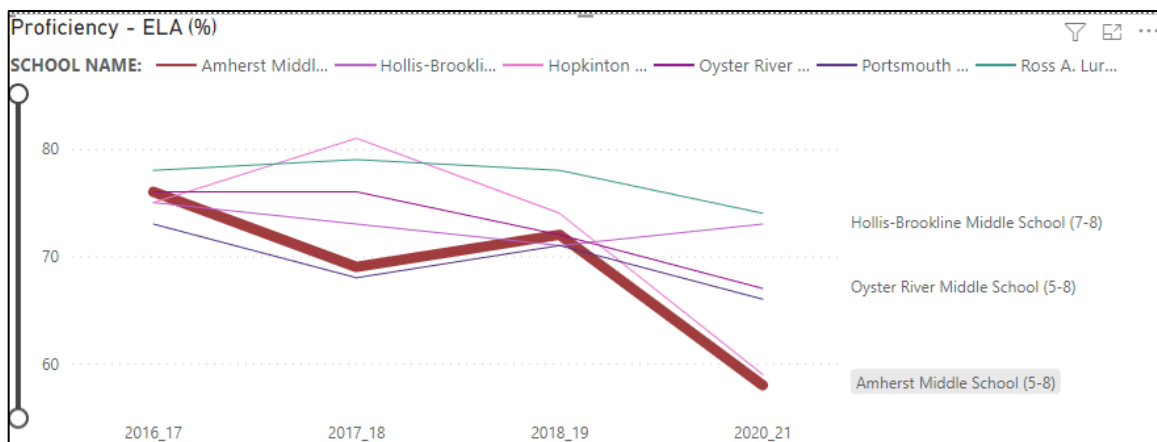
2020-21 ELA Proficiency Distribution – Elementary Schools



2020_21 ELA Proficiency Details – Elementary Schools

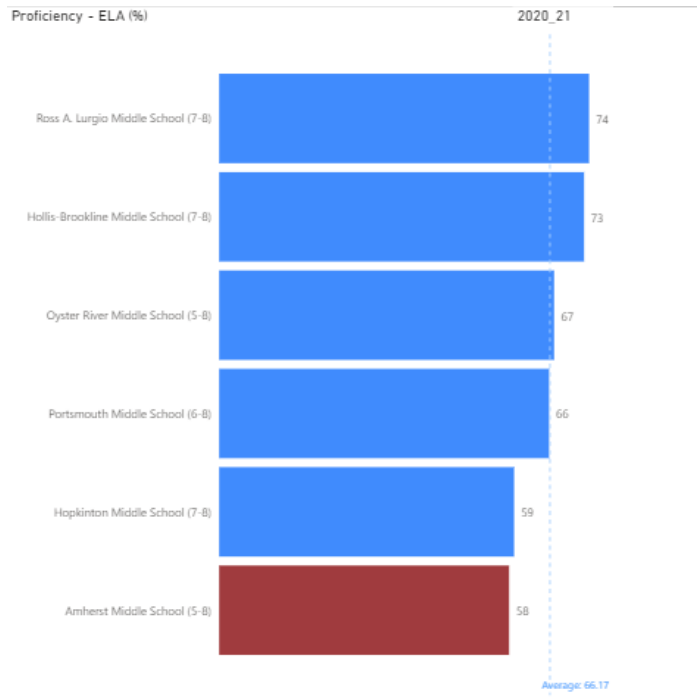
Proficiency - ELA (%)					
SAU Name / School (Grades)	2016_17	2017_18	2018_19	2019_20	2020_21
Amherst SAU Office					
Clark-Wilkins School (P K 1-4)	64.00%	58.00%	62.00%	*COVID	61.00%
Mont Vernon Village School (K 1-6)	68.00%	65.00%	73.00%	*COVID	80.00%
Bedford SAU Office					
McKelvie Intermediate School (5-6)	82.00%	78.00%	75.00%	*COVID	82.00%
Memorial School (P K 1-4)	76.00%	82.00%	>90.00%	*COVID	78.00%
Peter Woodbury School (K 1-4)	72.00%	82.00%	78.00%	*COVID	79.00%
Riddle Brook School (K 1-4)	87.00%	88.00%	85.00%	*COVID	76.00%
Hanover SAU Office					
Bernice A. Ray School (K 1-5)	86.00%	84.00%	79.00%	*COVID	83.00%
Frances C. Richmond School (6-8)	86.00%	81.00%	79.00%	*COVID	79.00%
Hollis-Brookline SAU Office					
Captain Samuel Douglass Academy (4-6)	73.00%	80.00%	71.00%	*COVID	70.00%
Hollis Primary School (P K 1-3)	64.00%	75.00%	81.00%	*COVID	75.00%
Hollis Upper Elementary School (4-6)	78.00%	74.00%	73.00%	*COVID	78.00%
Richard Maghakian Memorial School (P K R 1-3)	78.00%	73.00%	66.00%	*COVID	55.00%
Hopkinton SAU Office					
Harold Martin School (P K 1-3)	71.00%	83.00%	54.00%	*COVID	68.00%
Maple Street Elementary School (4-6)	68.00%	72.00%	73.00%	*COVID	64.00%
Oyster River SAU Office					
Mast Way School (K 1-4)	84.00%	76.00%	67.00%	*COVID	83.00%
Moharimet School (K 1-4)	84.00%	76.00%	75.00%	*COVID	81.00%
Portsmouth SAU Office					
Little Harbour School (K 1-5)	78.00%	78.00%	80.00%	*COVID	76.00%
Mary C. Dondero Elementary School (K 1-5)	72.00%	83.00%	77.00%	*COVID	71.00%
New Franklin School (K 1-5)	88.00%	82.00%	85.00%	*COVID	88.00%
Windham SAU Office					
Golden Brook Elementary School (P K R 1-2)	NA	NA	NA	*COVID	66.00%
Windham Center School (3-5)	71.00%	75.00%	71.00%	*COVID	80.00%
Windham Middle School (6-8)	71.00%	76.00%	77.00%	*COVID	76.00%

ELA Proficiency– Middle Schools



Historically, AMS ELA Proficiency has been the lowest, or among the lowest, of its peers.

2020-21 ELA Proficiency Distribution – Middle Schools



2020-21 ELA Proficiency Details – Middle Schools

Proficiency - ELA (%)					
SAU Name / School (Grades)	2016_17	2017_18	2018_19	2019_20	2020_21
Amherst SAU Office					
Amherst Middle School (5-8)	76.00%	69.00%	72.00%	*COVID	58.00%
Bedford SAU Office					
Ross A. Lurgio Middle School (7-8)	78.00%	79.00%	78.00%	*COVID	74.00%
Hollis-Brookline SAU Office					
Hollis-Brookline Middle School (7-8)	75.00%	73.00%	71.00%	*COVID	73.00%
Hopkinton SAU Office					
Hopkinton Middle School (7-8)	75.00%	81.00%	74.00%	*COVID	59.00%
Oyster River SAU Office					
Oyster River Middle School (5-8)	76.00%	76.00%	72.00%	*COVID	67.00%
Portsmouth SAU Office					
Portsmouth Middle School (6-8)	73.00%	68.00%	71.00%	*COVID	66.00%

2.4 Observations

Our data analysis reveals that academic performance in ASD falls notably below that of other comparable schools and districts. What is also disconcerting is the historical persistence of those performance gaps along with trends showing further erosion of ASD performance in key subject areas and grade levels. The NWEA insights show that when ASD students begin to fall behind in a subject area, that gap is not closed – even throughout the rest of their public education. Left unresolved, these issues threaten to stunt the academic growth, success, and post-high-school-education options for students over the longer term.

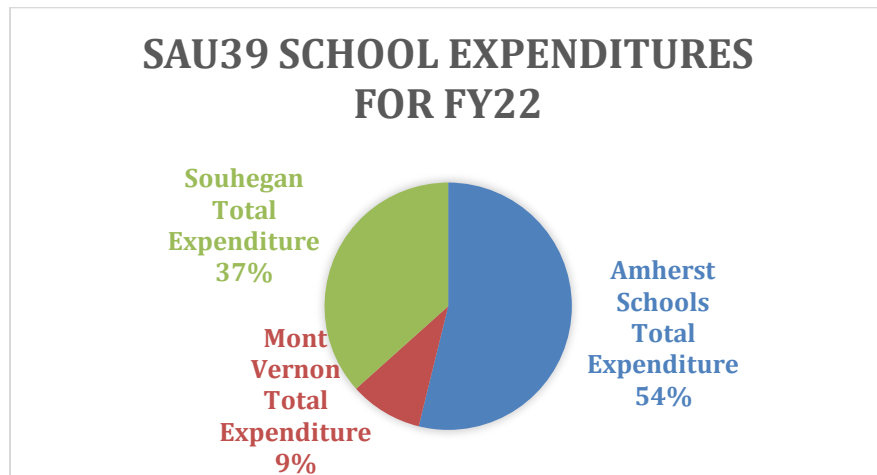
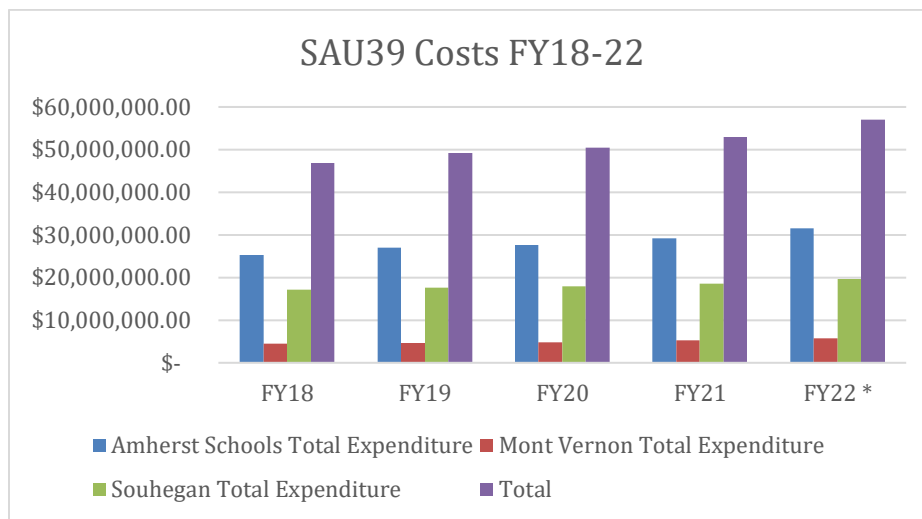
SECTION 3: ASSESSING ASD FINANCIAL COSTS

3.1 Introduction

Amherst residents devote upwards of \$300,000 per child to provide a public K-12 education. Of the total annual taxes paid by Amherst resident, about 25% go to municipal/county government, and about 75% go to our schools.

For FY22, the total expenditure for SAU39 was about \$57 million. Of that:

- With ASD consuming \$31.5 million or 54% of the total SAU budget.
- Souhegan consuming about \$19.7 million or 37%.
- Mont Vernon consuming \$5.7 million or about 9%.



Given this level of spending, it is important to understand how ASD's costs compare with other similar communities and what those expenditures deliver in educational outcomes.

There are several ways to evaluate educational costs; each has its merits and limitations. We examine four approaches to assessing ASD costs:

1. The first involves doing a **year-over-year comparison** of a proposed budget – going line item by line item – to see if there are major increases or decreases in various line items to explore the reasons for the proposed change.
2. There is also a way to compare budgets across communities using the state-mandated **DOE-25 template**, which all districts submit to NHDOE annually, and we have added that approach to our analysis.
3. Another approach used to compare historical costs among NH school districts is **Cost-Per-Pupil (CPP)** that was created by the NHDOE expressly to assess and compare “the cost of instruction” among districts. We discuss why we elected not to use this approach.
4. There is a variation of CCP called “**All-In CPP**” that we elected to use and that we discuss in detail.

We believe a combination of these approaches, used sensibly, can provide insightful analysis of educational costs. We further define and use them to analyze ASD cost trends and levels and, where feasible, to compare them to comparable schools and districts.

3.2 Year-Over Year ASD Budget Analysis

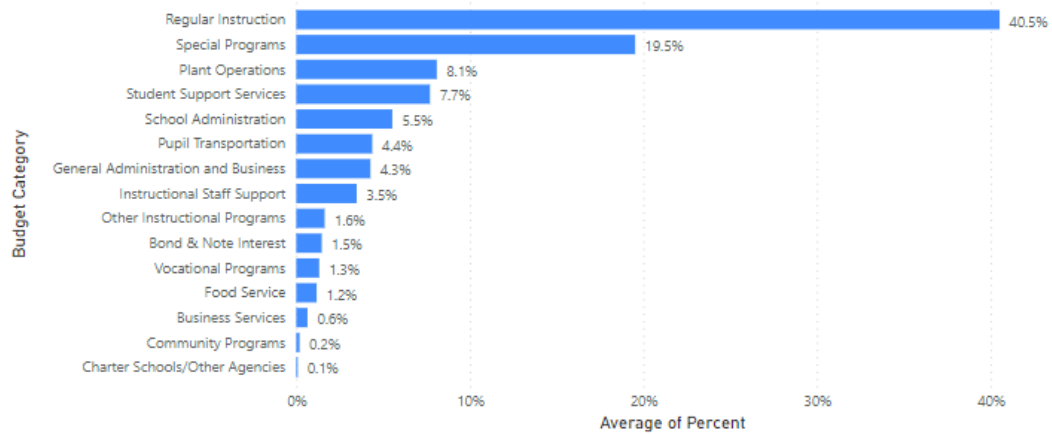
This cost analysis approach involves comparing a proposed budget with that of the version of the budget currently in effect. It is a way to look line item by line item to discern notable fluctuations and explore the reasons for proposed increases or decreases. It does not look at broader spending trends of the school or district, and it doesn't compare spending levels with other comparable communities. What it does do is enable people to review every line item before it gets subsumed into the 15 categories that comprise the DOE-25 reporting requirements. This approach has been used by the ASD W&M Committee.

3.3 DOE-25 Template-Based Analysis

The DOE has created a financial reporting template, known as the DOE-25, that all NH districts use to submit their budgets to the state. This set of metrics (and historical data) allows districts to compare their cost distribution with other districts.

In 2020-21, the distribution of all 15 ‘Recurring Expense Categories’ for the state (including all districts) looked like this:

Recurring Expense Budget Components



Some interesting general patterns emerge across all districts:

- ~ 75% of the Total Recurring Expense is associated with four Recurring Expense Categories.
- ~ 90 % of the Total Recurring Expense is associated with eight Recurring Expense Categories.
- Distribution percentages have not varied significantly over the past six years.

The following table shows ASD’s expense distribution over the most recently reported four-year period.

ASD Expense Analysis Report - Detail

School Year District	2018_19		2019_20		2020_21		2021_22	
	Percent	Value	Percent	Value	Percent	Value	Percent	Value
Amherst								
Regular Instruction	42.9%	\$10,998,192	40.3%	\$10,806,792	40.4%	\$11,563,583	41.1%	\$12,570,692
Special Programs	19.0%	\$4,870,994	20.8%	\$5,577,699	19.9%	\$5,695,923	19.6%	\$5,981,271
Student Support Services	12.4%	\$3,178,965	12.7%	\$3,405,614	11.9%	\$3,406,105	12.4%	\$3,802,553
General Administration and Business	6.1%	\$1,563,846	7.3%	\$1,957,558	7.7%	\$2,203,950	7.2%	\$2,203,594
Plant Operations	6.4%	\$1,640,756	6.3%	\$1,689,399	7.9%	\$2,261,196	6.4%	\$1,958,665
School Administration	6.0%	\$1,538,209	5.7%	\$1,528,504	5.2%	\$1,488,382	5.0%	\$1,540,623
Pupil Transportation	3.5%	\$897,288	3.0%	\$804,476	3.0%	\$858,682	3.1%	\$939,734
Instructional Staff Support	2.1%	\$538,373	2.0%	\$536,317	1.8%	\$515,209	1.9%	\$594,134
Food Service	0.5%	\$128,184	0.8%	\$214,527	1.5%	\$429,341	2.1%	\$633,733
Other Instructional Programs	0.7%	\$179,458	0.6%	\$160,895	0.5%	\$143,114	1.0%	\$293,190
Bond & Note Interest	0.4%	\$102,547	0.3%	\$80,448	0.2%	\$57,245	0.2%	\$51,275
Business Services	0.0%	\$0	0.0%	\$0	0.0%	\$0	0.0%	\$322
Charter Schools/Other Agencies	0.0%	\$0	0.0%	\$0	0.0%	\$0	0.0%	\$0
Community Programs	0.0%	\$0	0.0%	\$0	0.0%	\$0	0.0%	\$0
Non-Public Programs	0.0%	\$0	0.0%	\$0	0.0%	\$0	0.0%	\$0
Vocational Programs	0.0%	\$0	0.0%	\$0	0.0%	\$0	0.0%	\$0
Total	100.0%	\$25,636,812	99.8%	\$26,762,229	100.0%	\$28,622,730	100.0%	\$30,569,786

In comparing the cost distribution of ASD’s 2020-21 spending with the generalized pattern of spending across the state, we find these key takeaways:

- Regular Instruction (40.4%), Special Programs (19.9%), Plant Operations (7.9%), and School Administration (5.2%) for ASD track closely with the generalized cost distributions.
- Student Support Services for ASD (11.9%) are higher than the 7.7% general distribution.
- General Administration and Business for ASD (7.7%) is higher than the 4.3% general distribution.
- Instructional Staff Support for ASD (1.8%) is lower than the 3.5% general distribution.

Comparing ASD’s 2021-22 spending with the generalized state distribution, we find these key takeaways:

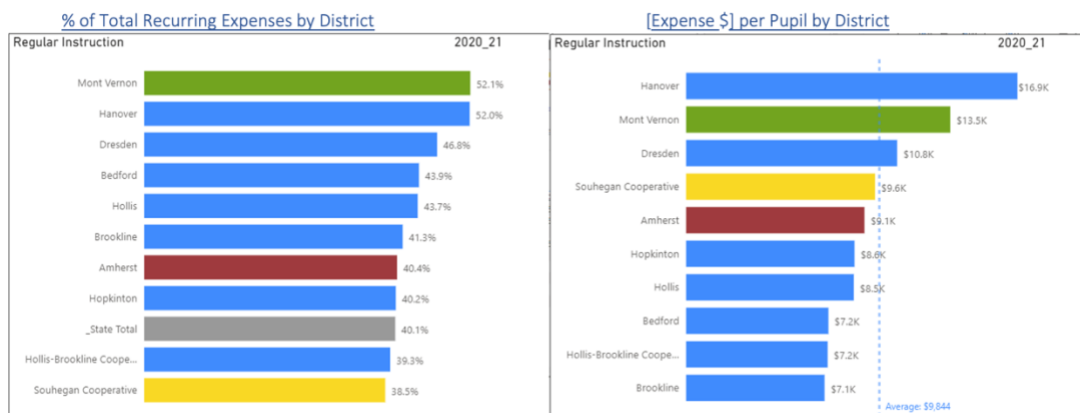
- Student Support Services rose from 11.9% to 12.4%, which is even higher than the general distribution of 7.7%
- Plant operations dropped from 7.9% in the previous year (which was lower than the 8.1% state average) to 6.4%.
- General Administration and Business for ASD (7.2%) is higher than the 4.3% general distribution.

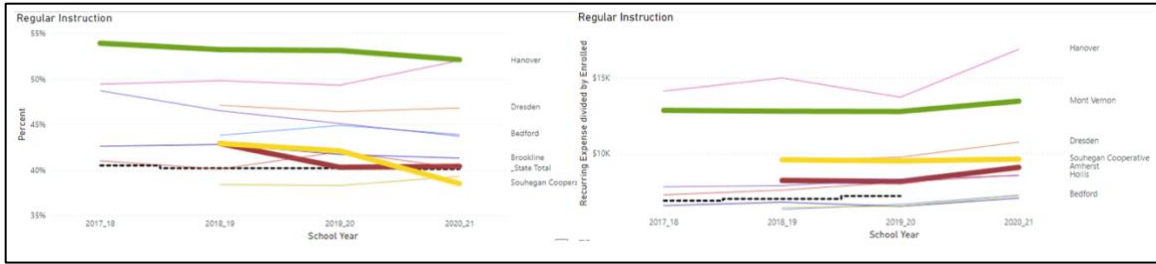
We should remind ourselves that the ratio of expenses across categories is different than the total amount of budgets spent by various districts. That is, two comparable school districts may have the same general allocation of their costs. However, District A might spend \$20 million per year while District B spends only \$10 million per year.

We can also compare ASD costs in various categories with those of comparable districts. In this report, for illustration, we only show one of the 15 categories– Regular Instruction – which represents the highest single cost category.

District Legend	
■	Amherst
■	Mont Vernon
■	Souhegan Cooperative

Regular Instruction





Three-year History for "Regular Instruction"

School Year District Name	2018_19				2019_20				2020_21			
	Value	Enrolled	Percent	RExpPP	Value	Enrolled	Percent	RExpPP	Value	Enrolled	Percent	RExpPP
_State Total	\$1,249,095,573	178,328	40.2%	\$7,004	\$1,267,298,441	176,168	40.2%	\$7,194	\$1,325,049,039	167,909	40.1%	\$7,891
Amherst	\$10,998,192	1,318	42.9%	\$8,345	\$10,806,792	1,308	40.3%	\$8,262	\$11,563,583	1,256	40.4%	\$9,207
Bedford	\$29,482,495	4,521	43.8%	\$6,521	\$30,230,583	4,432	44.9%	\$6,821	\$31,678,971	4,259	43.9%	\$7,438
Brookline	\$3,971,788	573	42.8%	\$6,932	\$3,856,738	574	41.7%	\$6,719	\$3,977,796	562	41.3%	\$7,078
Dresden	\$11,558,539	1,123	47.1%	\$10,293	\$11,554,551	1,101	46.4%	\$10,495	\$12,146,523	1,054	46.8%	\$11,524
Hanover	\$6,962,754	458	49.8%	\$15,203	\$6,809,808	489	49.3%	\$13,926	\$7,725,615	451	52.0%	\$17,130
Hollis	\$5,416,793	673	46.5%	\$8,049	\$5,433,467	640	45.1%	\$8,490	\$5,521,684	617	43.7%	\$8,949
Hollis-Brookline Cooperative	\$8,192,205	1,249	38.4%	\$6,559	\$8,333,041	1,239	38.3%	\$6,726	\$8,916,841	1,200	39.3%	\$7,431
Hopkinton	\$7,594,614	1,002	40.1%	\$7,579	\$8,051,637	993	42.0%	\$8,108	\$8,005,291	933	40.2%	\$8,580
Mont Vernon	\$2,418,320	189	53.2%	\$12,795	\$2,568,226	201	53.1%	\$12,777	\$2,745,859	204	52.1%	\$13,460
Souhegan Cooperative	\$7,157,900	740	42.9%	\$9,673	\$7,201,394	750	42.1%	\$9,602	\$6,858,279	707	38.5%	\$9,701

Total
Expenditure

Total
Enrollment

Percent of
Budget

Investment
per Pupil

Another companion W&M [report](#) entitled “*Reviewing NH School Budgets Using DOE-25 Data*” covers all 15 line items in detail.

3.4 Cost-Per-Pupil Analysis

The DOE established a metric called Cost-Per-Pupil or CPP to help identify what amounts to the “cost of instruction” for school districts across the state. The goal was to strip out expenses that do not directly contribute to the educational focus of a school. So, for example, the CPP calculation takes a district’s Total Current Expenditures and subtracts Food Service Revenue, Transportation Expenses, Tuition Expenses, Capital Expenses, and Summer Expenses before dividing those remaining costs by the Average Daily Membership (ADM) in attendance (or enrollment).

The reason for eliminating some costs is that they can distort results among communities. For example, two towns might have the same number of students in a district. However, one town might cover a large geographic area, thereby incurring high transportation costs, whereas, the other town might be smaller and more compact, requiring far less transportation costs. But both might spend an equal amount on instruction. By eliminating non-instruction costs, the NHDOE has hoped to enable a more balanced analysis of cost of instruction per student among communities.

A challenge in using CPP is that it is only calculated on a district level, and the NHDOE cautions that only districts with the same grade-level divisions should be compared. This makes it challenging for us to compare ourselves with some other communities. For

example, all the schools in Bedford NH fall into one district. Therefore, trying to compare ASD with all of Bedford is like comparing an apple with an orange.

We tried finding ways to use CPP to compare ASD with other communities but found this apple-to-oranges problem made this approach limiting.

Also, a CPP for SAU39 can be somewhat distorted compared to some other communities, because our SAU has chosen to staff and serve Special Ed students in house and not tuition them out. The costs incurred for those communities that tuition their students out are *not* calculated in CPP. Thus, the SAU CPP will be inflated over those that do.

Another consideration is that CPP understates the taxes that residents are actually paying per student. As we said, non-instructional costs are removed from a CPP calculation. However, taxpayers are still paying for those expenses, which don't get accounted for in the CPP result. As a result of these limitations, we elected not to use the traditional CPP in our assessment of ASD costs.

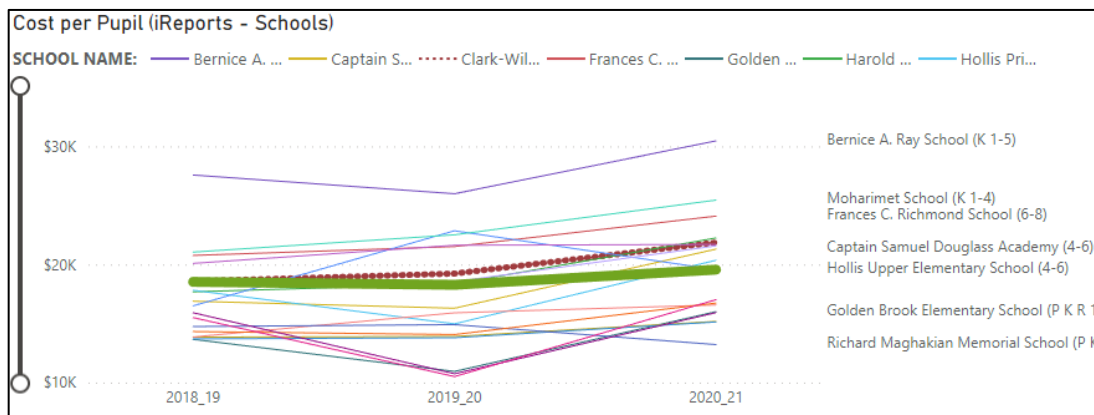
3.5 "All-In" CPP

What we did elect to use is a way to calculate a cost-per-pupil among schools, districts and SAUs that accounts for *all* expenses incurred divided by the total enrollment for a given school, district, or SAU. We found that the NHDOE publishes both types of data and maintains them over time.

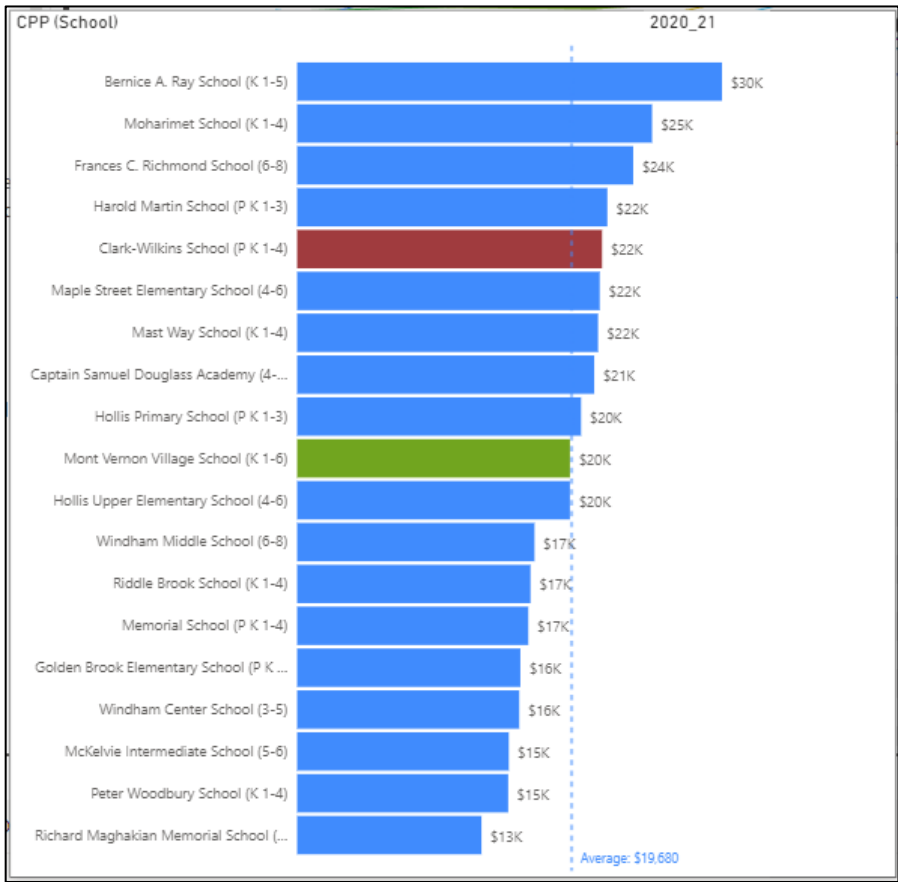
As a result, we have been able to calculate and compare (apples-to-apples) a wider number of communities and their elementary/middle school all-in costs per pupil with those of ASD. (We also captured similar data for Mont Vernon and Souhegan.) All-In cost comparisons are shown below.

District Legend	
	Amherst
	Mont Vernon
	Souhegan Cooperative

Cost per Pupil iReports (Schools) – Elementary Schools

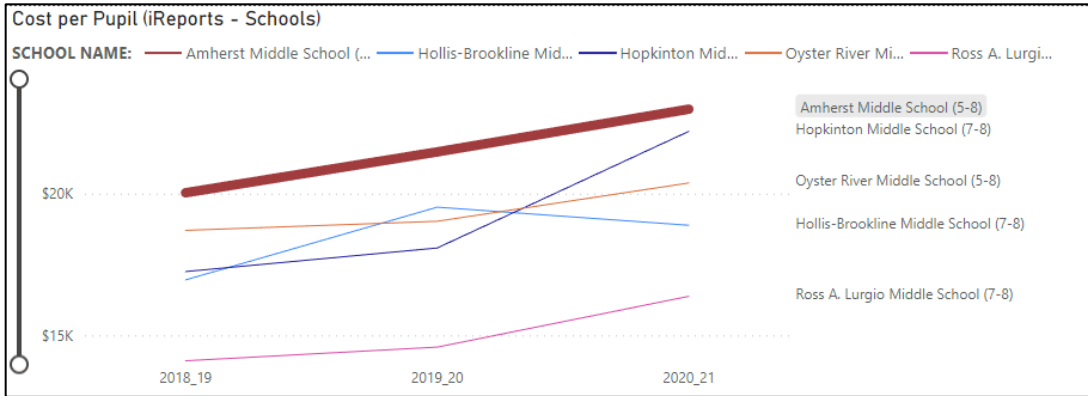


C-W has a higher All-In CPP than most peer schools.

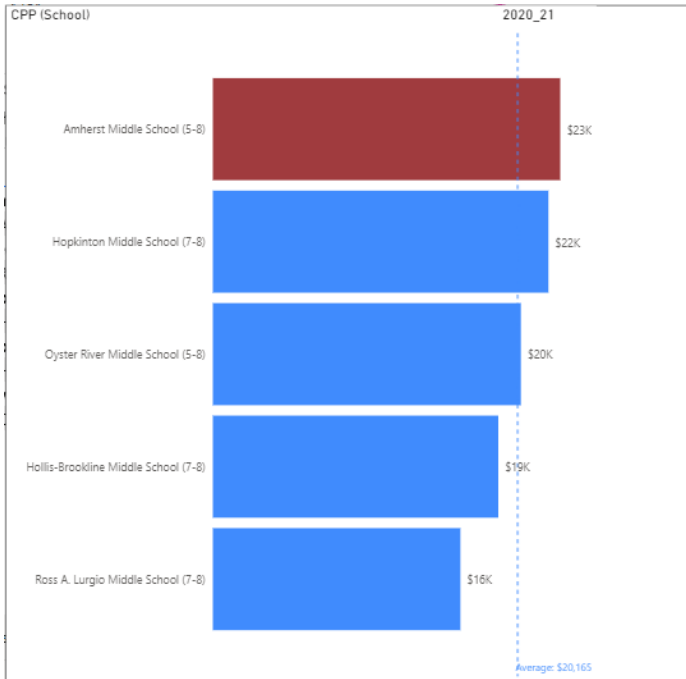


Cost per Pupil (iReports - Schools)										
School Year	2018_19			2019_20			2020_21			
SAU Name / School (Grades)	Total Expenditures	Enrolled	Total Exp per Pupil	Total Expenditures	Enrolled	Total Exp per Pupil	Total Expenditures	Enrolled	Total Exp per Pupil	
Amherst SAU Office										
Clark-Wilkins School (P K 1-4)	\$12,650,710	681	\$18,577	\$13,133,448	683	\$19,229	\$14,078,741	644	\$21,861	
Mont Vernon Village School (K 1-6)	\$3,501,563	189	\$18,527	\$3,673,784	201	\$18,278	\$3,990,295	204	\$19,560	
Bedford SAU Office										
McKelvie Intermediate School (5-6)	\$9,801,648	708	\$13,844	\$9,605,908	691	\$13,901	\$10,517,747	693	\$15,177	
Memorial School (P K 1-4)	\$6,194,668	447	\$13,858	\$6,680,782	420	\$15,907	\$6,529,621	394	\$16,573	
Peter Woodbury School (K 1-4)	\$7,301,450	533	\$13,699	\$7,147,056	518	\$13,797	\$7,232,581	478	\$15,131	
Riddle Brook School (K 1-4)	\$8,262,183	577	\$14,319	\$7,848,518	558	\$14,065	\$8,567,478	512	\$16,733	
Hanover SAU Office										
Bernice A. Ray School (K 1-5)	\$12,628,401	458	\$27,573	\$12,708,121	489	\$25,988	\$13,737,947	451	\$30,461	
Frances C. Richmond School (6-8)	\$7,786,192	375	\$20,763	\$7,724,626	359	\$21,517	\$8,601,180	357	\$24,093	
Hollis-Brookline SAU Office										
Captain Samuel Douglass Academy ...	\$4,120,804	244	\$16,889	\$4,008,852	246	\$16,296	\$5,260,958	247	\$21,299	
Hollis Primary School (P K 1-3)	\$6,163,249	346	\$17,813	\$5,135,266	343	\$14,972	\$6,819,573	335	\$20,357	
Hollis Upper Elementary School (4-6)	\$5,394,547	327	\$16,497	\$6,787,135	297	\$22,852	\$5,515,431	282	\$19,558	
Richard Maghakian Memorial Scho...	\$4,850,839	329	\$14,744	\$4,889,534	328	\$14,907	\$4,162,857	315	\$13,215	
Hopkinton SAU Office										
Harold Martin School (P K 1-3)	\$5,570,094	315	\$17,683	\$5,669,586	309	\$18,348	\$5,827,235	262	\$22,241	
Maple Street Elementary School (4-6)	\$4,259,080	212	\$20,090	\$4,411,909	204	\$21,627	\$4,469,139	206	\$21,695	
Oyster River SAU Office										
Mast Way School (K 1-4)	\$6,713,026	365	\$18,392	\$6,913,175	373	\$18,534	\$7,033,669	326	\$21,576	
Moharimet School (K 1-4)	\$6,650,334	316	\$21,045	\$6,708,171	298	\$22,511	\$7,329,375	288	\$25,449	
Windham SAU Office										
Golden Brook Elementary School (P ...	\$7,910,177	579	\$13,662	\$11,359,692	1,038	\$10,944	\$16,179,563	1,011	\$16,004	
Windham Center School (3-5)	\$10,344,077	650	\$15,914	\$4,868,439	453	\$10,747	\$6,608,554	415	\$15,924	
Windham Middle School (6-8)	\$12,169,502	785	\$15,503	\$5,517,564	525	\$10,510	\$8,662,708	509	\$17,019	

Cost per Pupil iReports (Schools) – Middle Schools



AMS has the highest All-In CPP of peer schools.



School Year SAU Name / School (Grades)	2018_19		2019_20			2020_21			
	Total Expenditures	Enrolled	Total Exp per Pupil	Total Expenditures	Enrolled	Total Exp per Pupil	Total Expenditures	Enrolled	Total Exp per Pupil
Amherst SAU Office									
Amherst Middle School (5-8)	\$12,759,893	637	\$20,031	\$13,377,895	623	\$21,473	\$14,065,176	612	\$22,982
Bedford SAU Office									
Ross A. Lurgio Middle School (7-8)	\$10,308,619	731	\$14,102	\$10,895,019	747	\$14,585	\$11,497,073	702	\$16,378
Hollis-Brookline SAU Office									
Hollis-Brookline Middle School (7-8)	\$6,647,336	392	\$16,957	\$7,438,510	381	\$19,524	\$7,232,813	383	\$18,885
Hopkinton SAU Office									
Hopkinton Middle School (7-8)	\$2,880,946	167	\$17,251	\$2,911,477	161	\$18,084	\$3,085,808	139	\$22,200
Oyster River SAU Office									
Oyster River Middle School (5-8)	\$12,476,847	667	\$18,706	\$12,652,129	665	\$19,026	\$13,408,775	658	\$20,378

3.6 Observations

Relative to other comparable communities, ASD costs fall into the higher range across elementary and middle school expenditures. Also, they appear to be rising faster than some other communities.

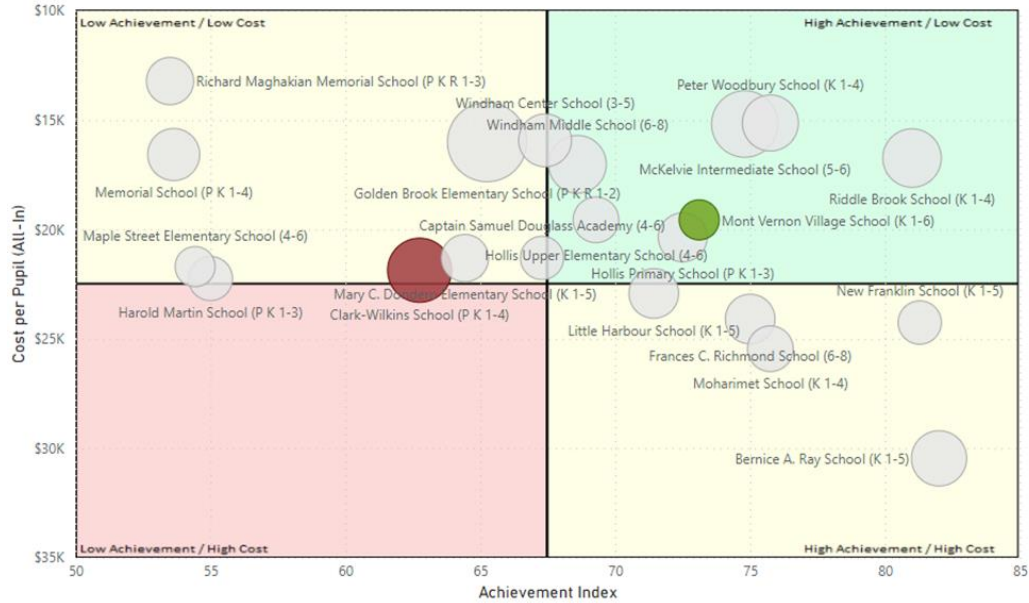
ASD's largest cost categories are driven predominantly by the contract negotiated with the Amherst Educators Association (AEA), the teachers' union. The elements covered in this union agreement, once accepted by Amherst residents through their vote, become contractual obligations for the town and become part of the default budget, thus making it impossible to adjust significantly until the next contract is negotiated. The AEA contract is thus a critical vehicle for managing educational costs within ASD and, along with the ASSA support staff contract, deserves close scrutiny to disclose its full impact.

SECTION 4: ASSESSING ASD EDUCATIONAL VALUE

In considering the tradeoff of costs invested to obtain good educational outcomes, the ideal would be to have a low expenditure in taxes contributing to high educational outcomes for students. However, that is not what we see for our ASD schools.

Elementary School Educational Value Comparisons

Educational Outcomes - Achievement vs Cost



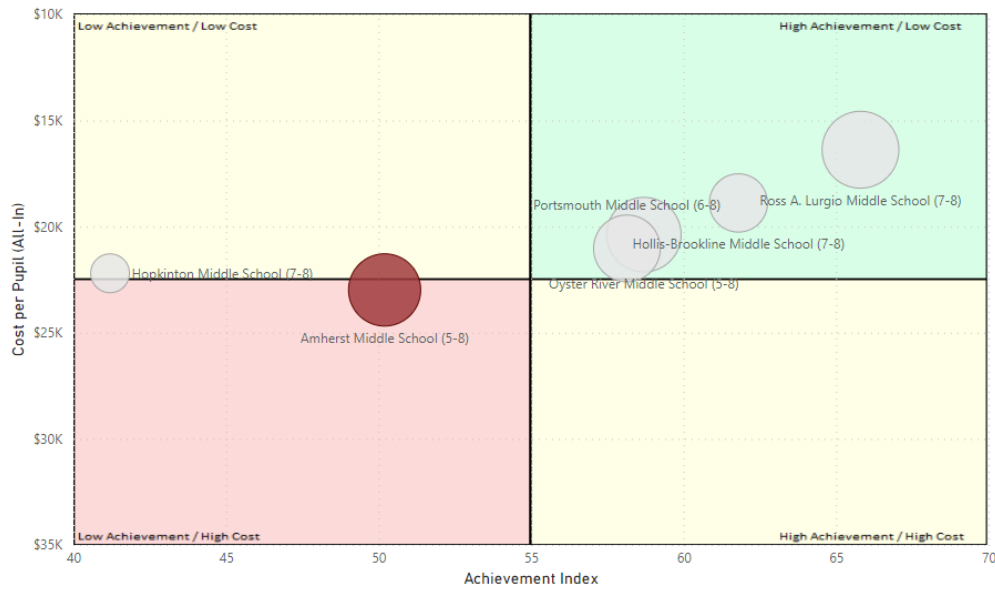
The Size of the 'bubble = Enrollment. The Y-axis is the 'Cost per Pupil (All-in)' calculated for the school. The X-axis is the Average Proficiency Test Scores for all tests reported to the DOE from the school's grades in 2020_21; (Math, ELA, and Science where applicable).

Cost per Pupil (iReports - Schools)

School Year	2020_21			
SAU Name / School (Grades)	Total Expenditures	Enrolled	Total Exp per Pupil	Ave Proficiency per Pupil (All Subjects)
Amherst SAU Office				
Clark-Wilkins School (P K 1-4)	\$14,078,741	644	\$21,861	62.8
Mont Vernon Village School (K 1-6)	\$3,990,295	204	\$19,560	73.1
Bedford SAU Office				
McKelvie Intermediate School (5-6)	\$10,517,747	693	\$15,177	74.8
Memorial School (P K 1-4)	\$6,529,621	394	\$16,573	53.6
Peter Woodbury School (K 1-4)	\$7,232,581	478	\$15,131	75.8
Riddle Brook School (K 1-4)	\$8,567,478	512	\$16,733	81.0
Hanover SAU Office				
Bernice A. Ray School (K 1-5)	\$13,737,947	451	\$30,461	82.0
Frances C. Richmond School (6-8)	\$8,601,180	357	\$24,093	75.0
Hollis-Brookline SAU Office				
Captain Samuel Douglass Academy ...	\$5,260,958	247	\$21,299	67.3
Hollis Primary School (P K 1-3)	\$6,819,573	335	\$20,357	72.5
Hollis Upper Elementary School (4-6)	\$5,515,431	282	\$19,558	69.3
Richard Maghakian Memorial Scho...	\$4,162,857	315	\$13,215	53.5
Hopkinton SAU Office				
Harold Martin School (P K 1-3)	\$5,827,235	262	\$22,241	55.0
Maple Street Elementary School (4-6)	\$4,469,139	206	\$21,695	54.4
Oyster River SAU Office				
Moharimet School (K 1-4)	\$7,329,375	288	\$25,449	75.8
Portsmouth SAU Office				
Little Harbour School (K 1-5)	\$8,068,813	352	\$22,923	71.4
Mary C. Dondero Elementary Schoo...	\$6,754,604	317	\$21,308	64.4
New Franklin School (K 1-5)	\$5,990,400	247	\$24,253	81.3
Windham SAU Office				
Golden Brook Elementary School (P ...	\$16,179,563	1,011	\$16,004	65.3
Windham Center School (3-5)	\$6,608,554	415	\$15,924	67.4
Windham Middle School (6-8)	\$8,662,708	509	\$17,019	68.6

Middle School Educational Value Comparisons

Educational Outcomes - Achievement vs Cost



Cost per Pupil (iReports - Schools)

School Year	2020_21				
SAU Name / School (Grades)	Total Expenditures	Enrolled	Total Exp per Pupil	Ave Proficiency (All Subjects)	
Amherst SAU Office					
Amherst Middle School (5-8)	\$14,065,176	612	\$22,982	50.2	
Bedford SAU Office					
Ross A. Lurgio Middle School (7-8)	\$11,497,073	702	\$16,378	65.8	
Hollis-Brookline SAU Office					
Hollis-Brookline Middle School (7-8)	\$7,232,813	383	\$18,885	61.8	
Hopkinton SAU Office					
Hopkinton Middle School (7-8)	\$3,085,808	139	\$22,200	41.2	
Oyster River SAU Office					
Oyster River Middle School (5-8)	\$13,408,775	658	\$20,378	58.7	
Portsmouth SAU Office					
Portsmouth Middle School (6-8)	\$11,019,649	524	\$21,030	58.1	

Other comparable elementary and middle schools are providing higher educational outcomes at lower cost.

Another way to assess the impact of a K-12 education is where students go on to college after graduation. The National Student Clearinghouse data shows the 25 schools in which our SAU39 graduates have most enrolled from 2014 through 2021.

**Most Common Institutions of Enrollment in the Fall Immediately following High School Graduation
for All Classes by Number of Students**

Name	Rank	State	Level	Type	Total
UNIVERSITY OF NEW HAMPSHIRE- DURHAM	1	NH	4-year	Public	155
NASHUA COMMUNITY COLLEGE	2	NH	2-year	Public	81
KEENE STATE COLLEGE	3	NH	4-year	Public	56
SOUTHERN NEW HAMPSHIRE- 15WEEK	4	NH	4-year	Private	41
UNIVERSITY OF VERMONT & STATE AGRICULTURAL COLLEGE	5	VT	4-year	Public	39
PLYMOUTH STATE UNIVERSITY	6	NH	4-year	Public	34
UNIVERSITY OF RHODE ISLAND	7	RI	4-year	Public	23
NHTI - CONCORD'S COMMUNITY COLLEGE	8	NH	2-year	Public	15
ROGER WILLIAMS UNIVERSITY	9	RI	4-year	Private	15
ROCHESTER INSTITUTE OF TECHNOLOGY	10	NY	4-year	Private	14
WENTWORTH INSTITUTE OF TECHNOLOGY	11	MA	4-year	Private	14
UNIVERSITY OF NEW ENGLAND	12	ME	4-year	Private	13
WORCESTER POLYTECHNIC INSTITUTE	13	MA	4-year	Private	13
SAINT MICHAELS COLLEGE	14	VT	4-year	Private	12
NORTHEASTERN UNIVERSITY	15	MA	4-year	Private	11
SAINT ANSELM COLLEGE	16	NH	4-year	Private	10
SUFFOLK UNIVERSITY BOSTON	17	MA	4-year	Private	10
UNIVERSITY OF MASSACHUSETTS AT AMHERST	18	MA	4-year	Public	10
BENTLEY UNIVERSITY	19	MA	4-year	Private	9
COLBY SAWYER COLLEGE	20	NH	4-year	Private	9
SIMMONS UNIVERSITY	21	MA	4-year	Private	9
ENDICOTT COLLEGE	22	MA	4-year	Private	8
ITHACA COLLEGE	23	NY	4-year	Private	8
RENSSELAER POLYTECHNIC INSTITUTE	24	NY	4-year	Private	8
SYRACUSE UNIVERSITY	25	NY	4-year	Private	8

SOUHEGAN HIGH SCHOOL

Report Run Date: 09/22/2022 04:24 PM
Page 45 of 47

**NATIONAL STUDENT
CLEARINGHOUSE**

©2012 National Student Clearinghouse. All rights reserved.

Of the 678 students covered in the chart, over half (372) attended the five highlighted schools.

Overall, by several different measures, we see lower educational outcomes in both our elementary and middle schools compared with peer institutions. On the cost side, ASD expenses are not the highest we saw among comparable schools and districts, but they are high and trending higher.

These facts lead us to conclude that the educational value of an ASD K-8 education today is notably lower than it should be. It is hard to reconcile the current levels of ASD spending with its lower educational outcomes. What seems called for is immediate intervention to increase educational outcomes and to manage costs more effectively.