HINGHAM PUBLIC SCHOOLS

MCAS ASSESSMENT & ACCOUNTABILITY RESULTS SPRING 2018

November 19, 2018
Dr. James M. LaBillois
Assistant Superintendent of Schools

PRESENTATION AGENDA

- **Part I:** District Accountability Information
- **Part II:** Overview of Next Generation MCAS (MCAS 2.0)
- **Part III:** Results of 2018 MCAS Performance: All Students; Benchmark Comparisons
- **Part IV:** Results of 2018 MCAS Performance: Special Education & High Needs; Benchmark Comparisons
- **Part V:** Next Steps

Part I: District Accountability Information

HPS 2018 ACCOUNTABILITY RESULTS

School	Progress Toward Targets
Hingham High School	59% Partially Meeting Targets
Hingham Middle School	56% Partially Meeting Targets
East Elementary School	94% Meeting Targets
Foster Elementary School	92% Meeting Targets
Plymouth River Elementary School*	96% Meeting Targets
South Elementary School**	94% Meeting Targets

* 2018 School of Recognition – Exceeding targets
** 2018 School of Recognition – High Growth

HPS 2018 ACCOUNTABILITY RESULTS: PERCENTILES

School	Percentile
Hingham High School	94th
Hingham Middle School	80th
East Elementary School	95th
Foster Elementary School	99th
Plymouth River Elementary School	95th
South Elementary School	98th

Part II: Overview of Next Generation MCAS (MCAS 2.0)

Next-Generation MCAS Overview

- Updated version of the nearly 20-year-old MCAS assessment
- Focuses on students' **critical thinking abilities**, **application of knowledge**, and ability to make **connections between reading and writing**
- Gives a **clearer signal of readiness** for the next grade level or college and career
- Designed to be given on a **computer** (though paper versions remain available)

MCAS Achievement Levels

LEGACY	NEXT-GENERATION
Advanced Students at this level demonstrate a comprehensive and in-depth understanding of rigorous subject matter, and provide sophisticated solutions to complex problems.	**Exceeding Expectations** A student who performed at this level exceeded grade-level expectations by demonstrating mastery of the subject matter.
Proficient Students at this level demonstrate a solid understanding of challenging subject matter and solve a wide variety of problems.	**Meeting Expectations** A student who performed at this level met grade-level expectations and is academically on track to succeed in the current grade in this subject.
Needs Improvement Students at this level demonstrate a partial understanding of subject matter and solve some simple problems.	**Partially Meeting Expectations** A student who performed at this level partially met grade-level expectations in this subject.
Warning Students at this level demonstrate a minimal understanding of subject matter and do not solve simple problems.	**Not Meeting Expectations** A student who performed at this level did not meet grade-level expectations in this subject.

Name: Doe, Jonathan H.
SASID: 1234567890

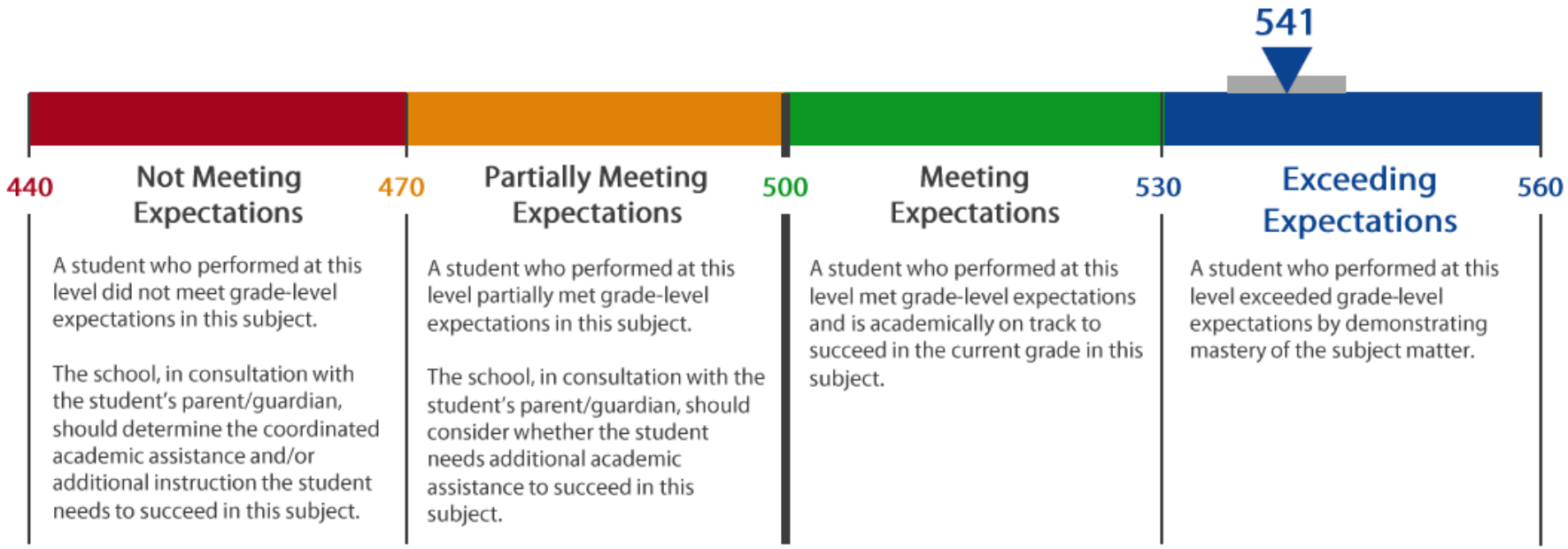
Grade 8
Spring 2017

Mathematics Results

Computer-based test

Your Child's Achievement Level: **Exceeding Expectations**

Your Child's Score: **541**



In the figure above, the triangle indicates your child's score on the test. The gray bar shows the range of likely scores your child would receive if he or she took the test multiple times.

How your child performed compared to the school, district, and state

Your Child's Score	Average Score		
	School	District	State
541	485	502	515

How your child performed on the test in each reporting category and on each individual test question

Reporting Category	Points earned by **your child**	Average number of points earned by Meeting Expectations students who scored close to 500.
Operations & Algebraic Thinking	7 out of 10	6.0 out of 10
Numbers & Operations in Base Ten	10 out of 10	6.8 out of 10
Numbers & Operations - Fractions	5 out of 5	4.0 out of 5
Measurement & Data	8 out of 9	6.1 out of 9
Geometry	3 out of 4	2.5 out of 4

Individual Test Questions

Question Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Points Earned	1/2	3/4	0/1	0/1	3/3	1/4	1/1	1/1	1/1	0/1	1/1	1/2	1/2	1/1	1/1	0/1	4/4	3/4	0/4	1/1	1/1	1/1	0/1	0/1	0/1	2/3	5/6	0/1	1/1	1/1

Key
x/y = x points earned out of y possible points
Blank space/y = no answer provided

Go online to see a description of every test question at www.doe.mass.edu/mcas/parents.

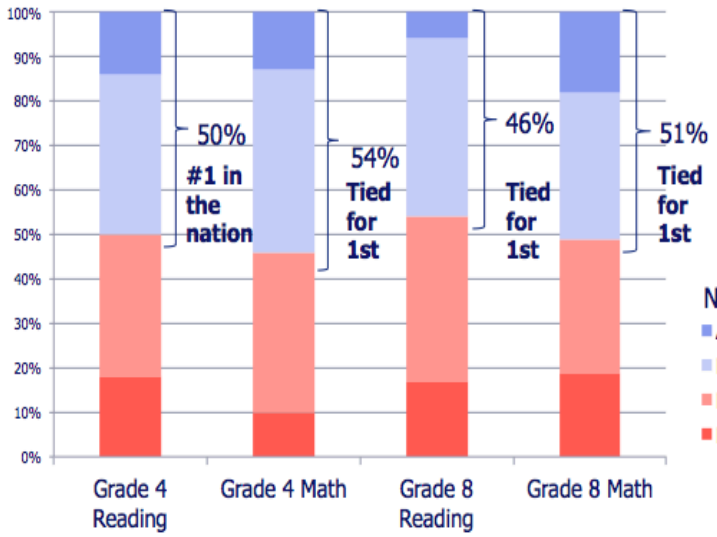
Revisions to Descriptors

- New standards for Meeting Expectations are **more rigorous** than the standards for reaching the Proficient level on the legacy MCAS.

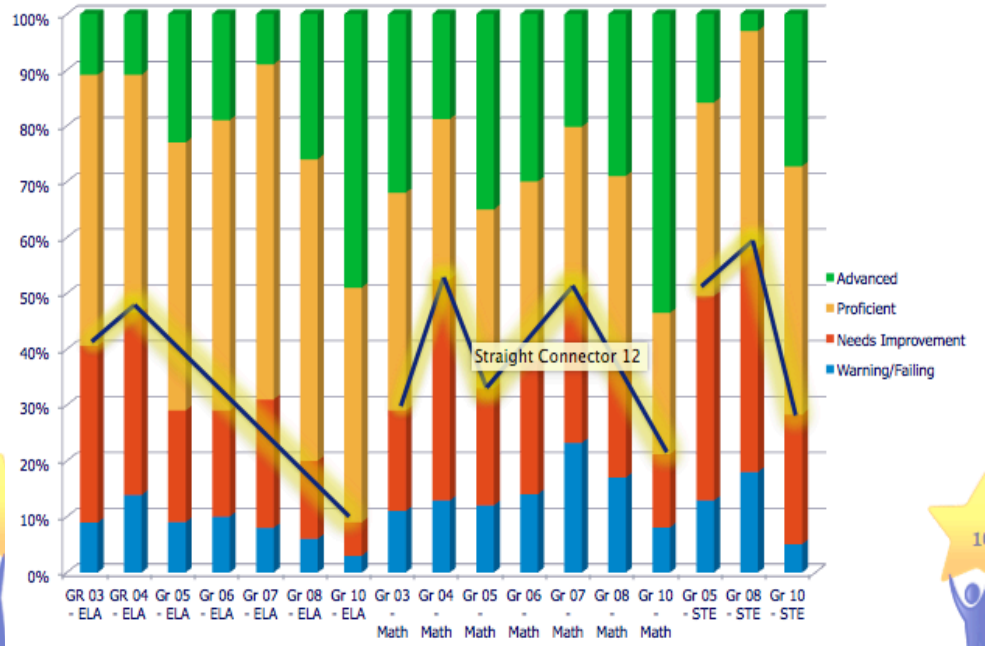
- **Massachusetts educators** set the new standards to help **signal students' readiness** for the next grade level.

Coherence of Scoring

Projected Next-Gen MCAS Results Look More Like Massachusetts's 2015 NAEP Results...

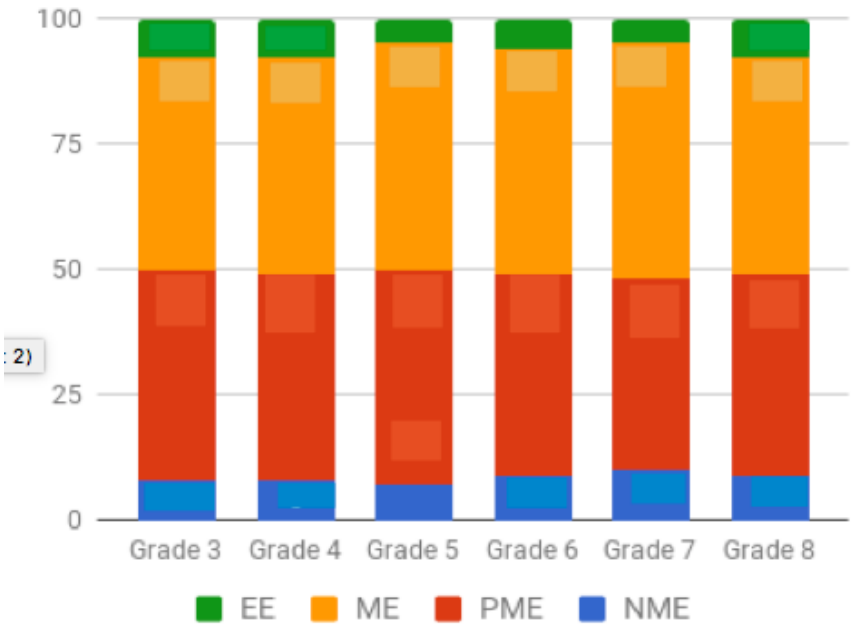


...and Less Like Legacy MCAS Results (2015)



Recalibration

Projected Statewide 2018 Results for Grades 3-8 ELA and Math: Percent of students in each achievement level



- **The results do NOT mean that students learned less**; the next-generation MCAS **measures in a different way**
- **2017 was the baseline year** — the first year of a new assessment — expect scores to change over time, as occurred when the legacy MCAS debuted in 1998.
- **In some grades and subjects**, **the percent of students** Meeting Expectations **will likely be similar** to the percent that were Proficient previously. **In other grades and subjects**, **the percent** who are in Meeting Expectations **will likely be lower** than the previous percent of Proficient students.

Part III: Results of 2018 MCAS Performance: All Students; Benchmark Comparisons

2018 Assessments

Schools	Assessment
Hingham High School	
• Grade 9 Biology	Legacy MCAS
• Grade 10 ELA & Math	Legacy MCAS
Hingham Middle School	
• Grade 6 ELA & Math	Next-Generation MCAS
• Grade 7 ELA & Math	Next-Generation MCAS
• Grade 8 ELA & Math	Next-Generation MCAS
• Grade 8 STE	Legacy MCAS
Elementary Schools	
• Grade 3 ELA & Math	Next-Generation MCAS
• Grade 4 ELA & Math	Next-Generation MCAS
• Grade 5 ELA & Math	Next-Generation MCAS
• Grade 5 STE	Legacy MCAS

MCAS RESULTS
Meeting/Exceeding Expectations 2018

Grades 3, 4, & 5	Hingham	State
Grade 3 Reading	76	52
Grade 3 Math	70	50
Grade 4 ELA	76	53
Grade 4 Math	78	48
Grade 5 ELA	82	54
Grade 5 Math	81	46
Grade 5 STE*	81	47

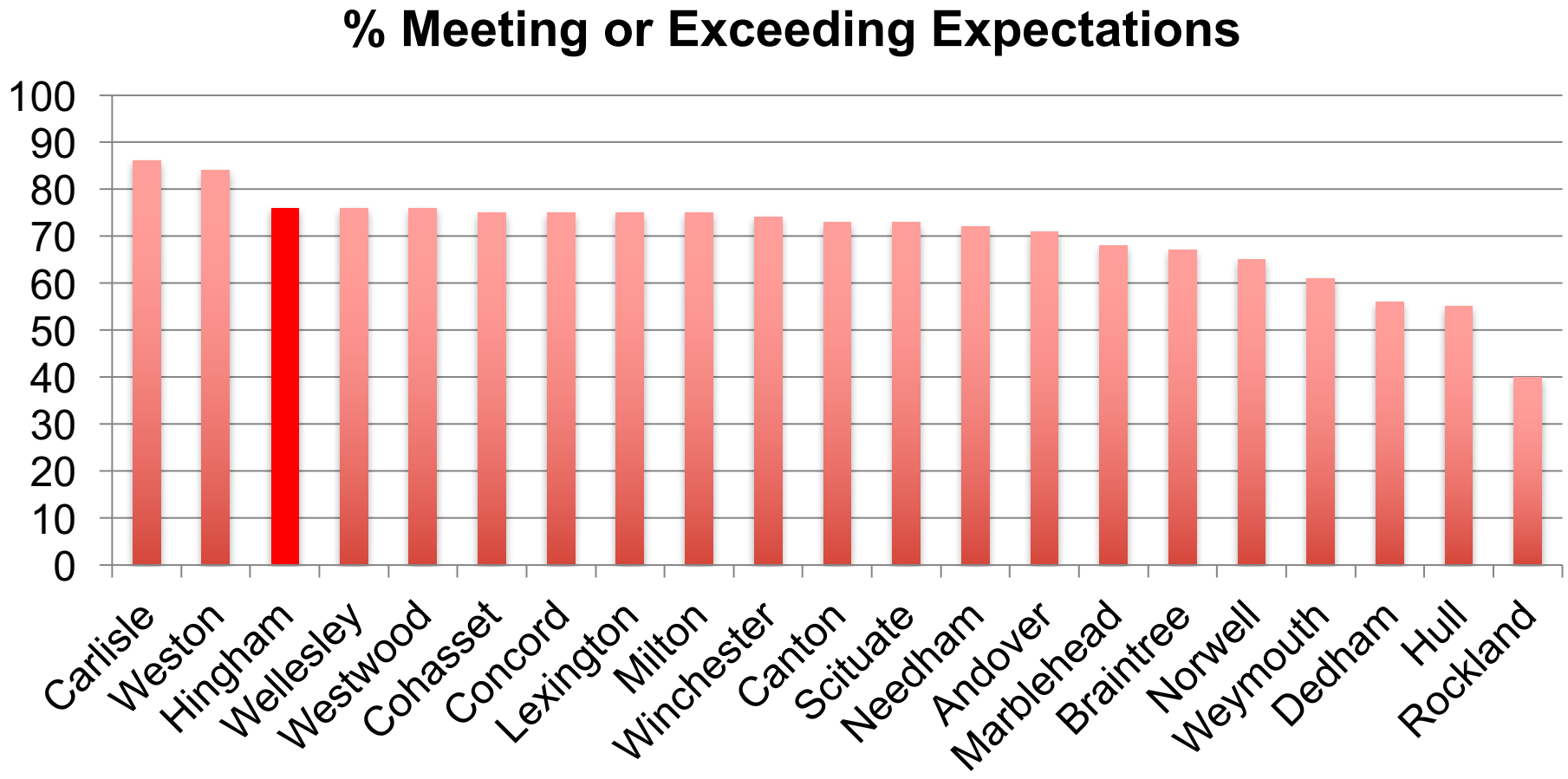
Grades 6, 7, & 8	Hingham	State
Grade 6 ELA	86	51
Grade 6 Math	82	47
Grade 7 ELA	71	46
Grade 7 Math	67	46
Grade 8 ELA	77	51
Grade 8 Math	67	50
Grade 8 STE*	61	35

All Grades K-8	Hingham	State
ELA	78	51
Math	74	48

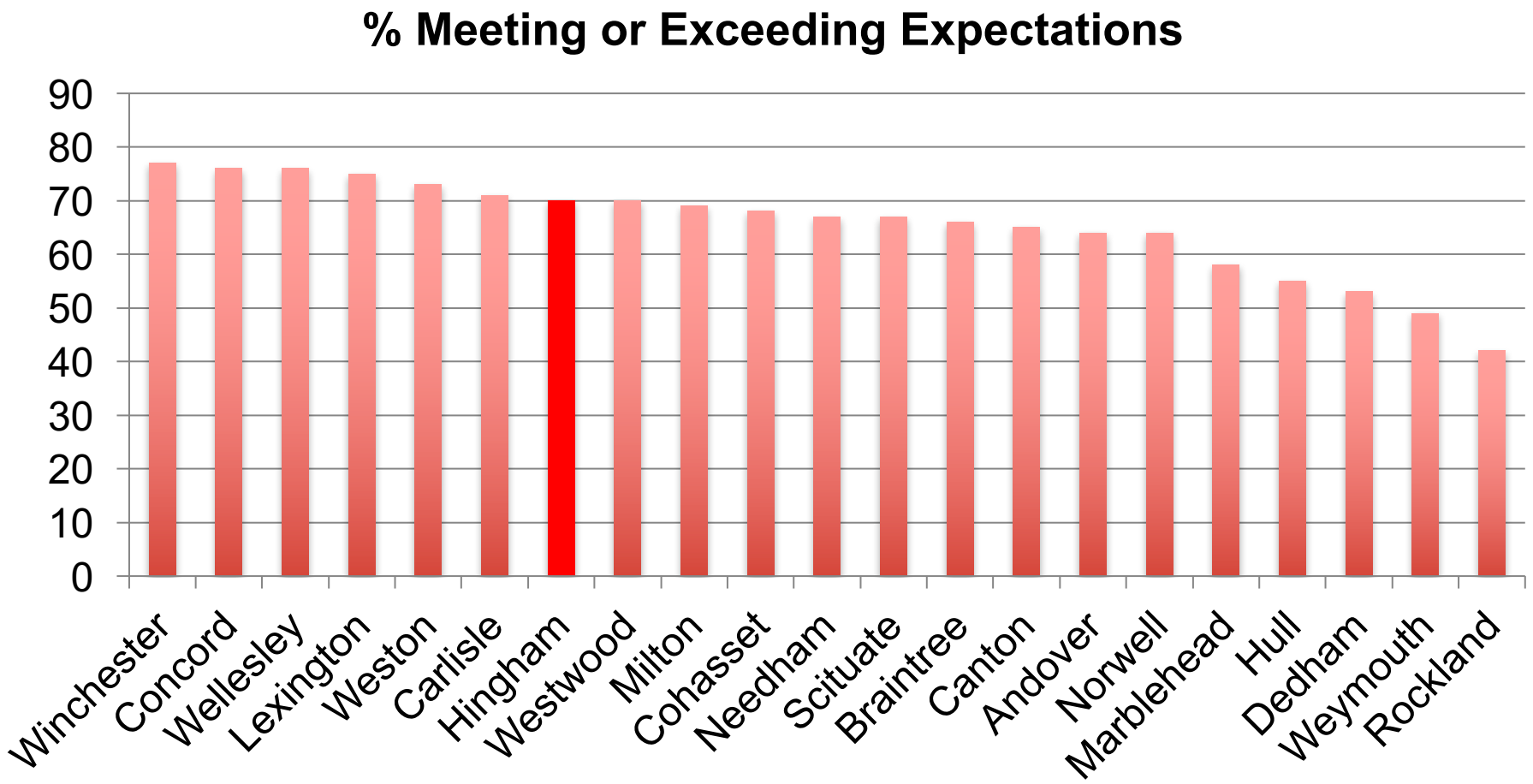
Grade 10	Hingham	State
Grade 10 ELA*	98	91
Grade 10 Math*	92	78
Grade 10 Science*	92	74

*** Legacy MCAS - % Proficient or Advanced**

Benchmark Comparison: Grade 3 Reading



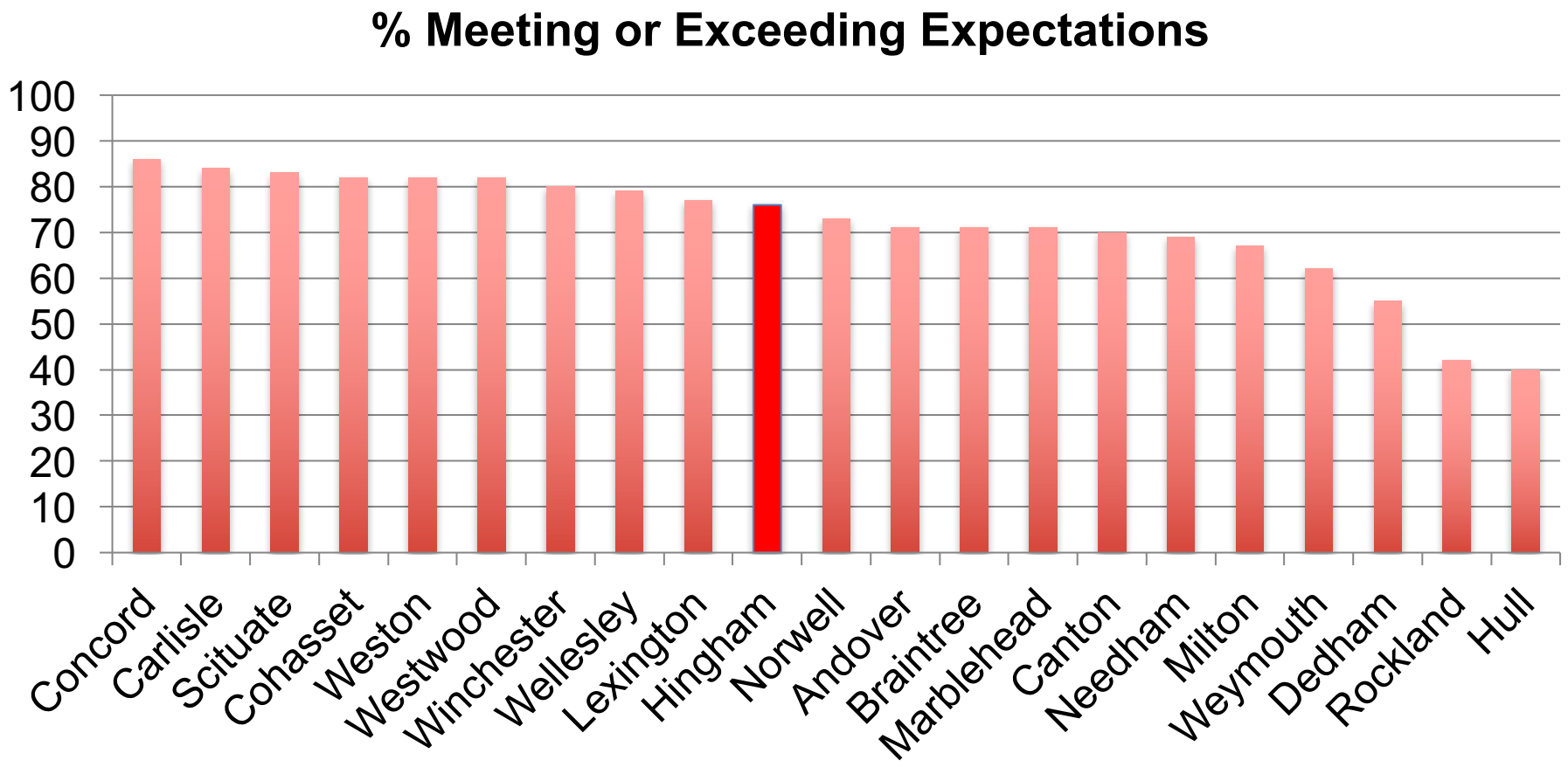
Benchmark Comparison: Grade 3 Math



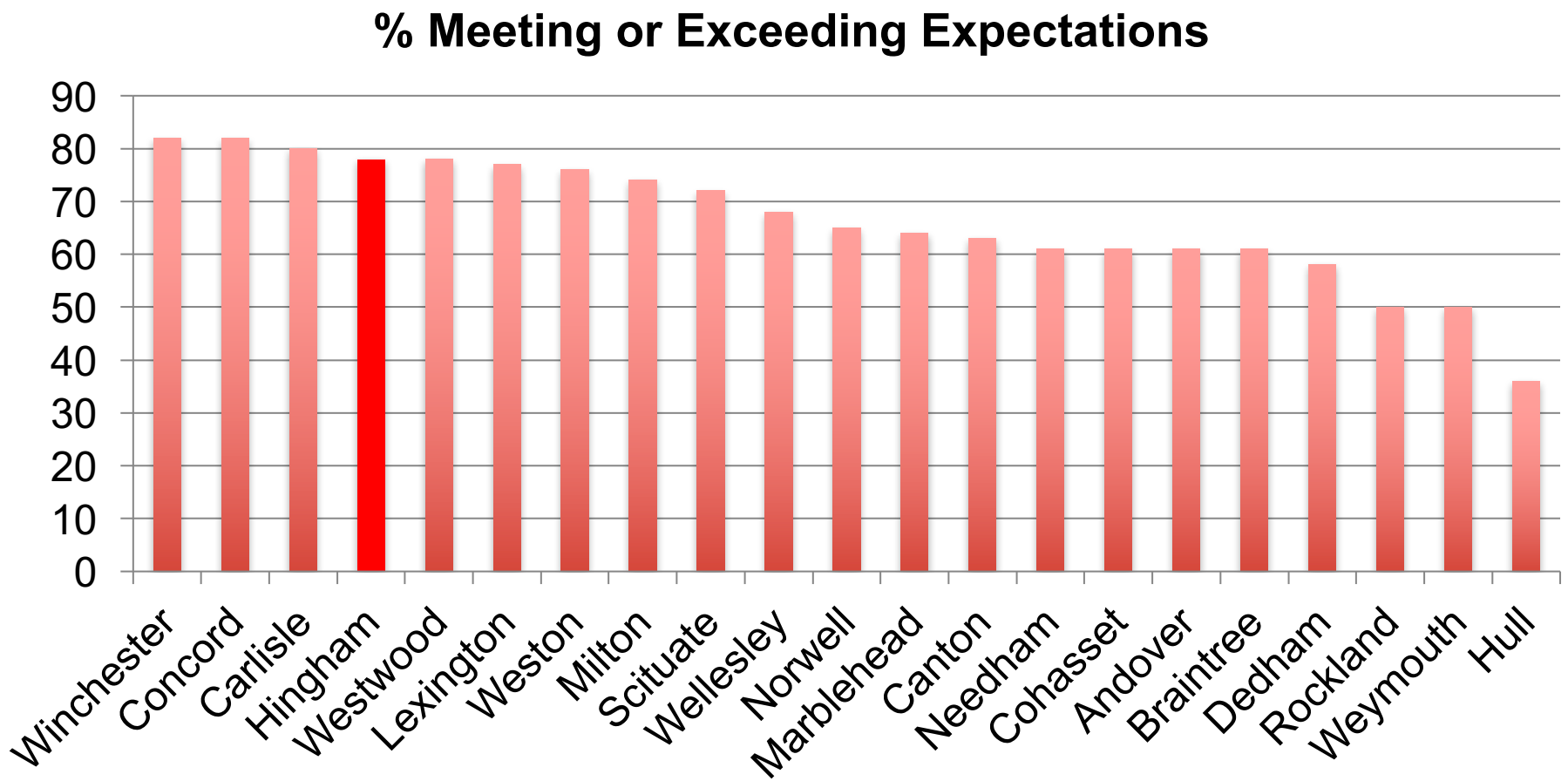
Grade 3: Performance Summary

Subject	Summary
ELA	• 76% of Hingham Grade 3 ELA students met or exceeded expectations (an increase of 12% from last year) • Performed 10% higher than the state average in ALL content strands: language, reading, and writing • Performed ABOVE the state average on all 26 test items
Math	• 97% of Grade 3 math students earned a passing score on mathematics MCAS; 70% meeting expectations or higher • Performed above the state average on all but 1 test question. • Performed at least 10 points above the state average for the content strands: *Measurement & Data, Number and Operations in Base Ten, Number and Operations - Fractions, and Operations & Algebraic Thinking*

Benchmark Comparison: Grade 4 ELA



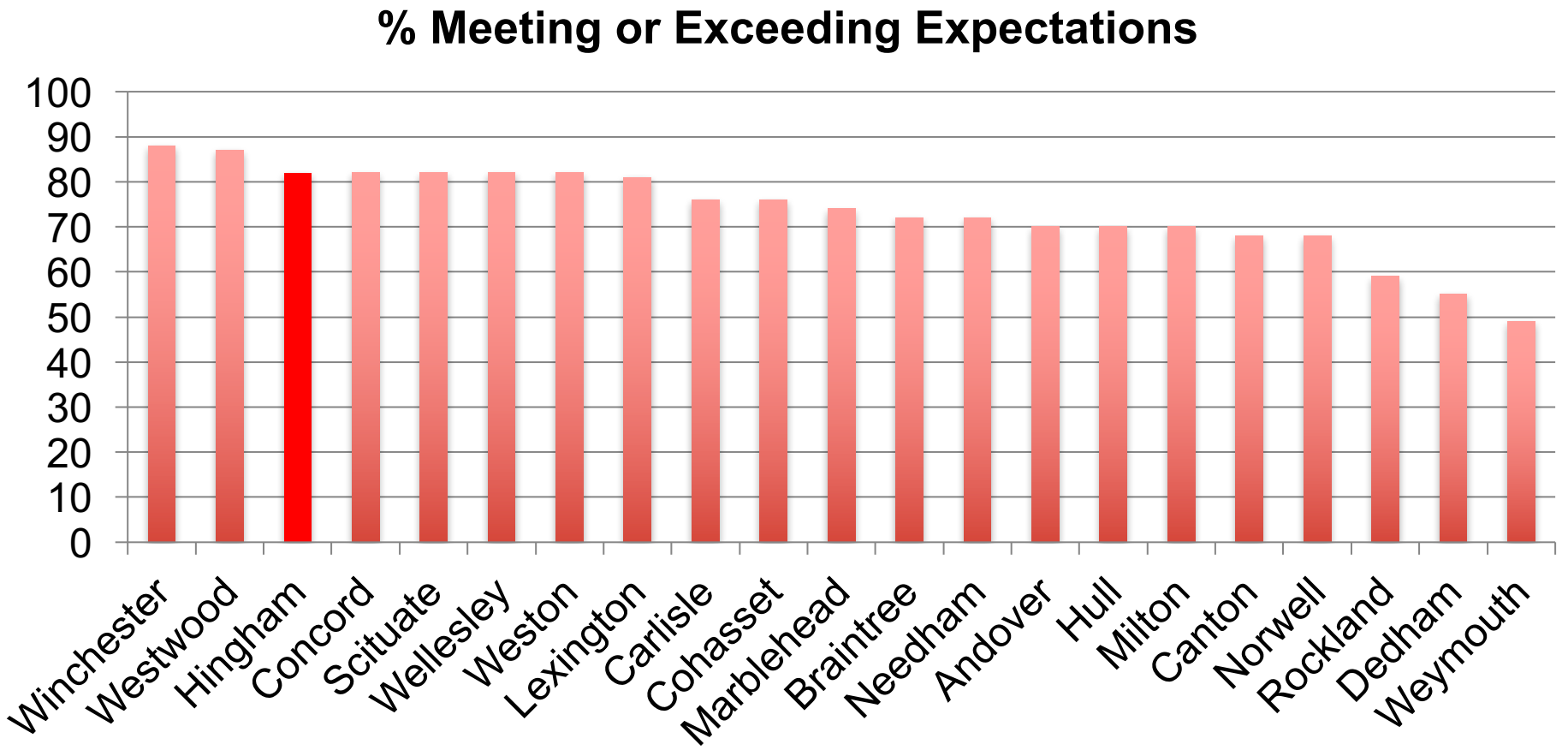
Benchmark Comparison: Grade 4 Math



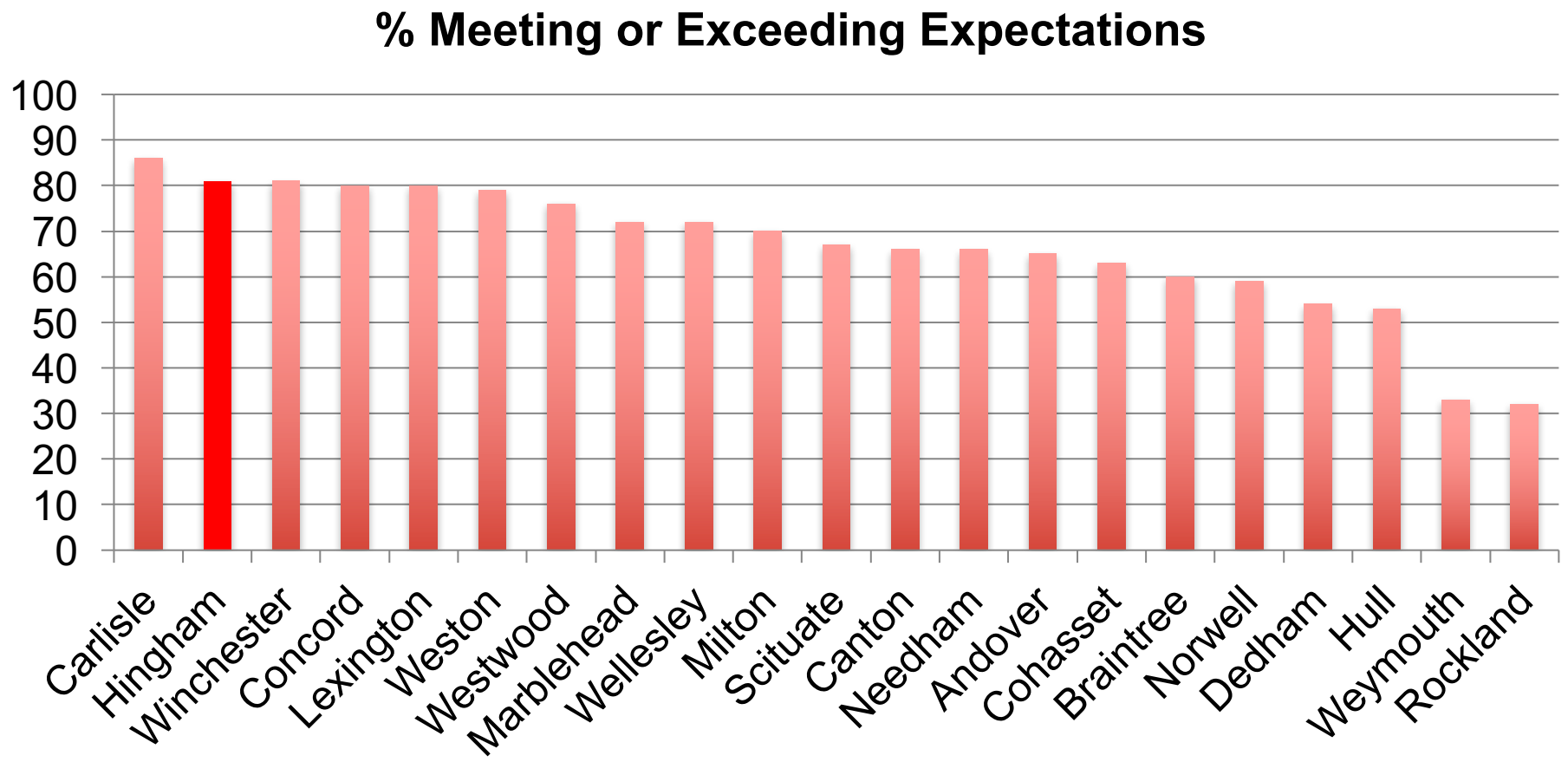
Grade 4: Performance Summary

Subject	Summary
ELA	• 76% of Hingham Grade 4 ELA students met or exceeded expectations (an increase of 2% from last year) • Performed 10% higher than the state average in ALL content strands: language, reading, and writing • Performed ABOVE the state average on all 26 test items
Math	• 97% earned a passing score; 77% earning a score of meeting expectations or higher. • Performed above the state average on all 40 test questions • Performed between 11-19 points above the state average for all content strands: *Geometry, Measurement & Data, Number and Operations in Base Ten, Number and Operations - Fractions, and Operations & Algebraic Thinking*

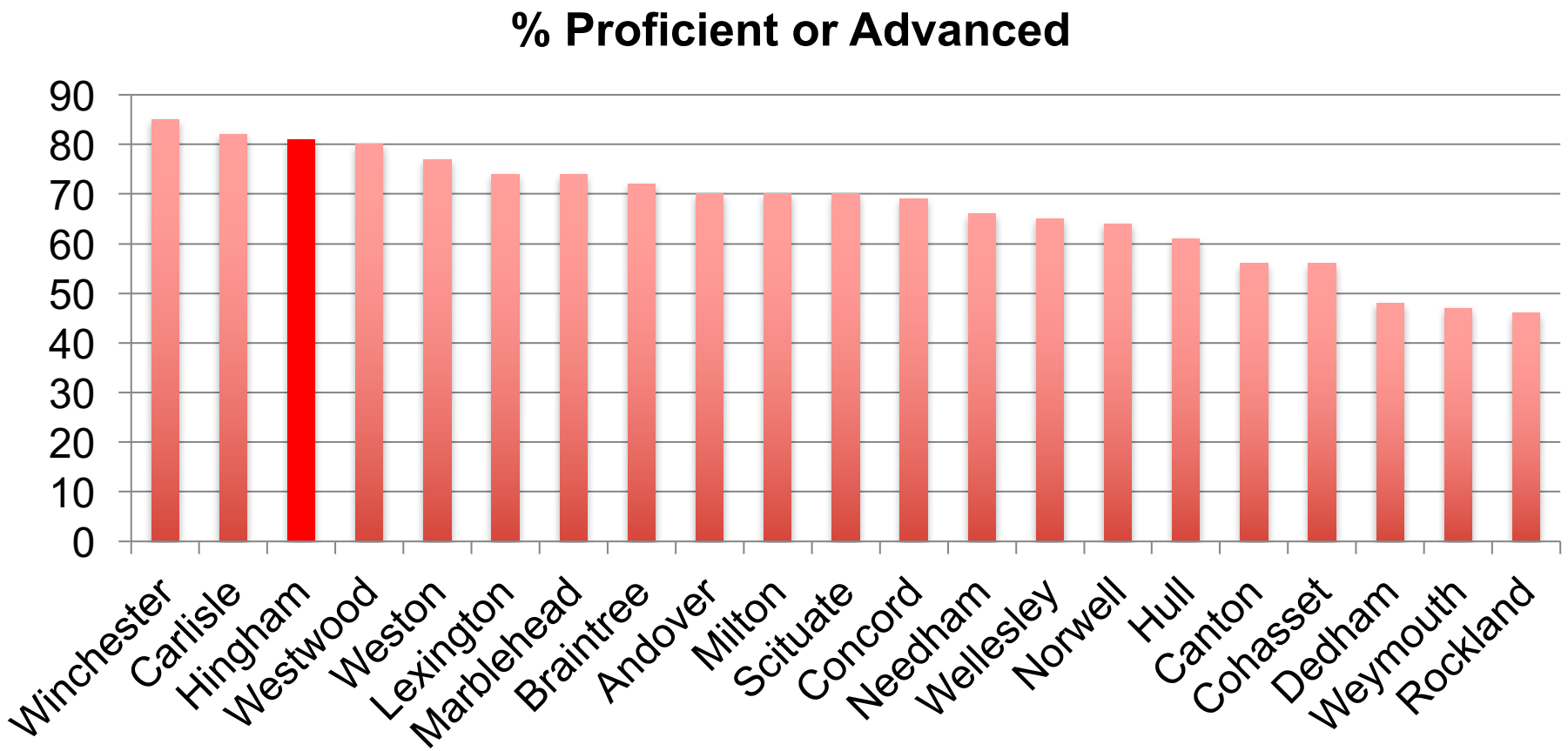
Benchmark Comparison: Grade 5 ELA



Benchmark Comparison: Grade 5 Math



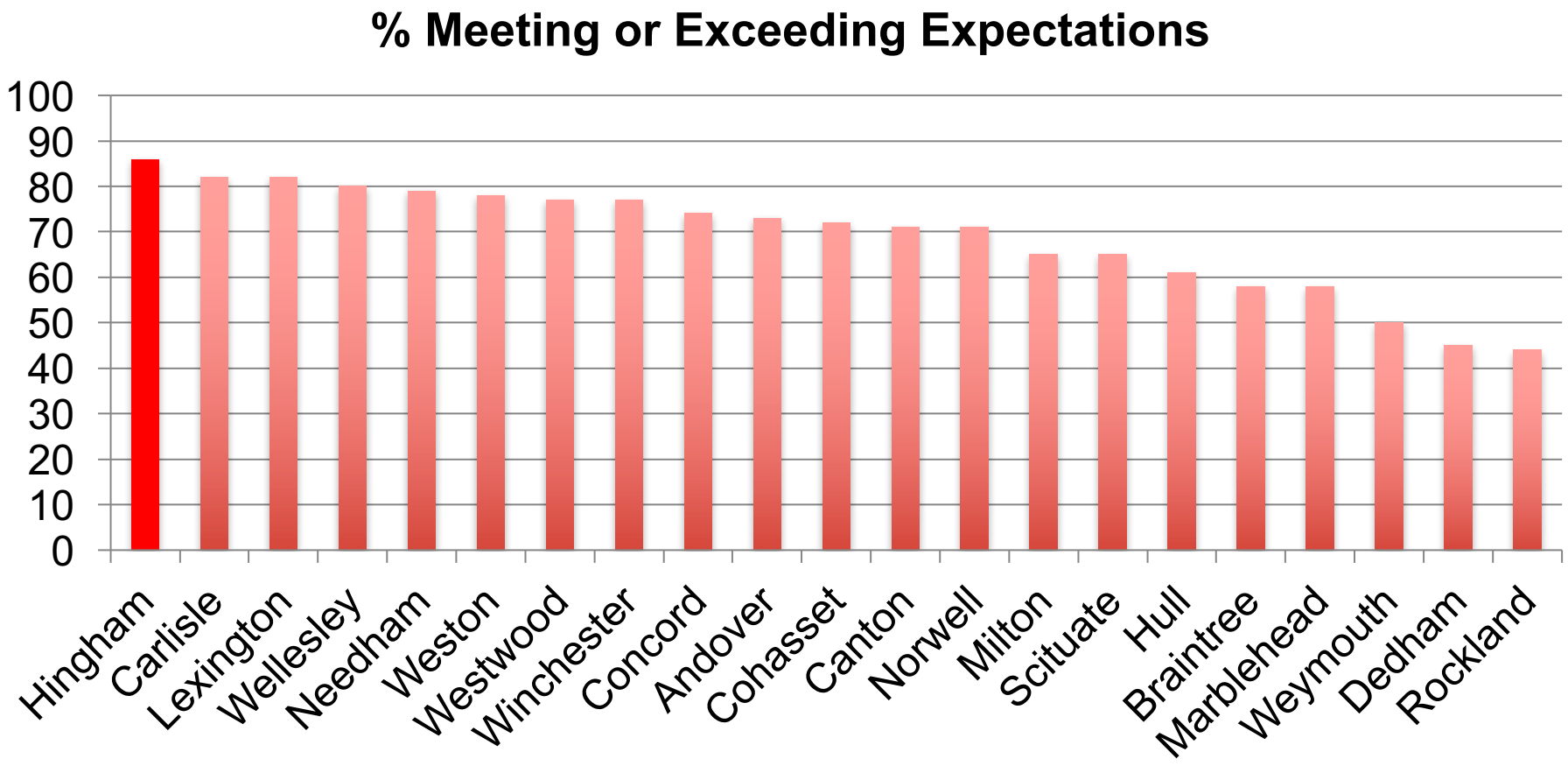
Benchmark Comparison: Grade 5 STE



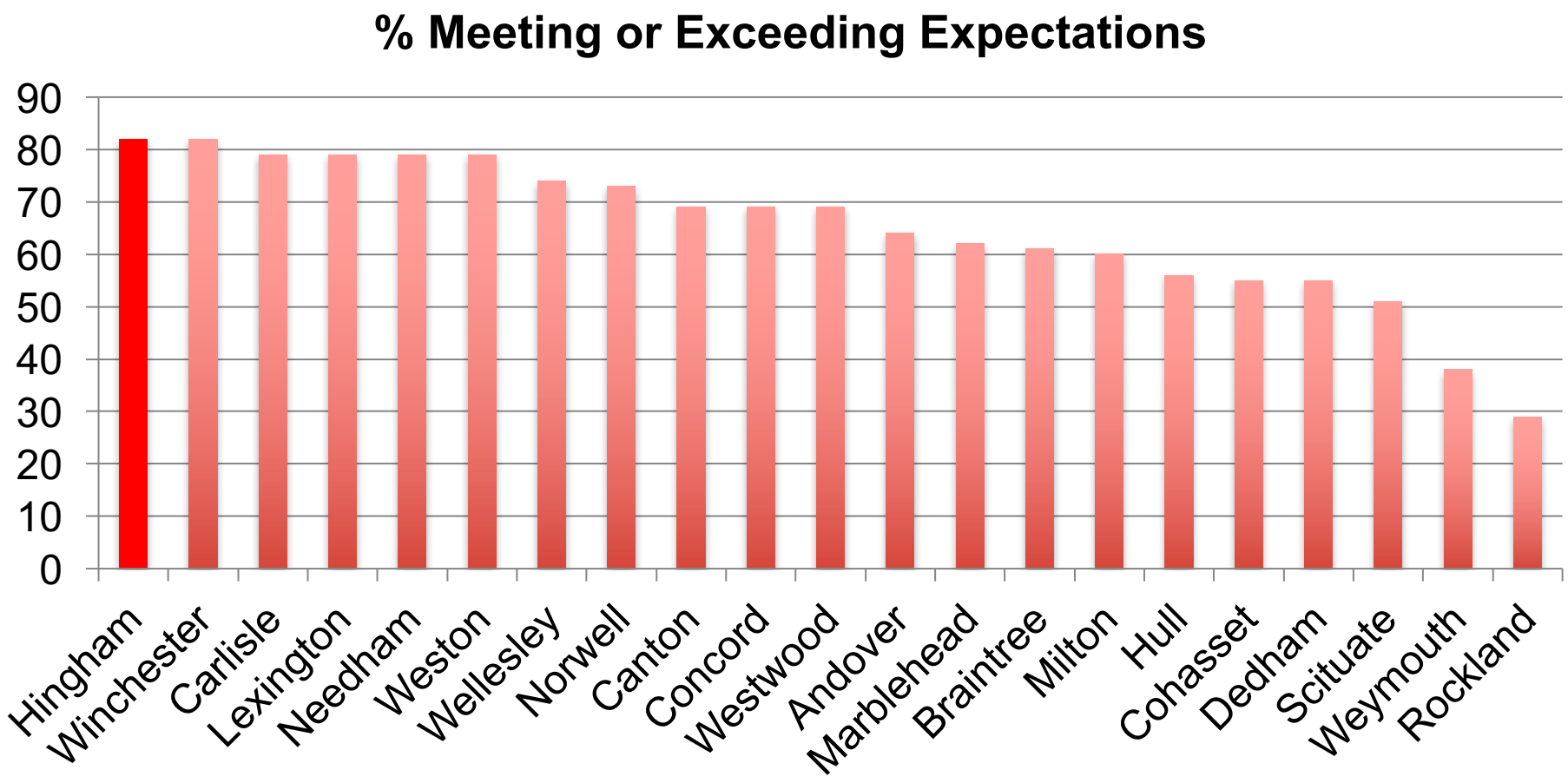
Grade 5: Performance Summary

Subject	Summary
ELA	• 82% of Hingham Grade 5 ELA students met or exceeded expectations on the new exam (an increase of 1% from last year) • Performed 14% higher than the state average in ALL content strands: language, reading, and writing • Performed ABOVE the state average on all 27 test items
Math	• 97% earned a passing score; 81% of students earning a score of meeting expectations or higher. • Performed above the state average on all 40 test questions • Performed between 13-20 points above the state average for all content strands: *Geometry, Measurement & Data, Number and Operations in Base Ten, Number and Operations - Fractions, and Operations & Algebraic Thinking*
Science	• 97% earned a passing score; 80% of students earning a score of proficient or higher. • 55% achieved an Advanced score in science, compared to 18% at the state level. • Performed at or above the state average on all 42 test questions

Benchmark Comparison: Grade 6 ELA



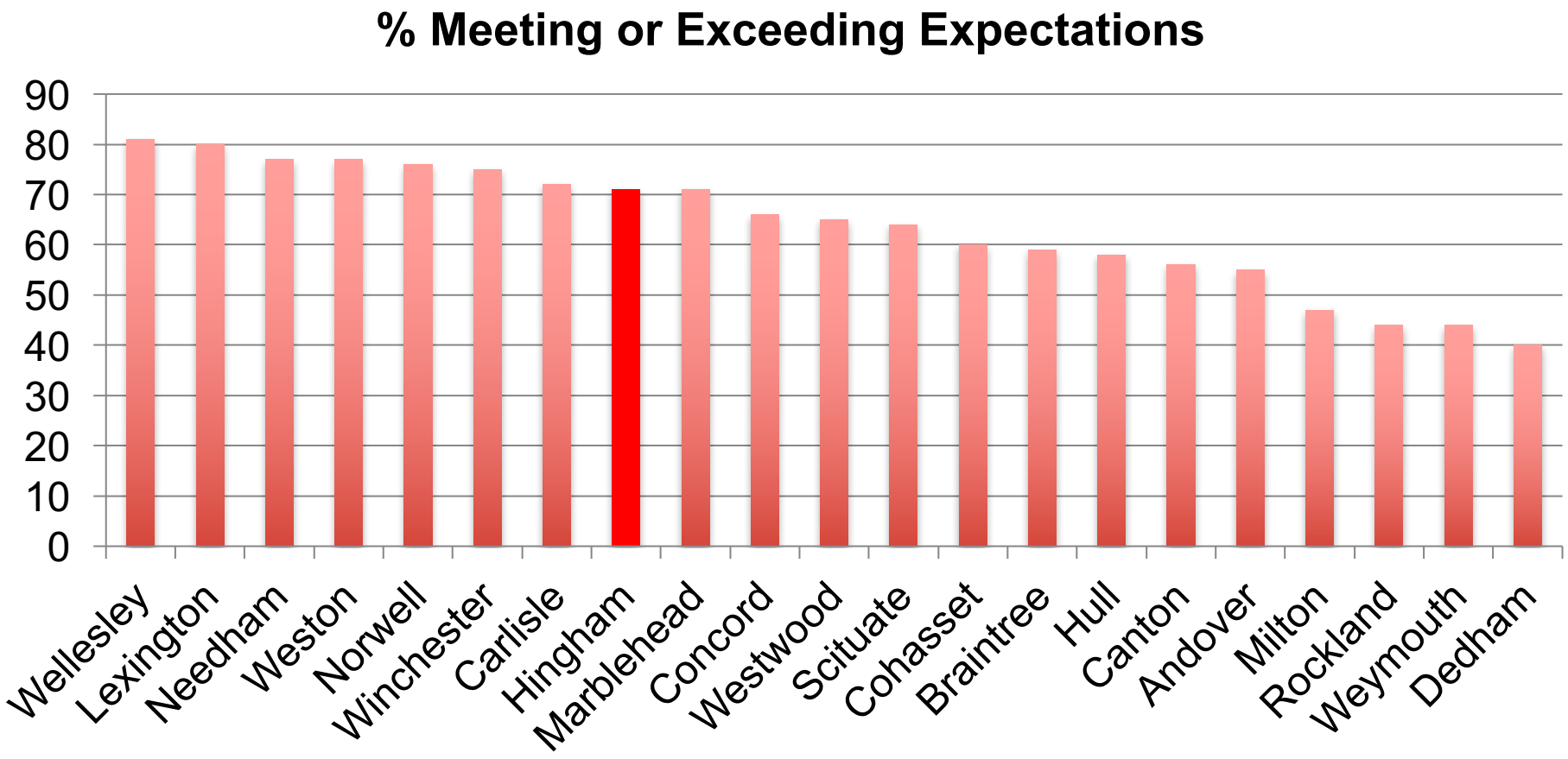
Benchmark Comparison: Grade 6 Math



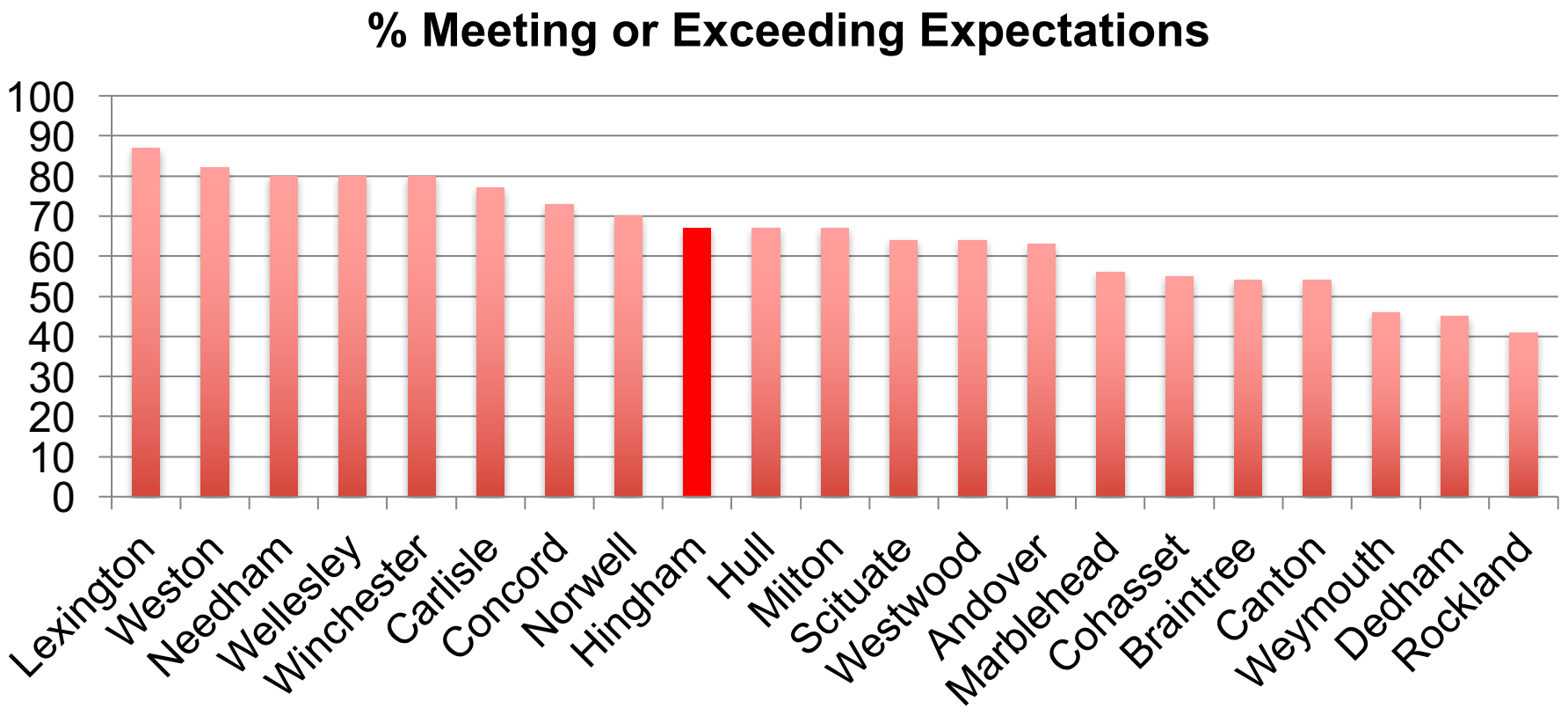
Grade 6: Performance Summary

Subject	Summary
ELA	• 86% met or exceeded expectations (an increase of 8% from last year) • Performed 18% higher than the state average in ALL content strands: language, reading, and writing • Performed ABOVE the state average on all 27 test items
Math	• 99% earned a passing score; 82% meeting expectations or higher. • Performed above the state average on all 40 test questions. • Performed between 15-22 points above the state average for content strands: *Geometry, Expressions and Equations, Ratios and Proportional Relationships, Statistics and Probability, The Number System*

Benchmark Comparison: Grade 7 ELA



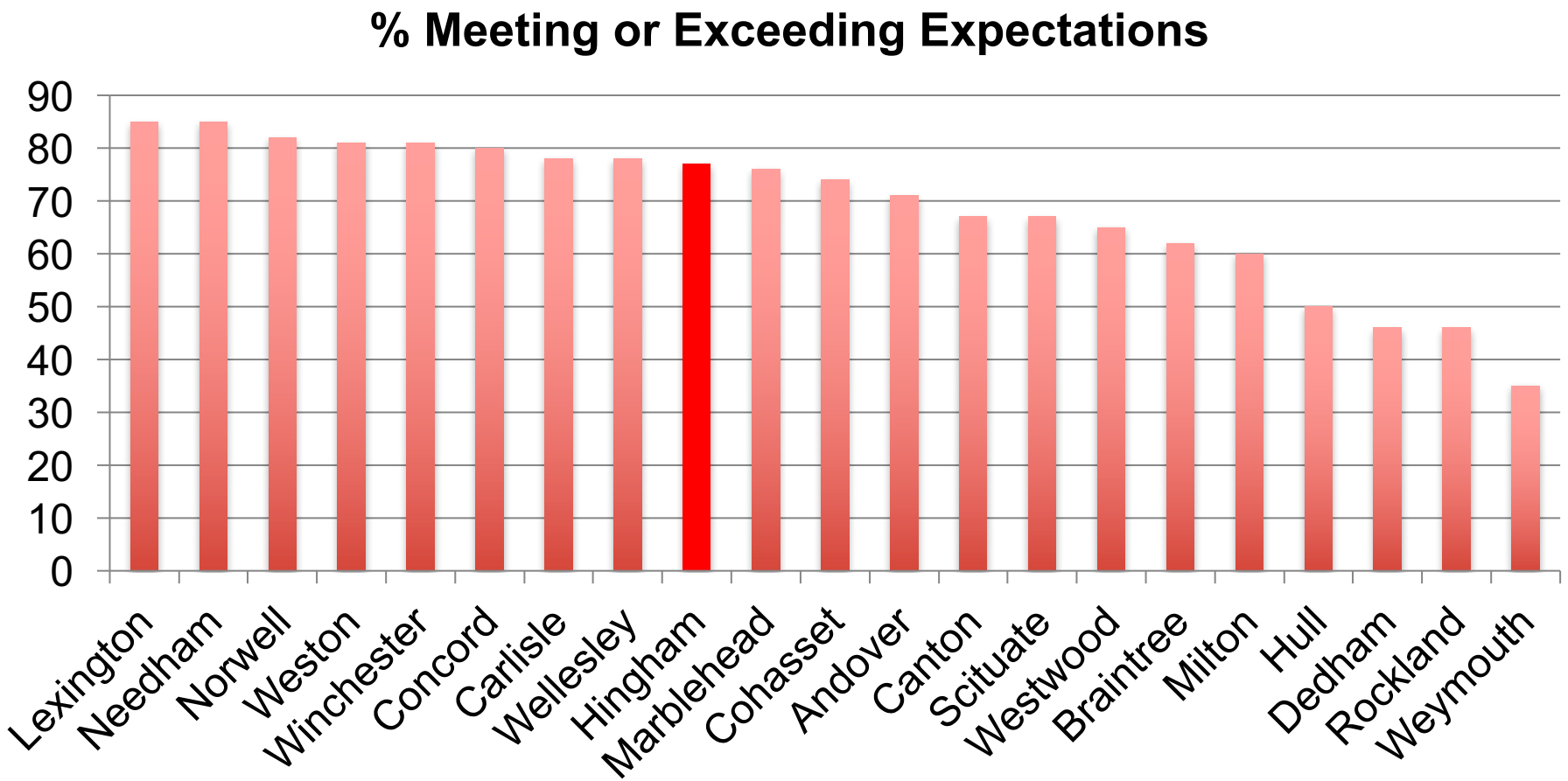
Benchmark Comparison: Grade 7 Math



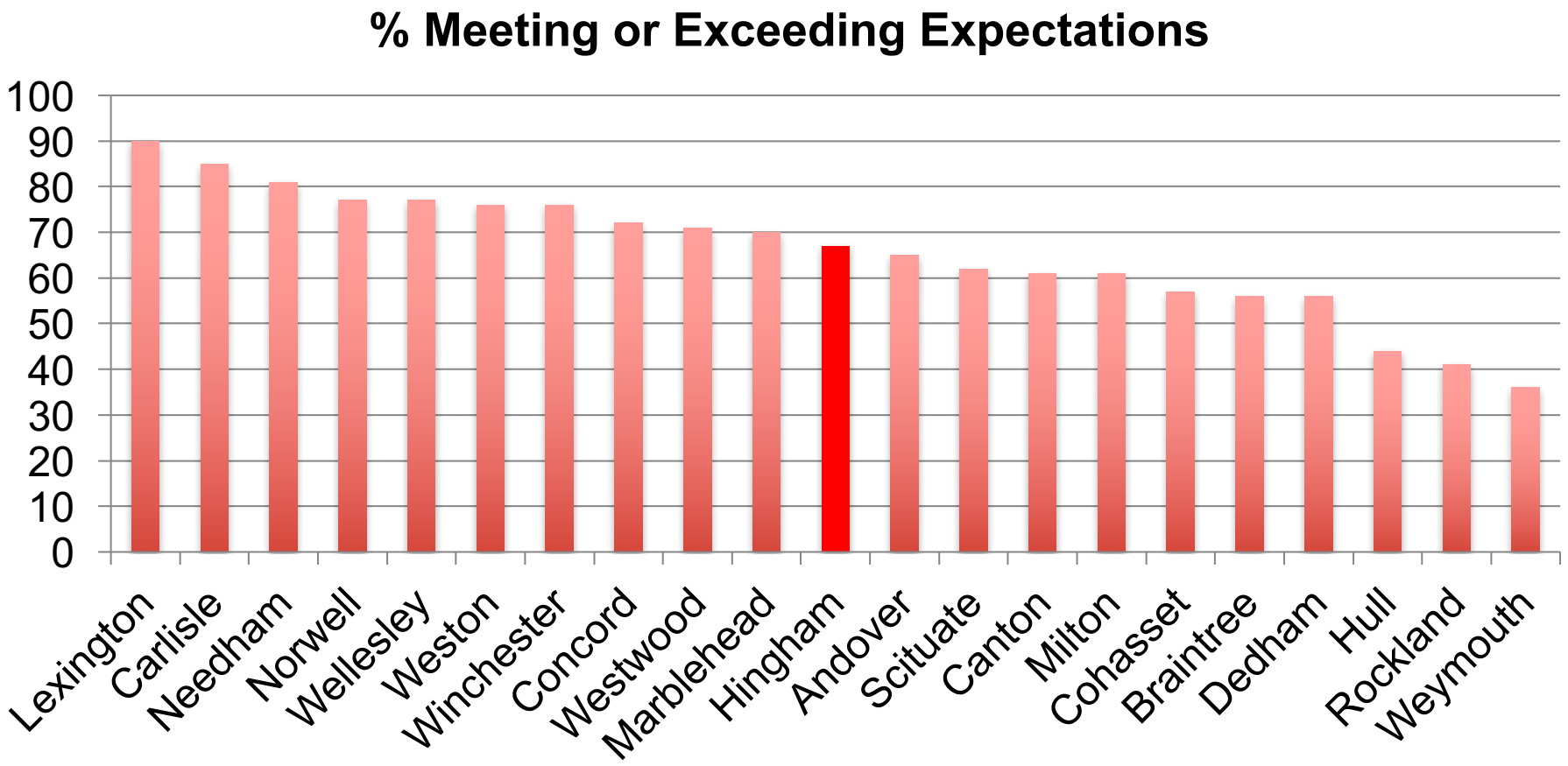
Grade 7: Performance Summary

Subject	Summary
ELA	• 72% met or exceeded expectations • Performed 13% higher than the state average in ALL content strands: language, reading, and writing • Performed ABOVE the state average on all 27 test items
Math	• 98% earned a passing score; 67% meeting expectations or higher. • Performed at or above the state average on 36 of 40 test questions. • Performed between 7-12 points above the state average for content strands: *Expressions and Equations, Ratios and Proportional Relationships, Statistics and Probability, The Number System, and Geometry*

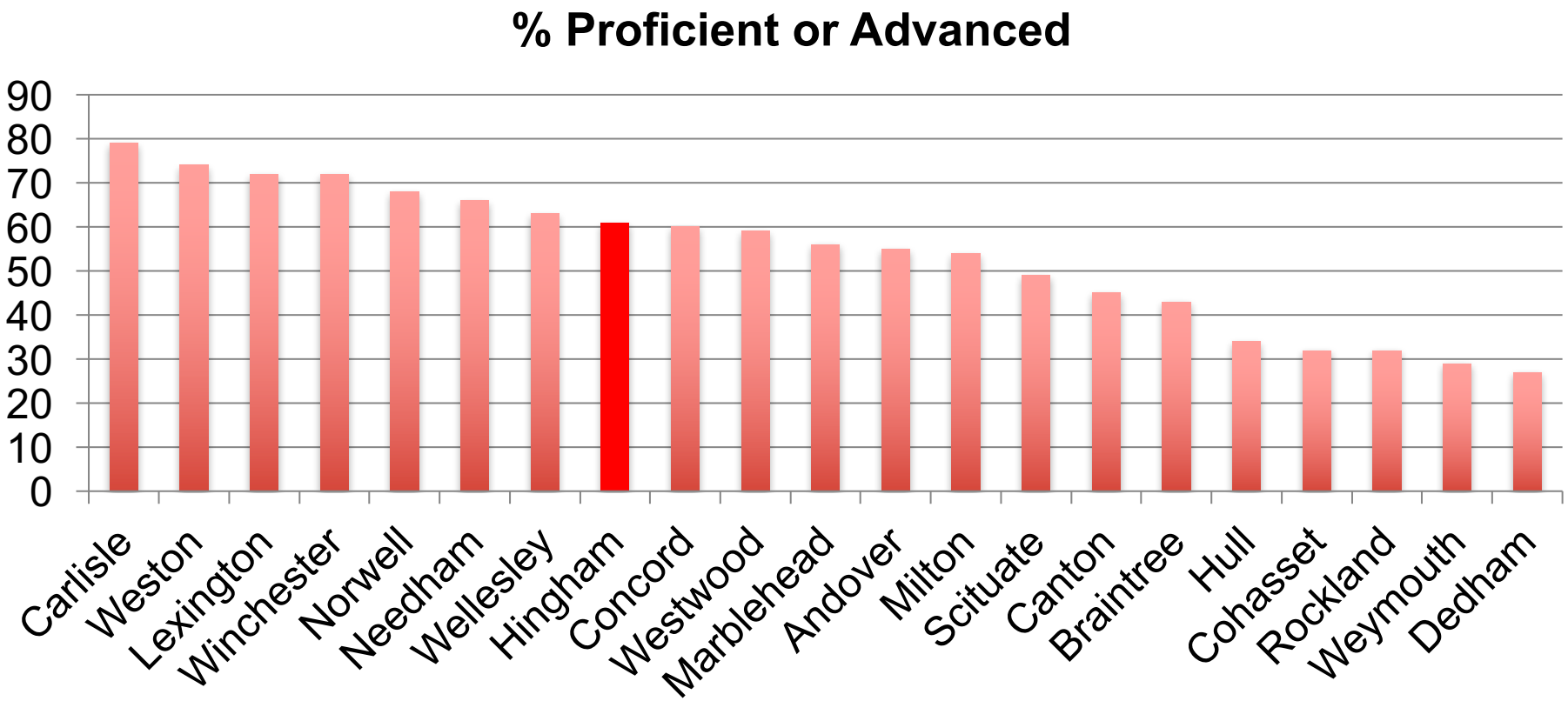
Benchmark Comparison: Grade 8 ELA



Benchmark Comparison: Grade 8 Math



Benchmark Comparison: Grade 8 STE



Grade 8: Performance Summary

Subject	Summary
ELA	• 78% met or exceeded expectations (an increase of 8% from last year) • Performed 12% higher than the state average in ALL content strands: language, reading, and writing • Performed ABOVE the state average on all 27 test items
Math	• 98% earned a passing score; 67% of students earning a score of meeting expectations or higher • Performed at or above the state average on 35 of 40 test questions • Performed between 5-14 points above the state average for content strands: *Geometry, Expressions and Equations, Ratios and Proportional Relationships, Statistics and Probability, The Number System*
Science	• 94% earned a passing score; 62% of students earning a score of proficient or higher. • Performed above the state average on 39 of 42 test questions. • Performed on average 12 points above performance of peers across the state

Part IV: Results of 2018 MCAS Performance: Special Education & High Needs; Benchmark Comparisons

High Needs Subgroup

- An unduplicated count of all students in a school or district belonging to at least one of the following individual subgroups: ***students with disabilities***, ***English language learners (ELL) and former ELL students***, or ***economically disadvantaged***.

MCAS RESULTS: High Needs Meeting/Exceeding Expectations 2018

Grades 3, 4, & 5	Hingham	State
Grade 3 Reading	44	34
Grade 3 Math	44	32
Grade 4 ELA	41	34
Grade 4 Math	44	31
Grade 5 ELA	45	34
Grade 5 Math	43	26
Grade 5 STE*	51	28

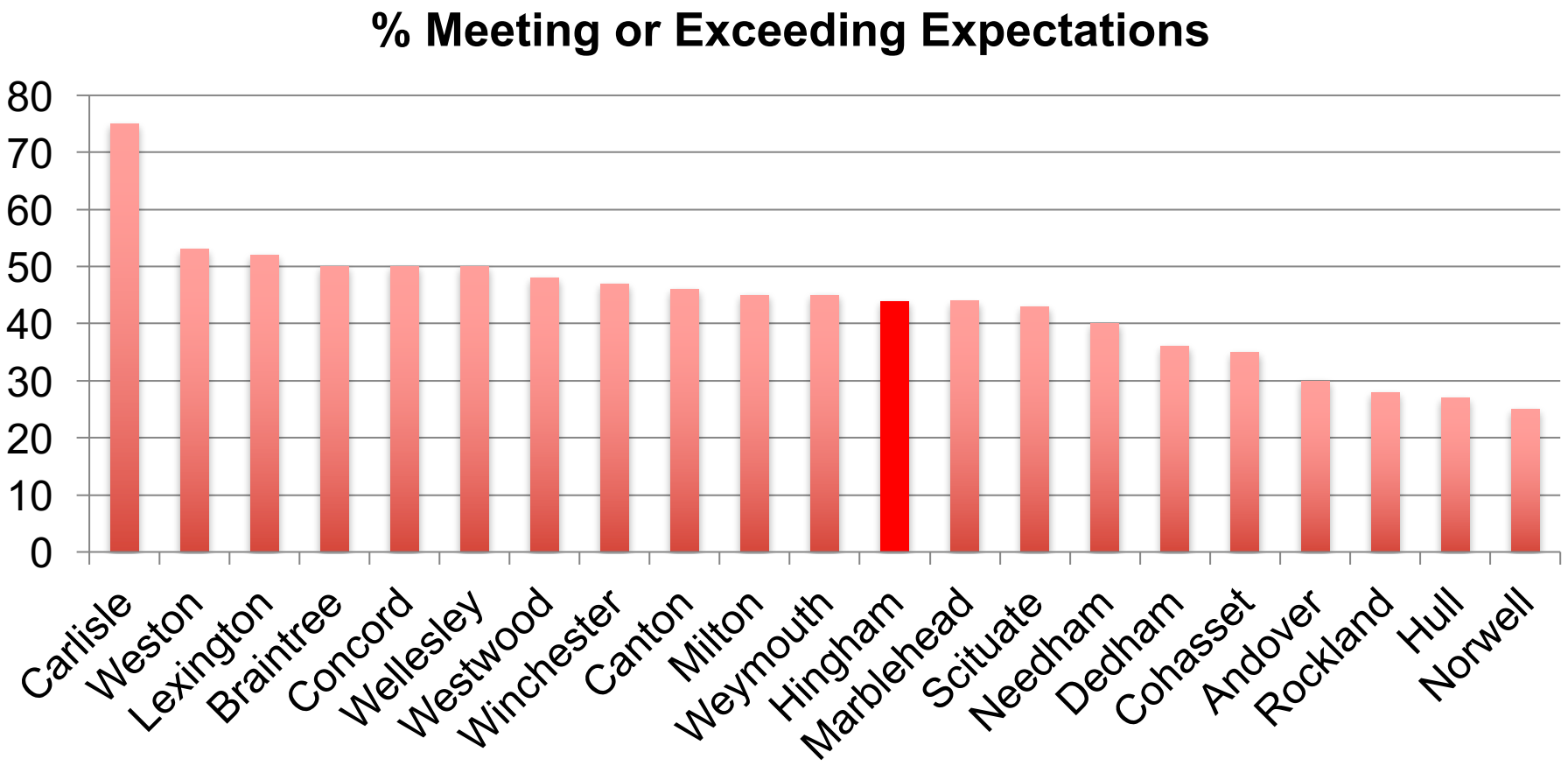
Grades 6, 7, & 8	Hingham	State
Grade 6 ELA	45	30
Grade 6 Math	36	26
Grade 7 ELA	19	24
Grade 7 Math	27	24
Grade 8 ELA	40	29
Grade 8 Math	33	27
Grade 8 STE*	25	16

All Grades K-8	Hingham	State
ELA	40	31
Math	38	28

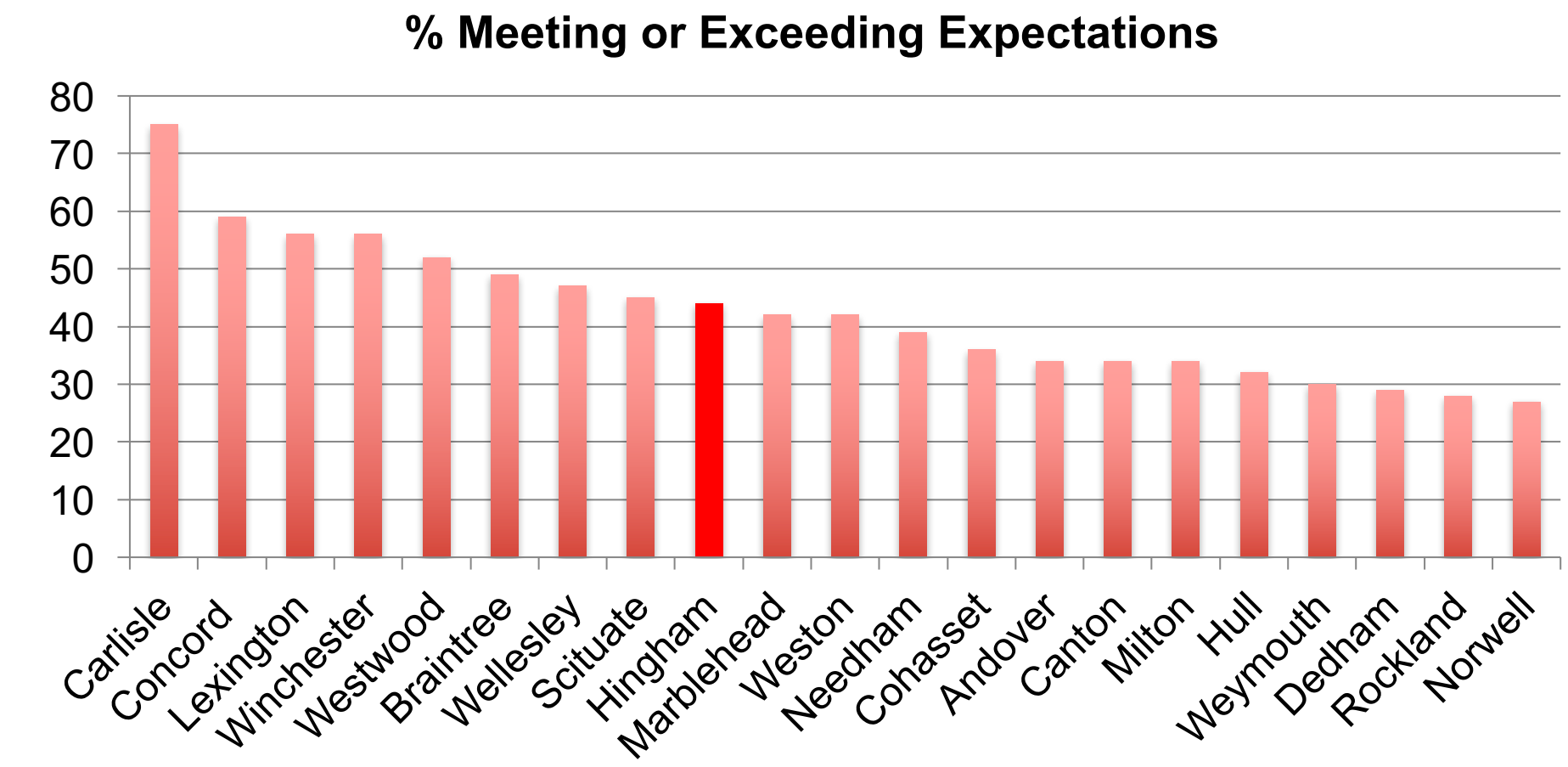
Grade 10	Hingham	State
Grade 10 ELA*	90	80
Grade 10 Math*	61	57
Grade 10 Science*	62	53

*** Legacy MCAS - % Proficient or Advanced**

High Needs: Grade 3 Reading



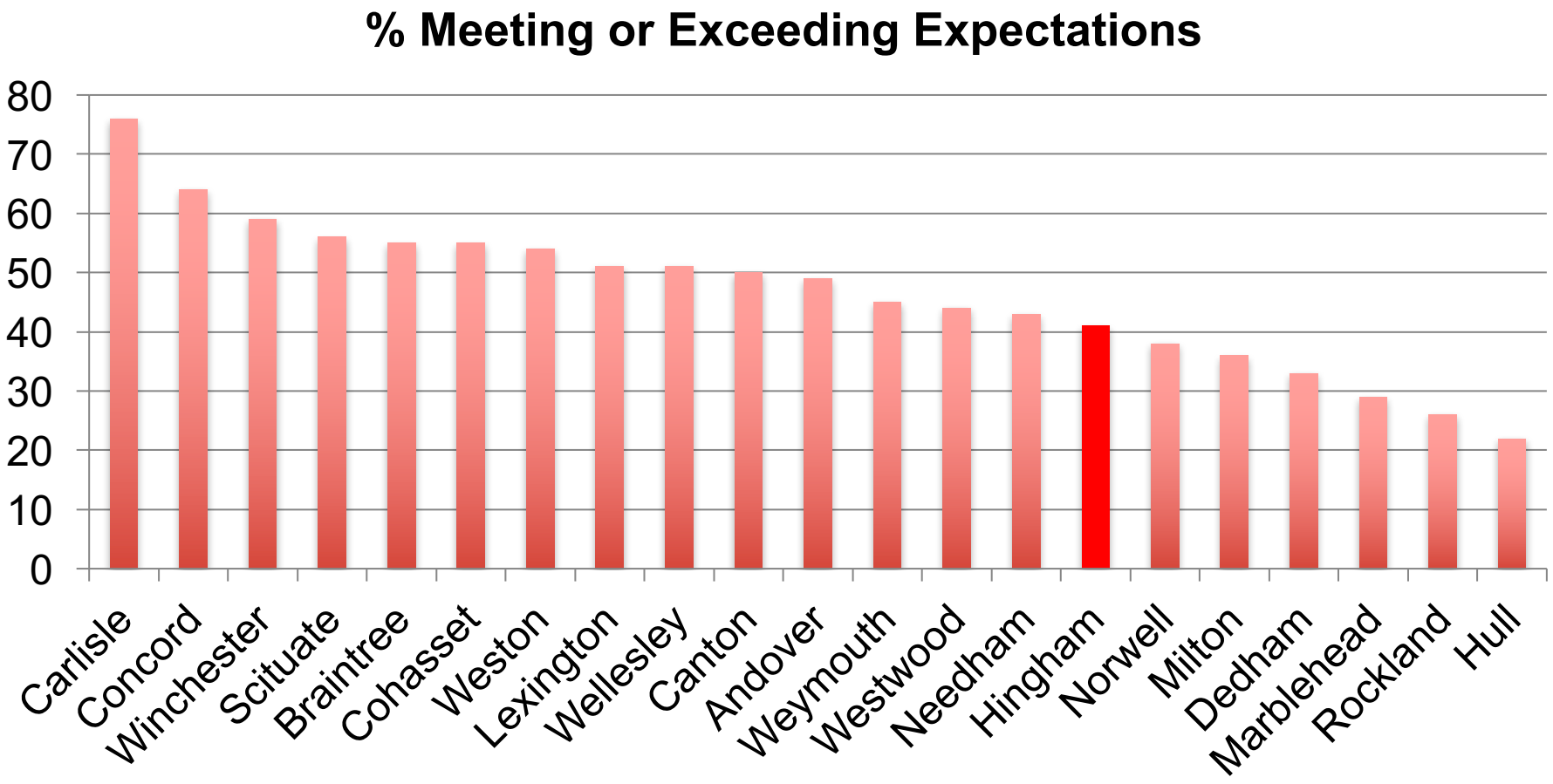
High Needs: Grade 3 Math



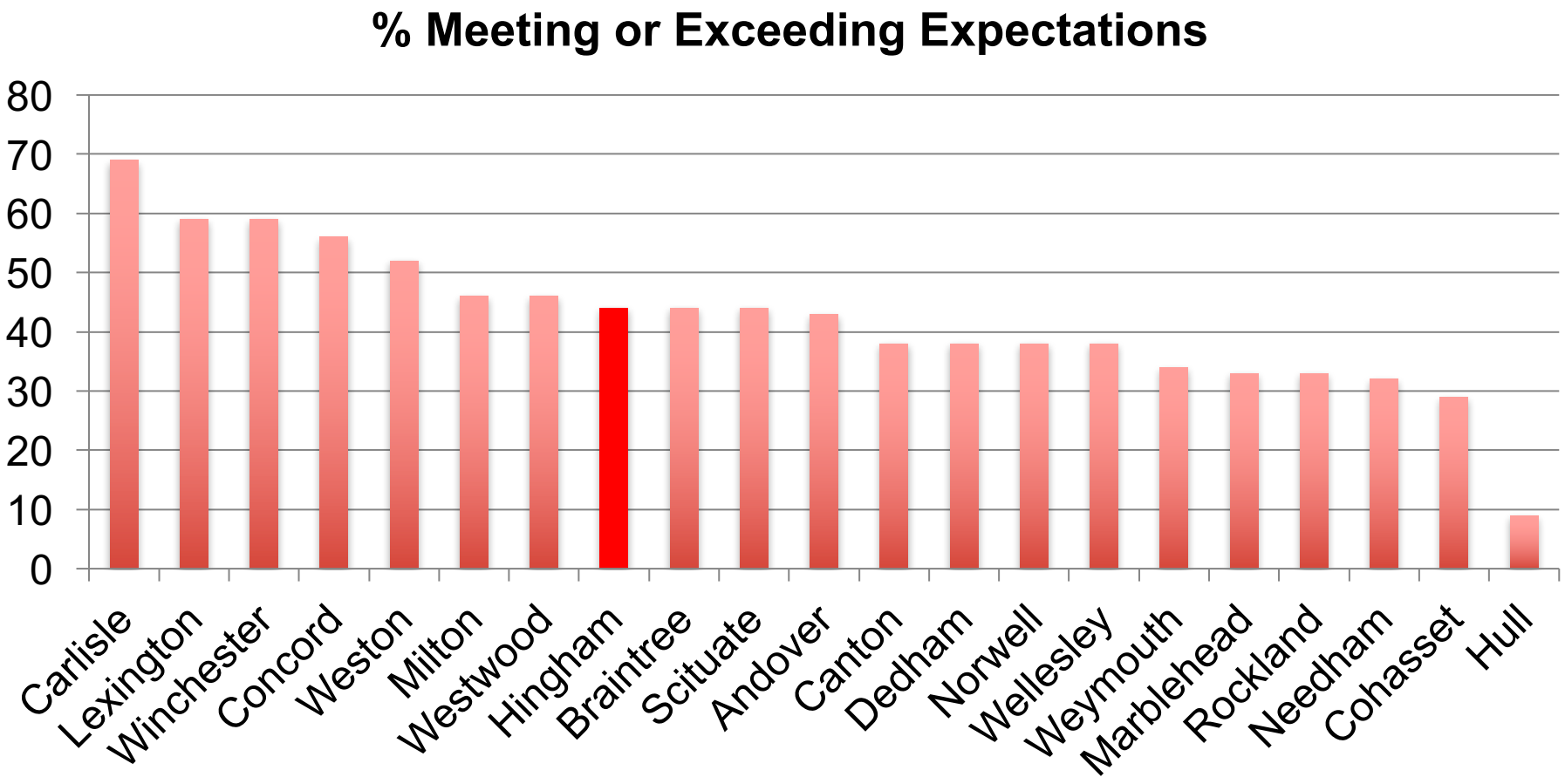
Grade 3: Areas of Strength & Opportunity

Subject	Strength	Opportunity for Growth
ELA	• Performed at or above the state average for high needs students on 26 of 27 test items	• Challenge areas included analyzing text features, finding textual evidence to support an idea, drawing inferences
Math	• Performed above the state average for High Needs on 33 of 40 test questions	• Challenge areas included recognizing perimeter, distinguishing between linear and area measures; telling and writing time to the nearest minute/measure time intervals in minutes; understanding that shapes in different categories may share attributes

High Needs: Grade 4 ELA



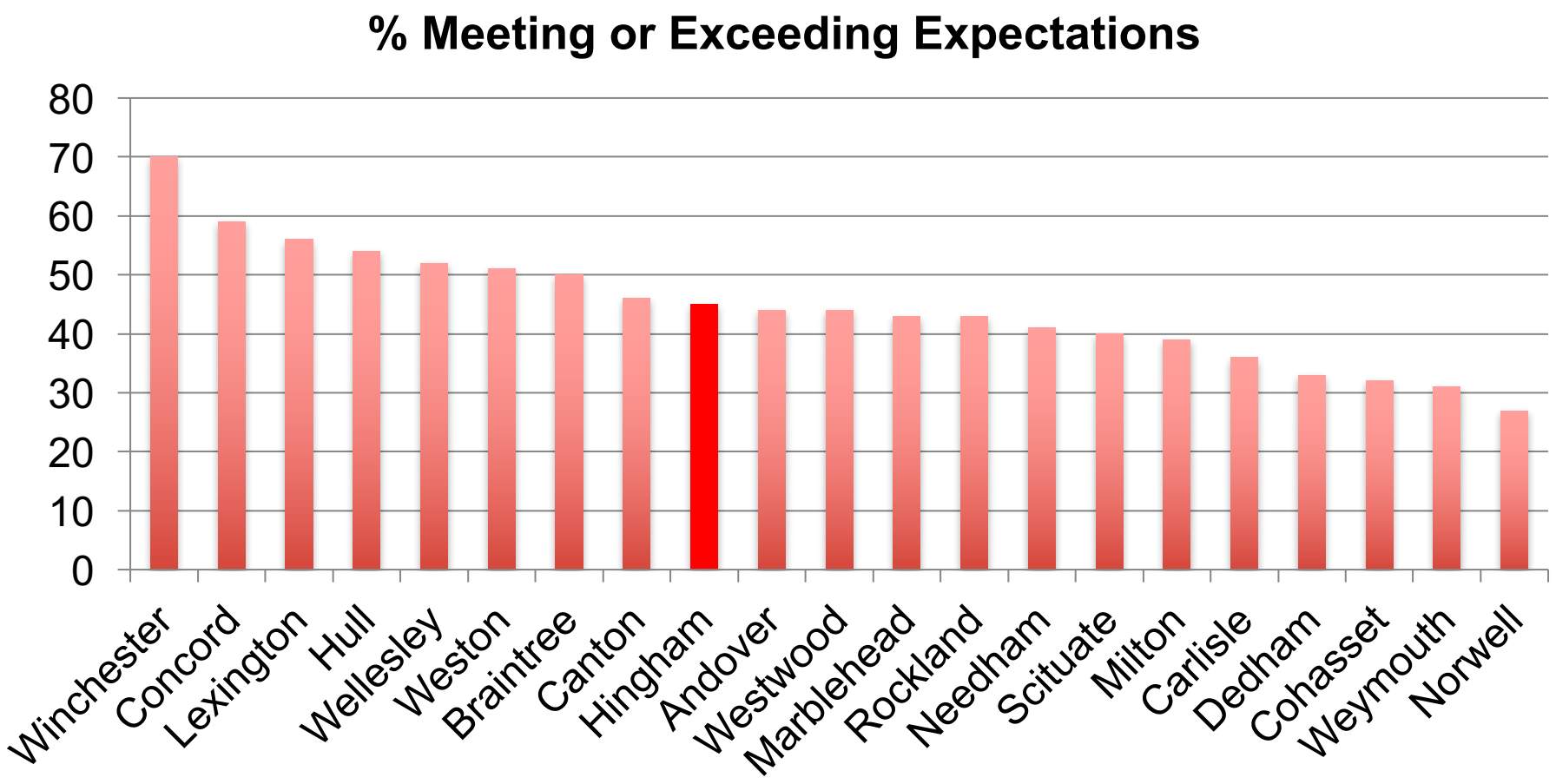
High Needs: Grade 4 Math



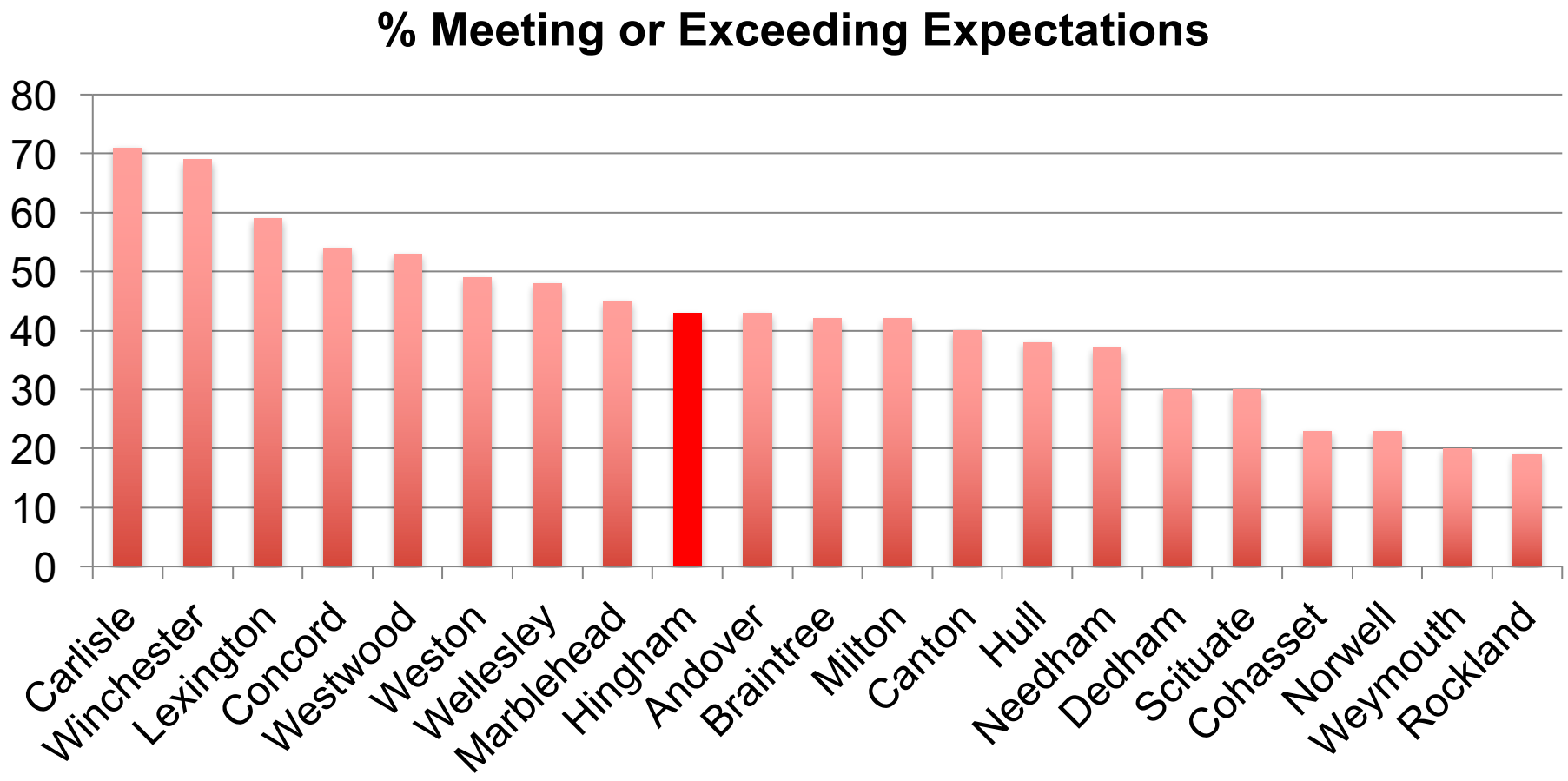
Grade 4: Areas of Strength & Opportunity

Subject	Strength	Opportunity for Growth
ELA	• Performed above the state average for high needs students on 25 of 26 test items	• Challenge areas included vocabulary in-context, analyzing use of structural elements, point of view writing, and explaining a central idea with supporting evidence
Math	• Performed at or above the state average on 39 of 40 test questions	• Challenge areas included place value understanding for multi-digit whole numbers, using place value understanding and properties of operations to perform multi-digit arithmetic , Classifying two-dimensional figures

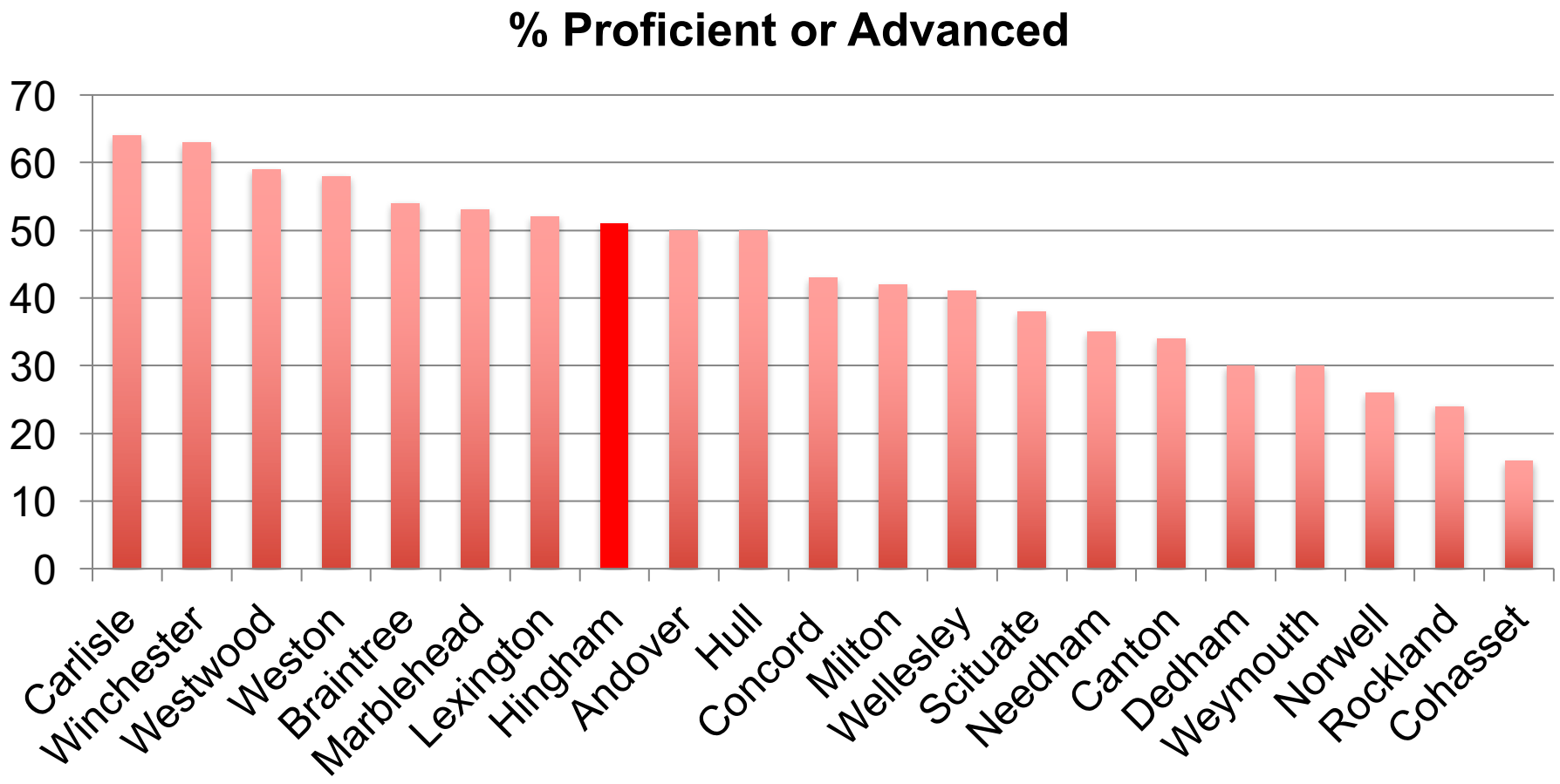
High Needs: Grade 5 ELA



High Needs: Grade 5 Math



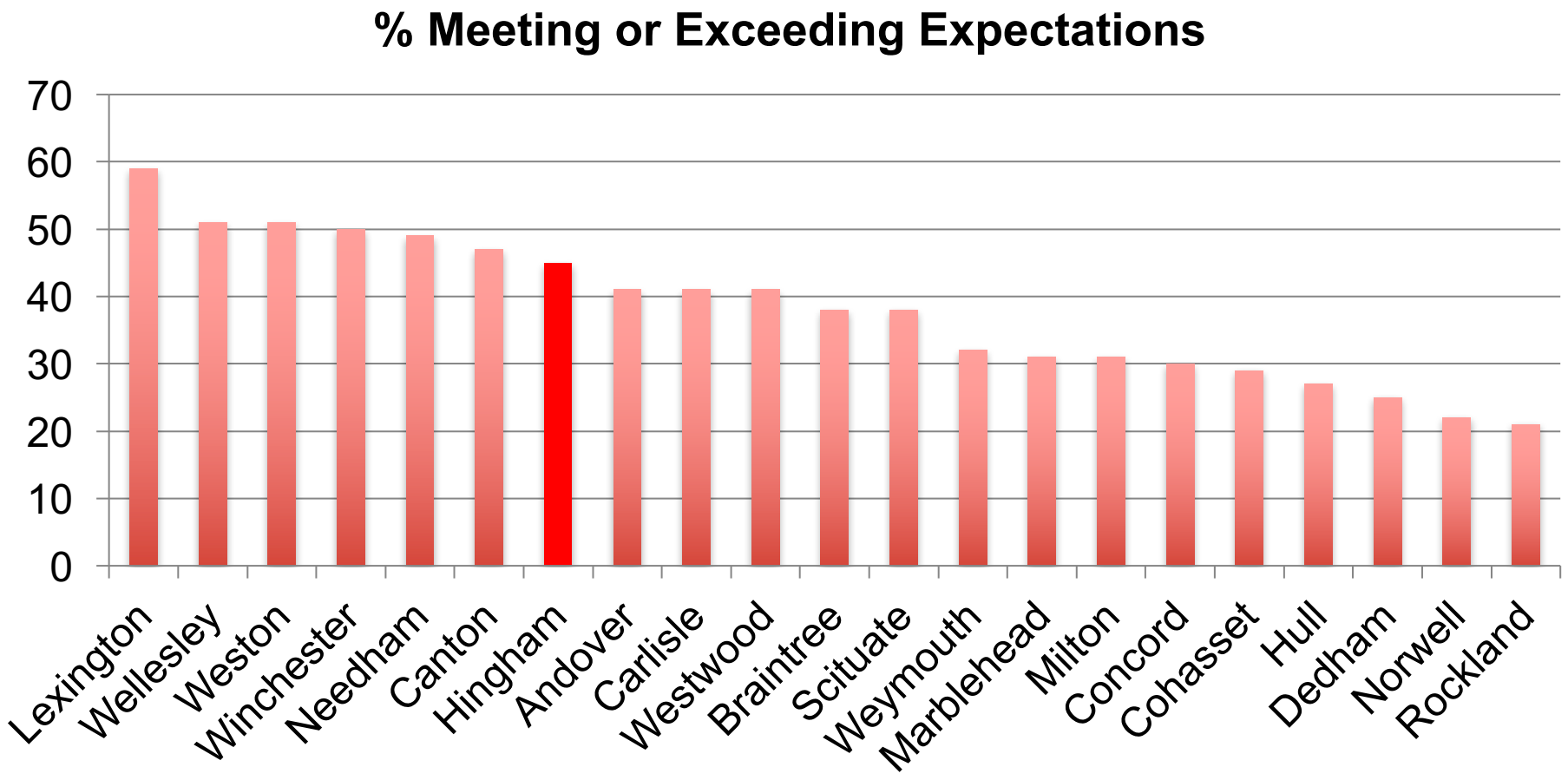
High Needs: Grade 5 STE



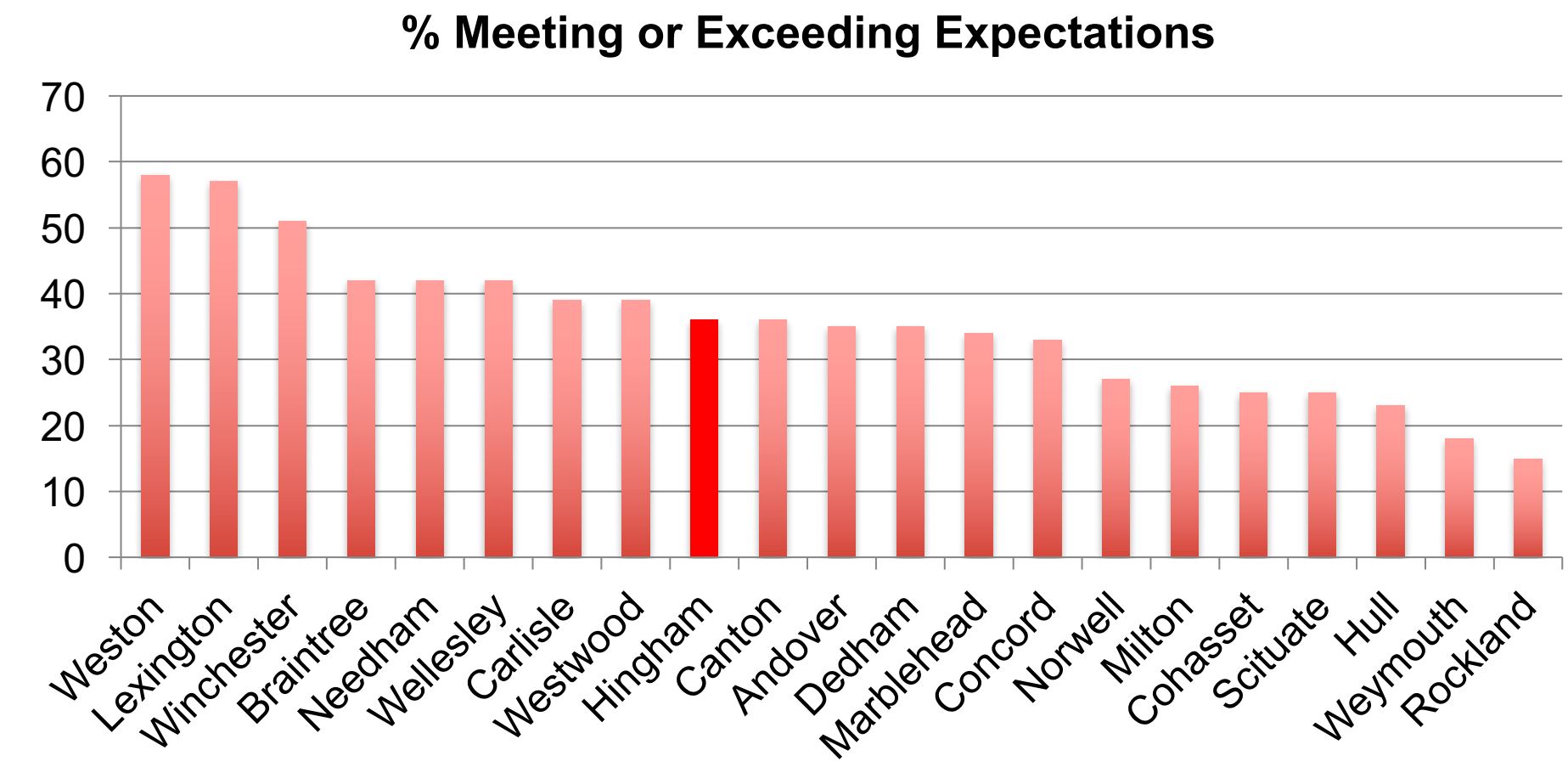
Grade 5: Areas of Strength & Opportunity

Subject	Strength	Opportunity for Growth
ELA	• Performed at or above the state average for high needs students on ALL 27 test items	• Challenge areas included analyzing how events affect character, point of view writing, and expository writing using textual evidence
Math	• Performed at or above the state average on 39 of 40 test questions	• Challenge areas included converting like measurement units, classifying two-dimensional figures, multiplication and division of fractions
Science	• Performed above the state average for HN students on 40 of 42 test questions	• Examine misconceptions related to abstract physical science; improvement on open response questions include reading comprehension strategies and addressing each part of a multi-step question

High Needs: Grade 6 ELA



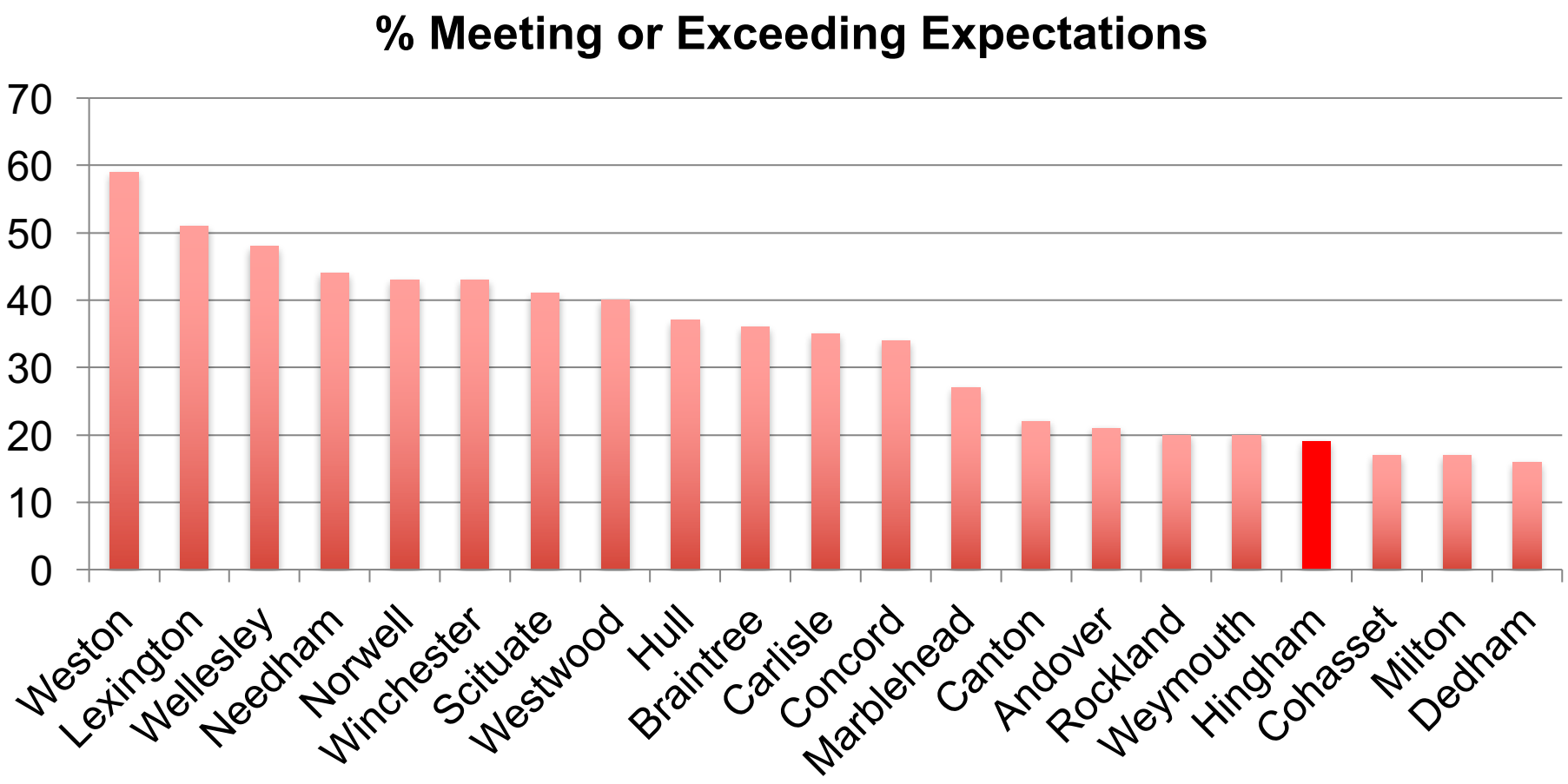
High Needs: Grade 6 Math



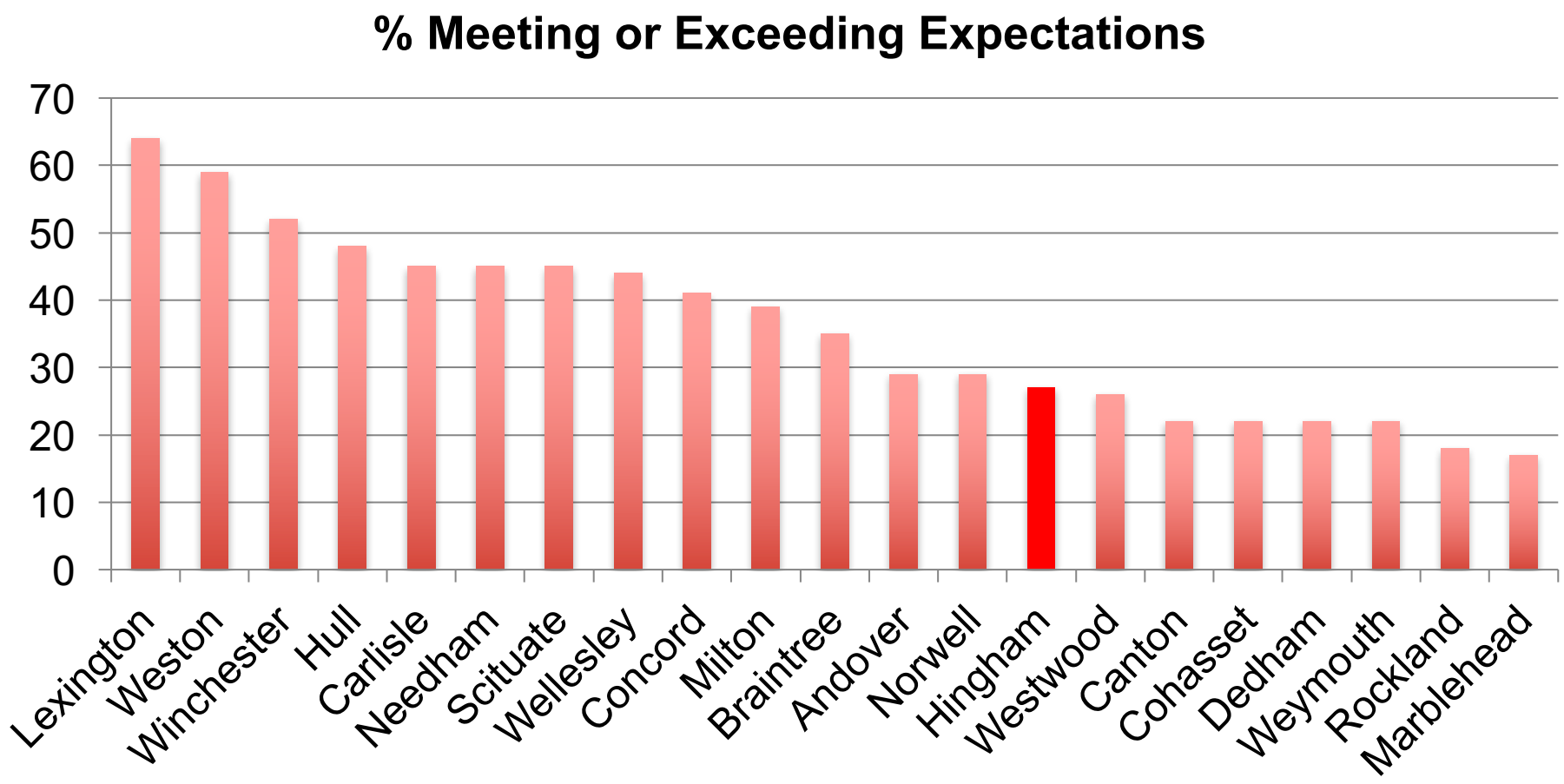
Grade 6: Areas of Strength & Opportunity

Subject	Strength	Opportunity for Growth
ELA	• Performed at or above the state average for high needs students on 24 of 27 test items	• Challenge areas included identifying how paragraphs contribute to plot, comparing ideas from multiple passages using textual evidence, analyzing diction
Math	• Performed above the state average on 39 of 40 test questions	• Writing equations, translating from words to equations, writing an equation given a table of data

High Needs: Grade 7 ELA



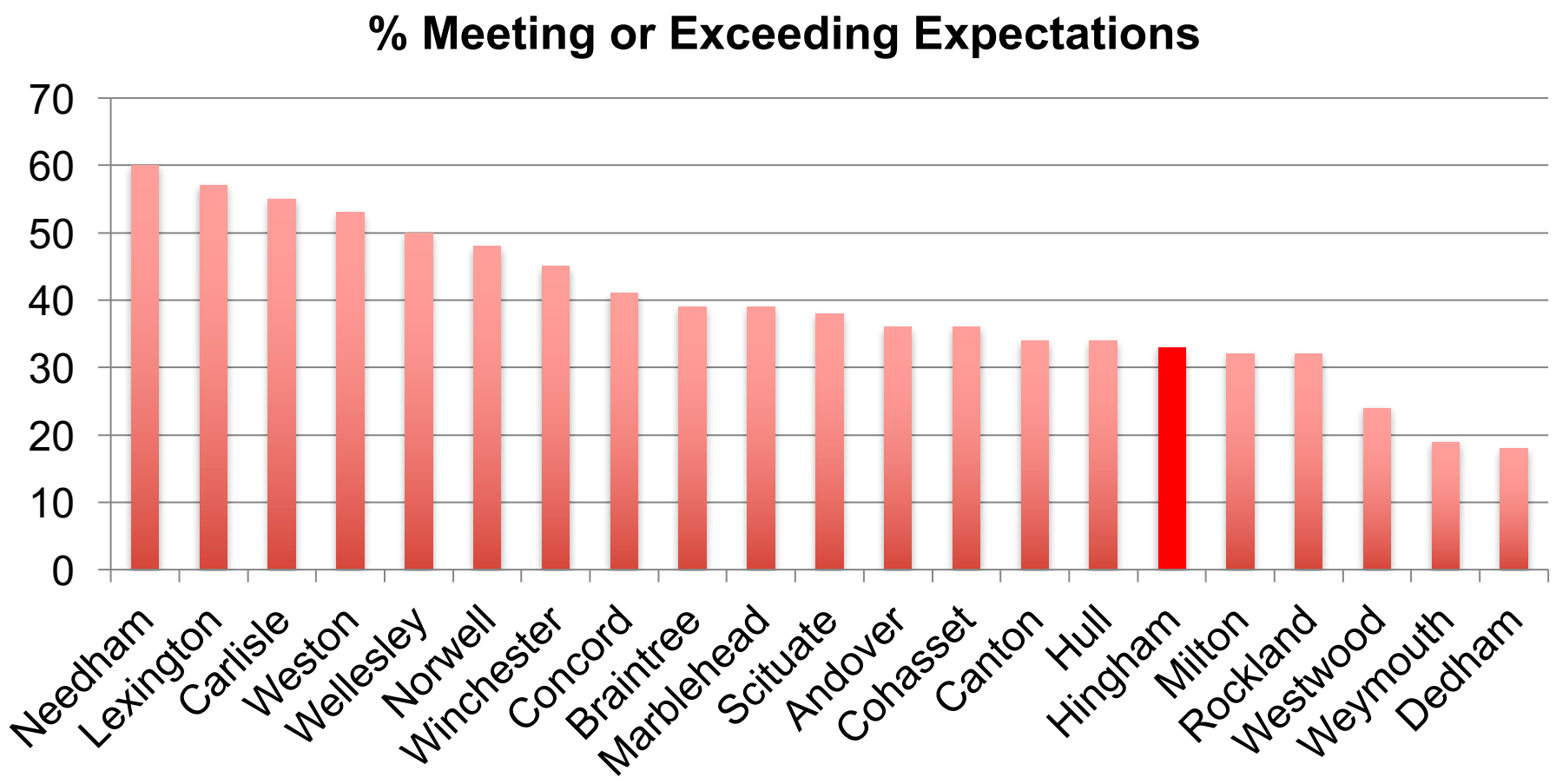
High Needs: Grade 7 Math



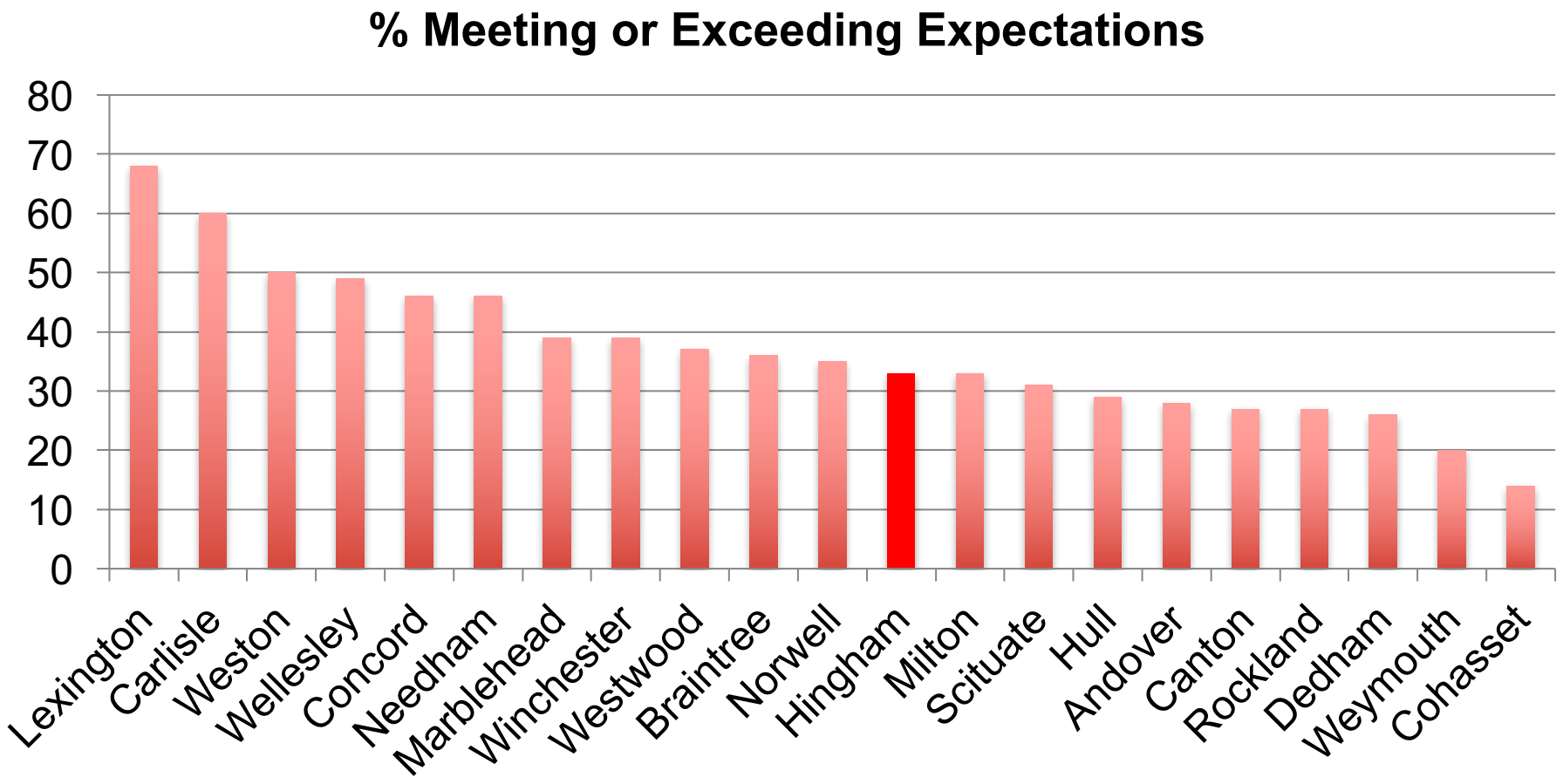
Grade 7: Areas of Strength & Opportunity

Subject	Strength	Opportunity for Growth
ELA	• Performed at or above the state average for high needs students on 17 of 27 test items	• Challenge areas included identifying vocabulary in-context, determining theme, finding supporting evidence, drawing inferences, and analyzing an internal monologue
Math	• Performed above the state average on 36 of 40 questions	• Geometry with 3 dimensional shapes (unreleased question), volume of composite shape, scale drawings (unreleased question), factoring a binomial along

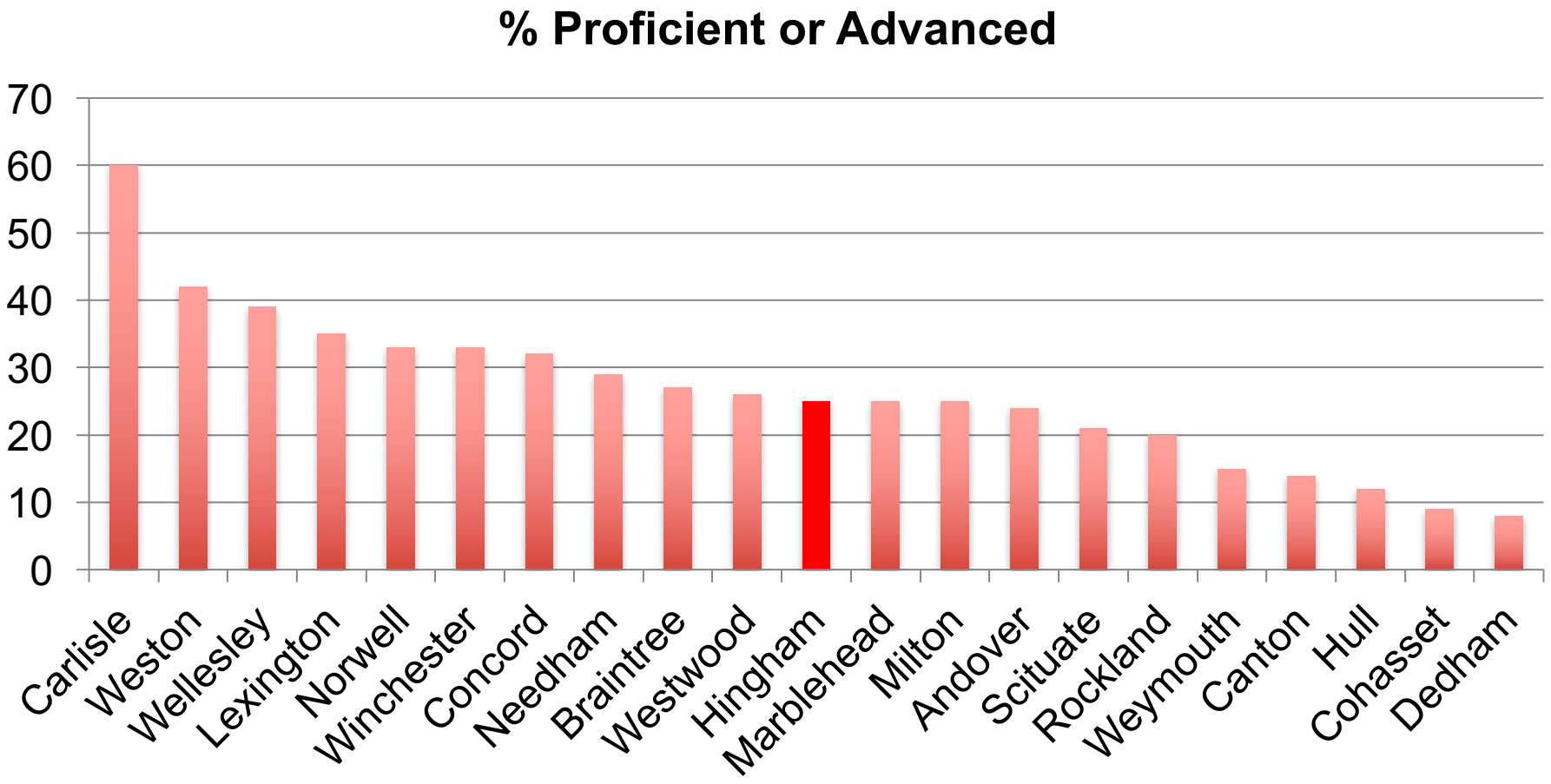
High Needs: Grade 8 ELA



High Needs: Grade 8 Math



High Needs: Grade 8 STE



Grade 8: Areas of Strength & Opportunity

Subject	Strength	Opportunity for Growth
ELA	• Performed at or above the state average for high needs students on 25 of 27 test items	• Challenge areas included analyzing text for theme, identifying vocabulary in-context, finding supporting evidence, perspective writing, and isolating details in a primary source
Math	• Performed at or above state average on 20 or 40 questions	• Geometry: rotations in a plane • Pythagorean Theorem: specifically with line segment in a plane
Science	• Performed at or above the state average for HN students on 38 of 42 test questions	• Strategies for improvement on multiple choice include practice interpreting data tables, graphs & diagrams • Strategies for improvement on open response questions include reading comprehension strategies (*highlight relevant content/circle action words*) and addressing each part of a multi-step question

Students with Disabilities Subgroup

- A count of all students in a school or district with a disability, as defined under the IDEA, who have an IEP.

MCAS RESULTS: Special Education Meeting/Exceeding Expectations 2018

Grades 3, 4, & 5	Hingham	State
Grade 3 Reading	41	17
Grade 3 Math	43	19
Grade 4 ELA	33	16
Grade 4 Math	41	16
Grade 5 ELA	32	12
Grade 5 Math	30	17
Grade 5 STE*	40	17

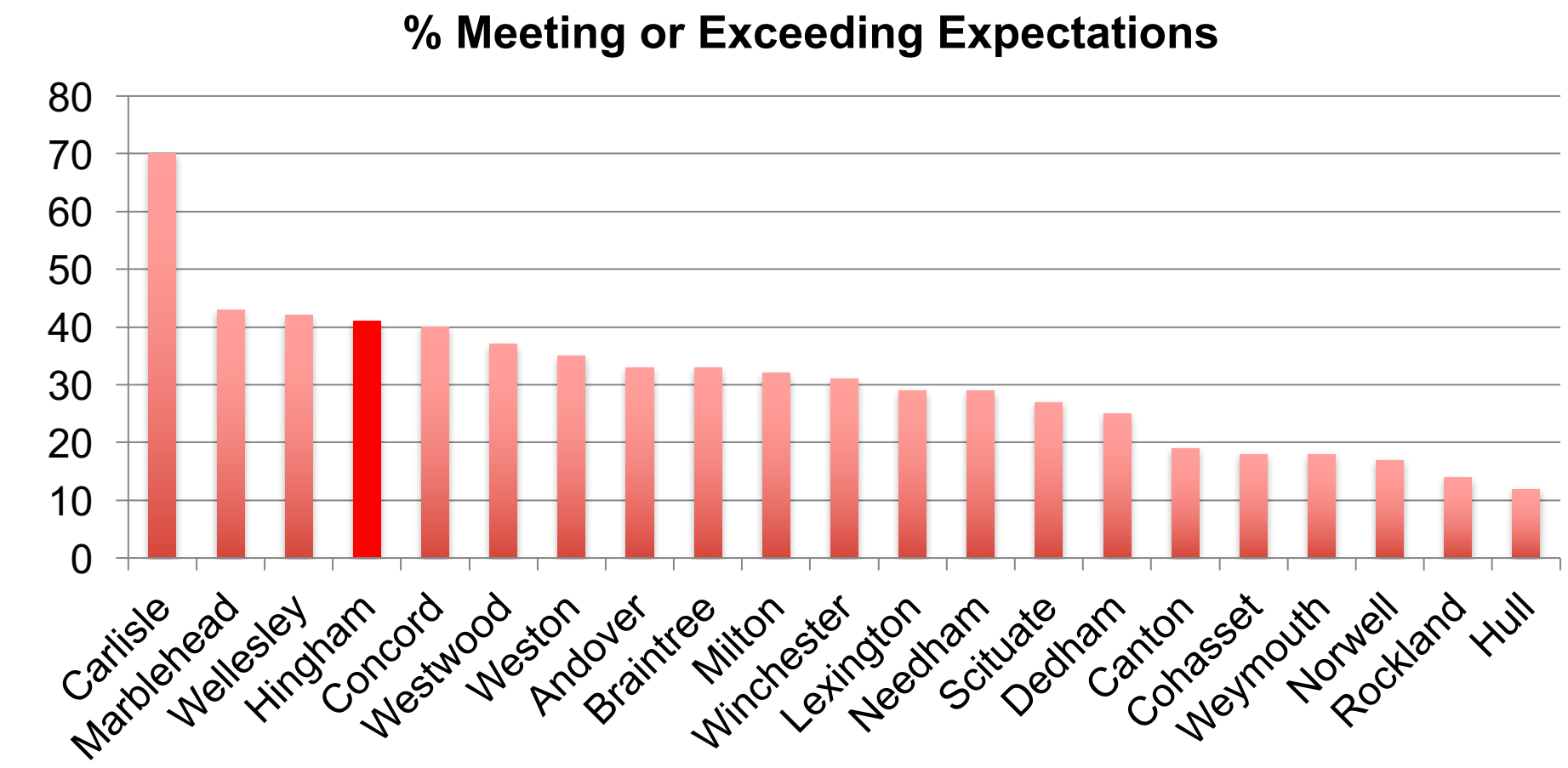
Grades 6, 7, & 8	Hingham	State
Grade 6 ELA	34	13
Grade 6 Math	29	13
Grade 7 ELA	13	9
Grade 7 Math	21	14
Grade 8 ELA	24	14
Grade 8 Math	22	12
Grade 8 STE*	9	10

All Grades K-8	Hingham	State
ELA	29	15
Math	32	14

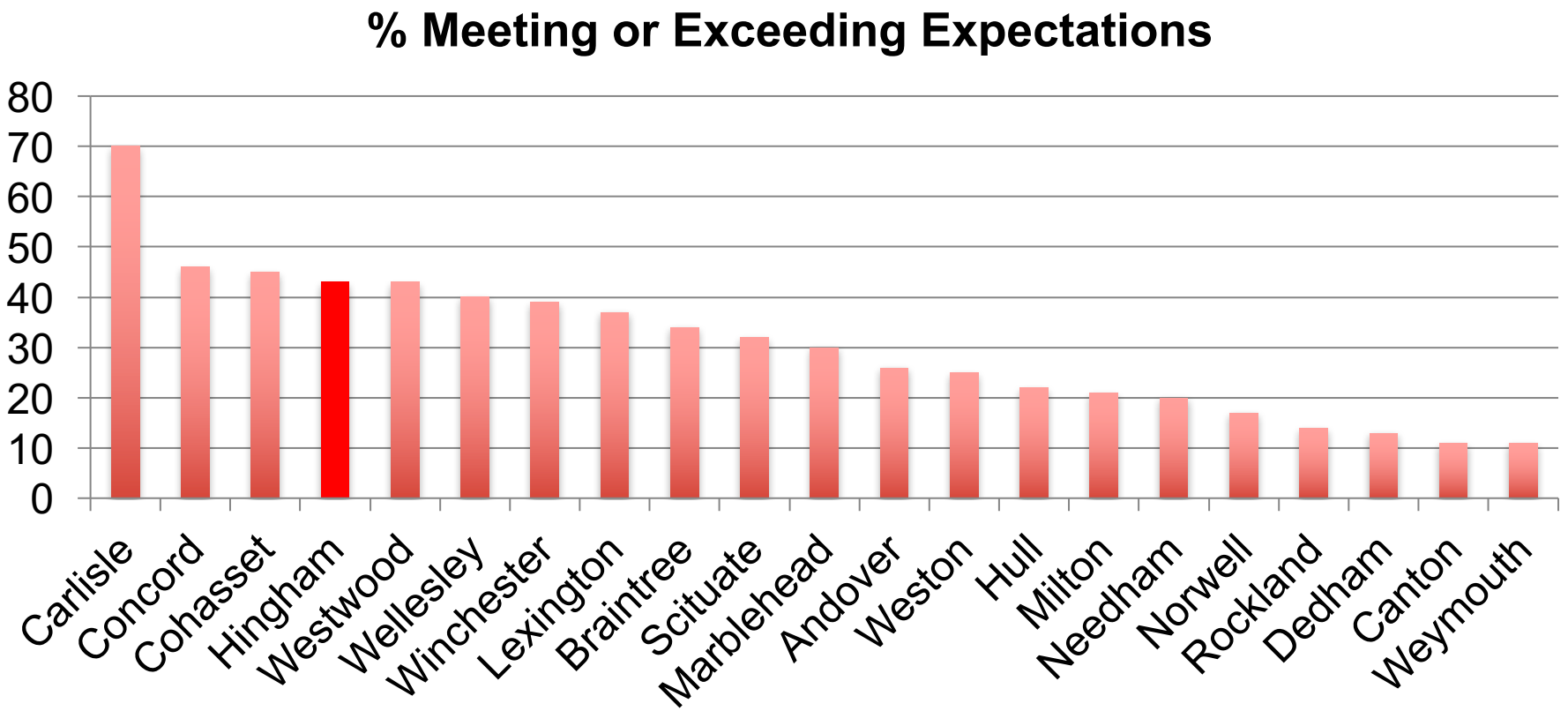
Grade 10	Hingham	State
Grade 10 ELA*	86	69
Grade 10 Math*	56	41
Grade 10 Science*	51	39

*** Legacy MCAS - % Proficient or Advanced**

Students with Disabilities: Grade 3 Reading



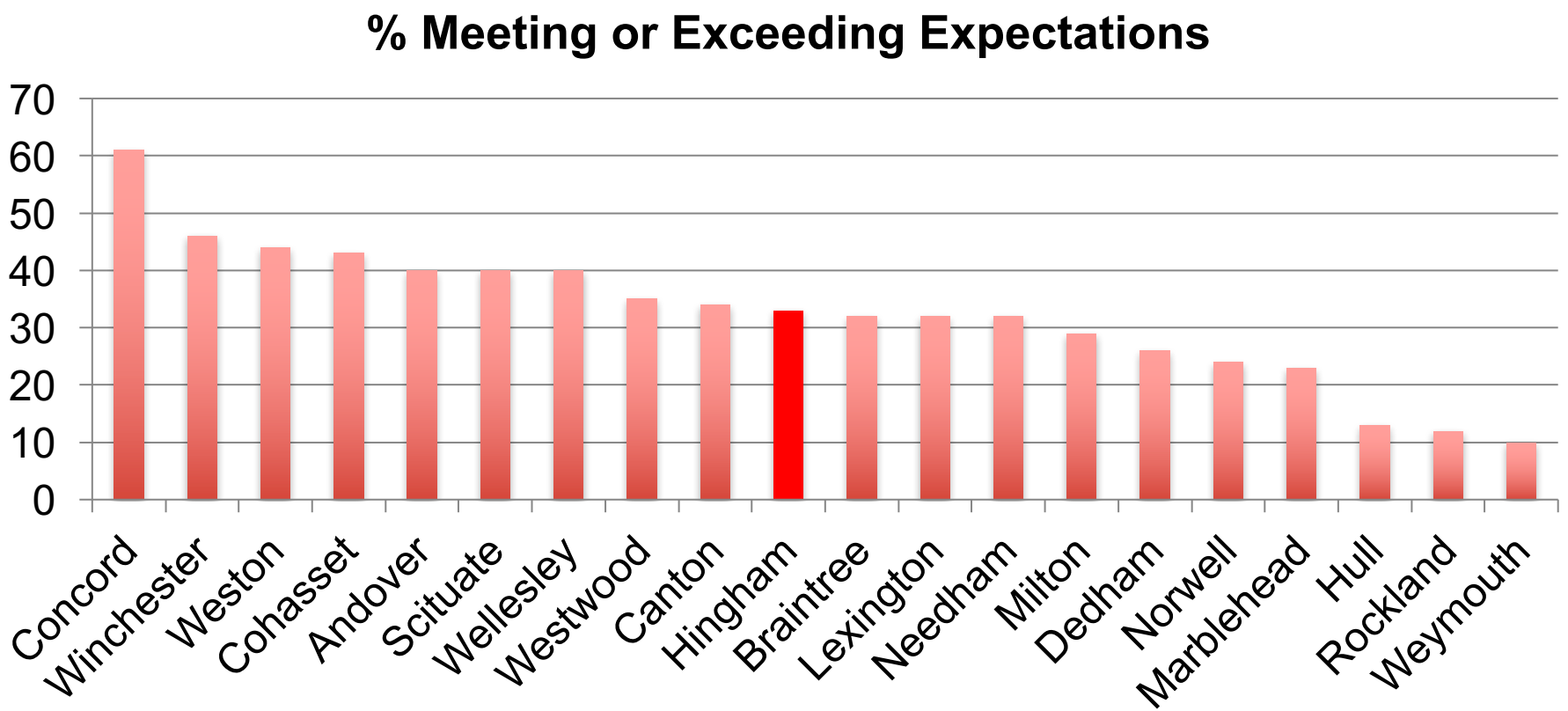
Students with Disabilities: Grade 3 Math



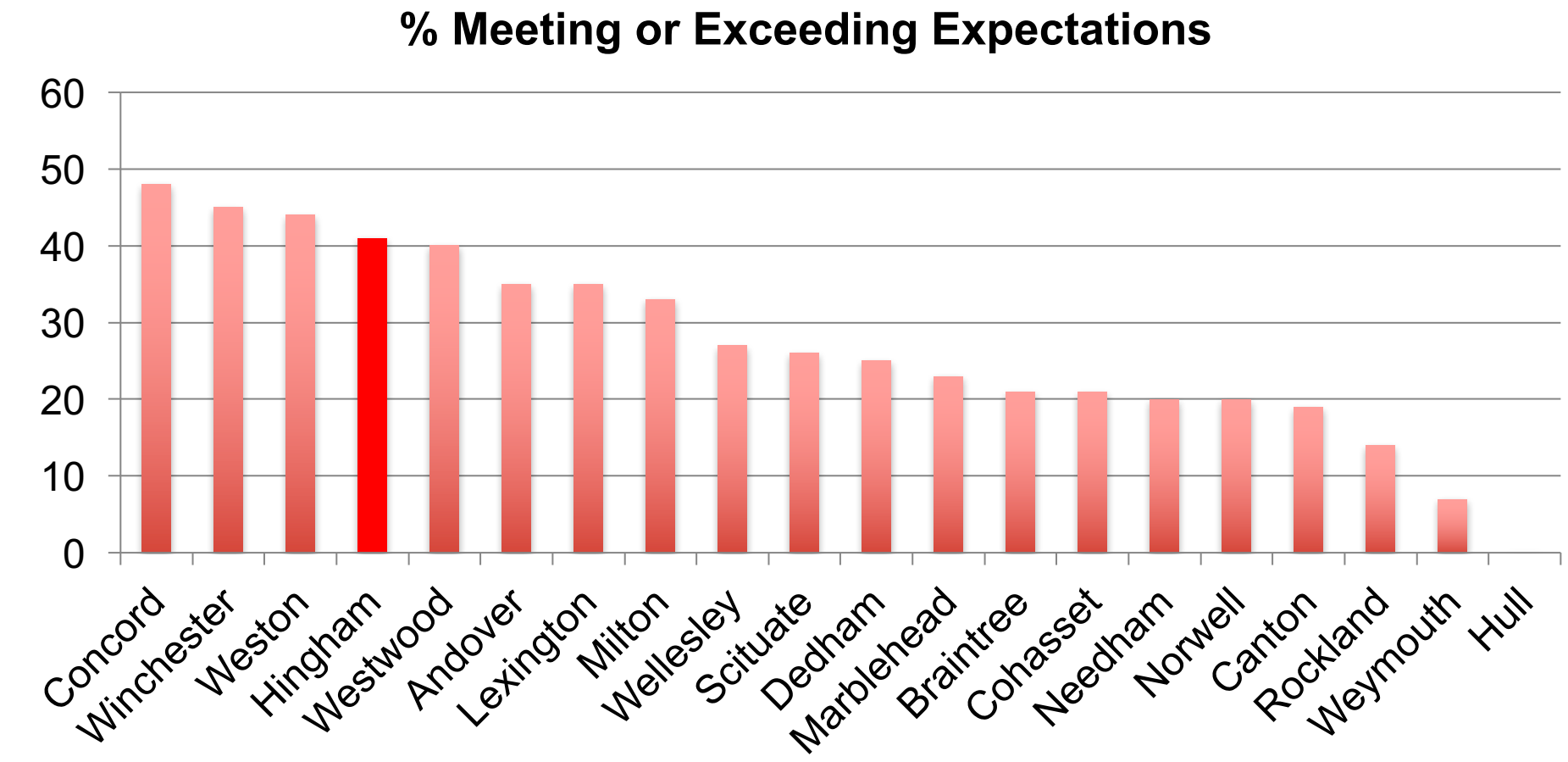
Grade 3: Areas of Strength & Opportunity

Subject	Strength	Opportunity for Growth
ELA	• Performed ABOVE the state average for SWD on all 26 test items	• Challenge areas included analyzing text features, writing to predict, comparing main ideas through use of supporting evidence
Math	• Performed above the state average for SWD on 38 of 40 test questions	• Challenge areas included recognizing perimeter, distinguishing between linear and area measures; telling and writing time to the nearest minute/measure time intervals in minutes; understanding that shapes in different categories may share attributes

Students with Disabilities: Grade 4 ELA



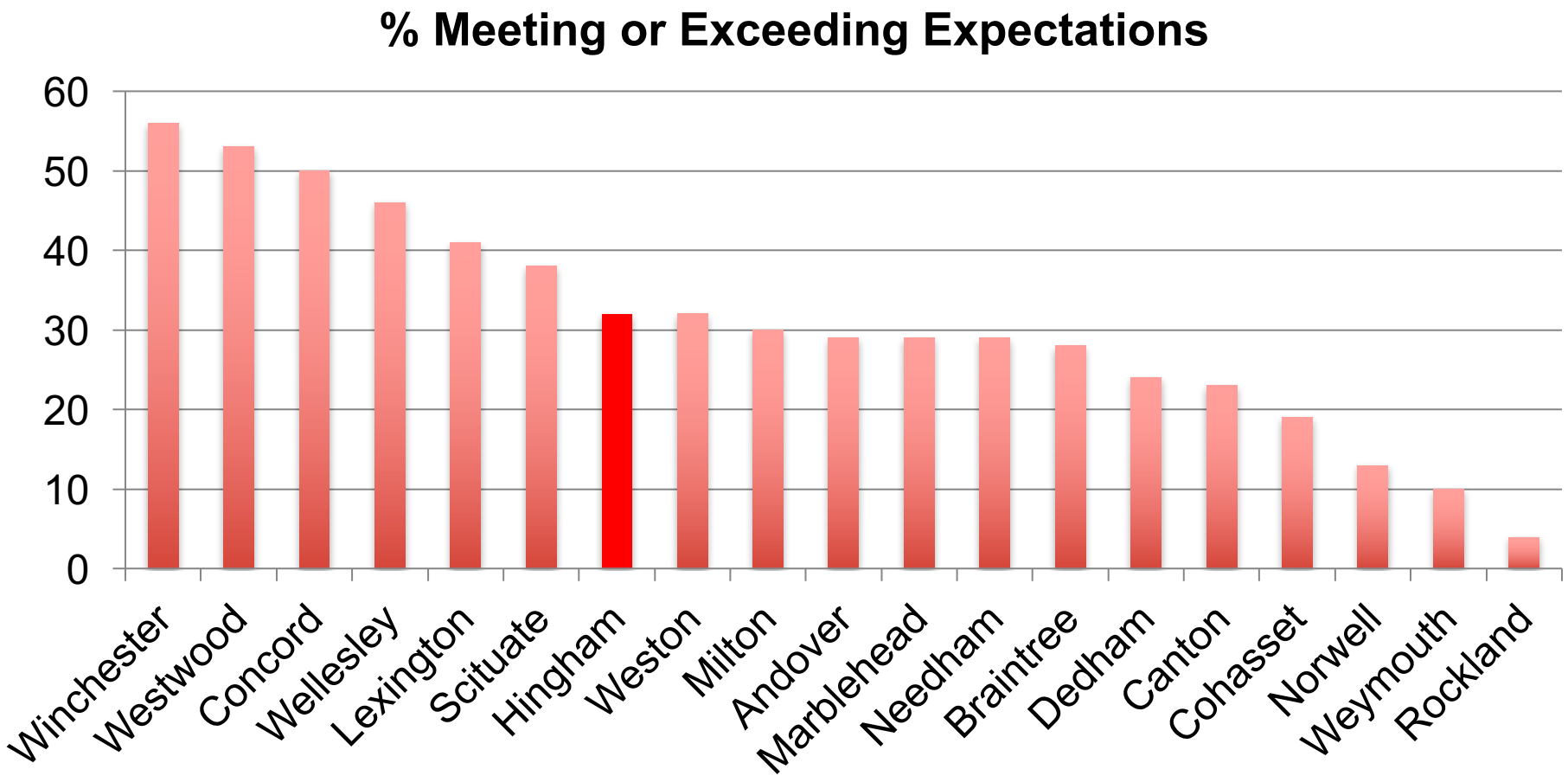
Students with Disabilities: Grade 4 Math



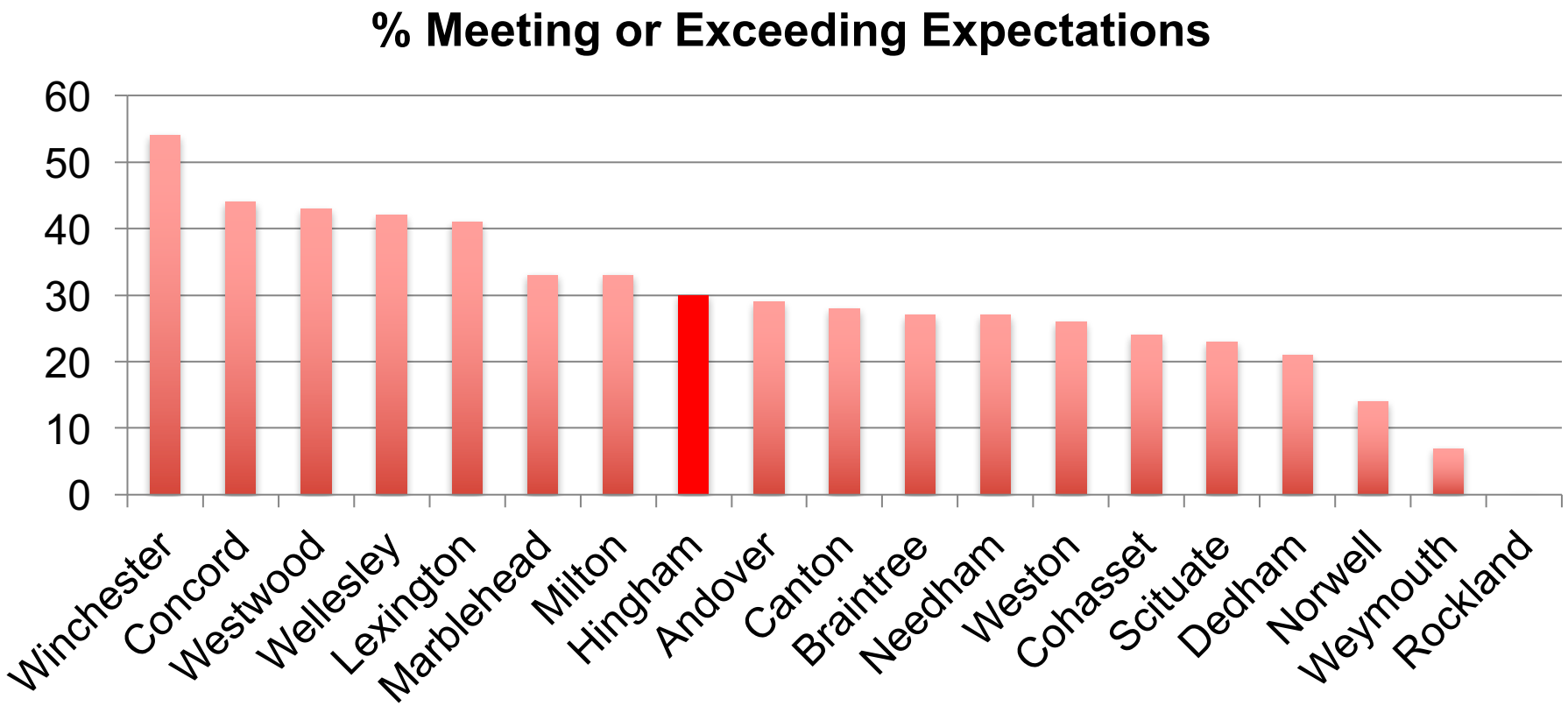
Grade 4: Areas of Strength & Opportunity

Subject	Strength	Opportunity for Growth
ELA	• Performed above the state average for SWD on ALL 26 test items	• Challenge areas included point of view writing, comparing structural elements, and explaining a central idea with supporting evidence
Math	• Performed above the state average for SWD on all test questions	• Challenge areas included place value understanding for multi-digit whole numbers, using place value understanding and properties of operations to perform multi-digit arithmetic , Classifying two-dimensional figures

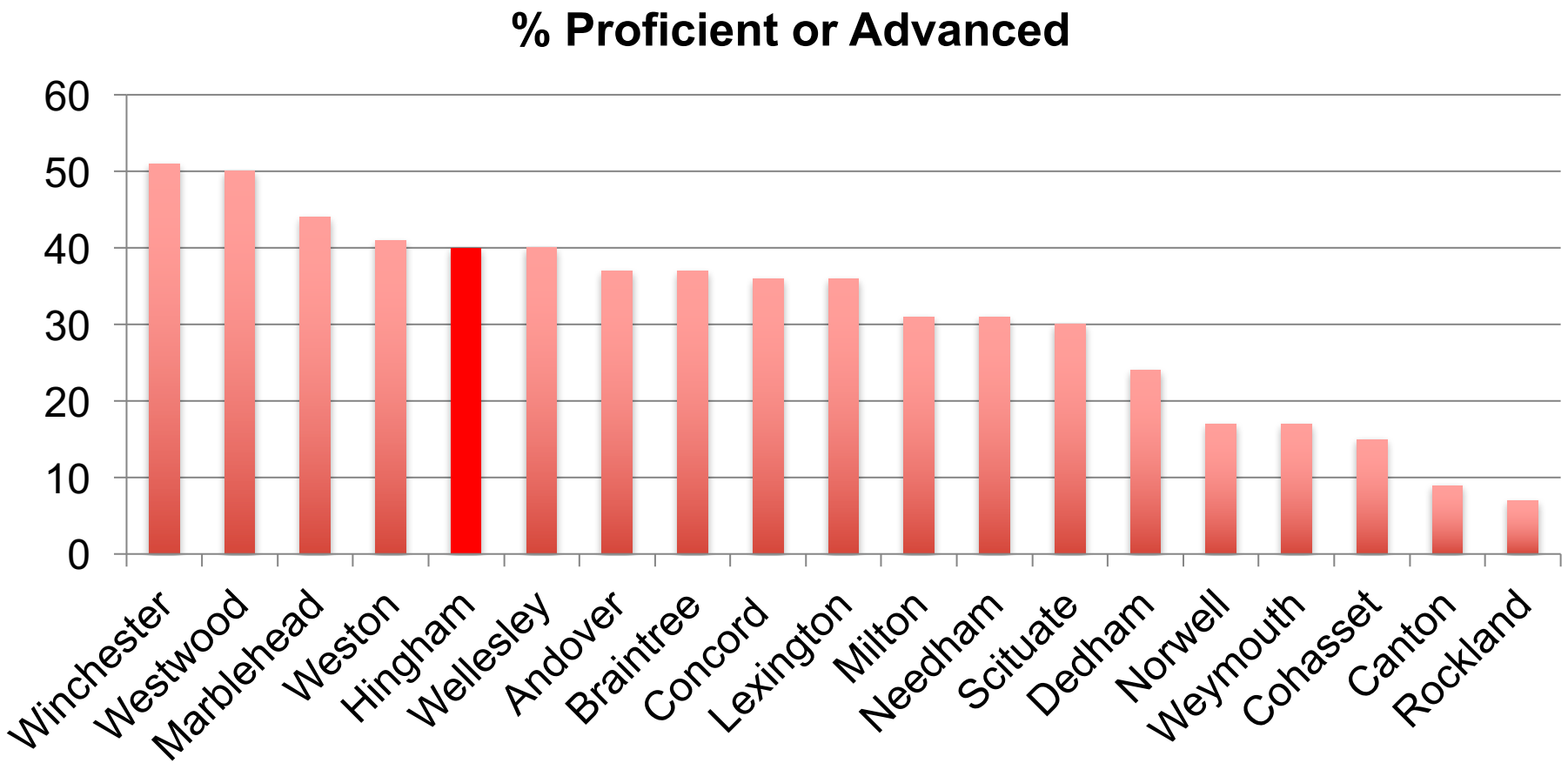
Students with Disabilities: Grade 5 ELA



Students with Disabilities: Grade 5 Math



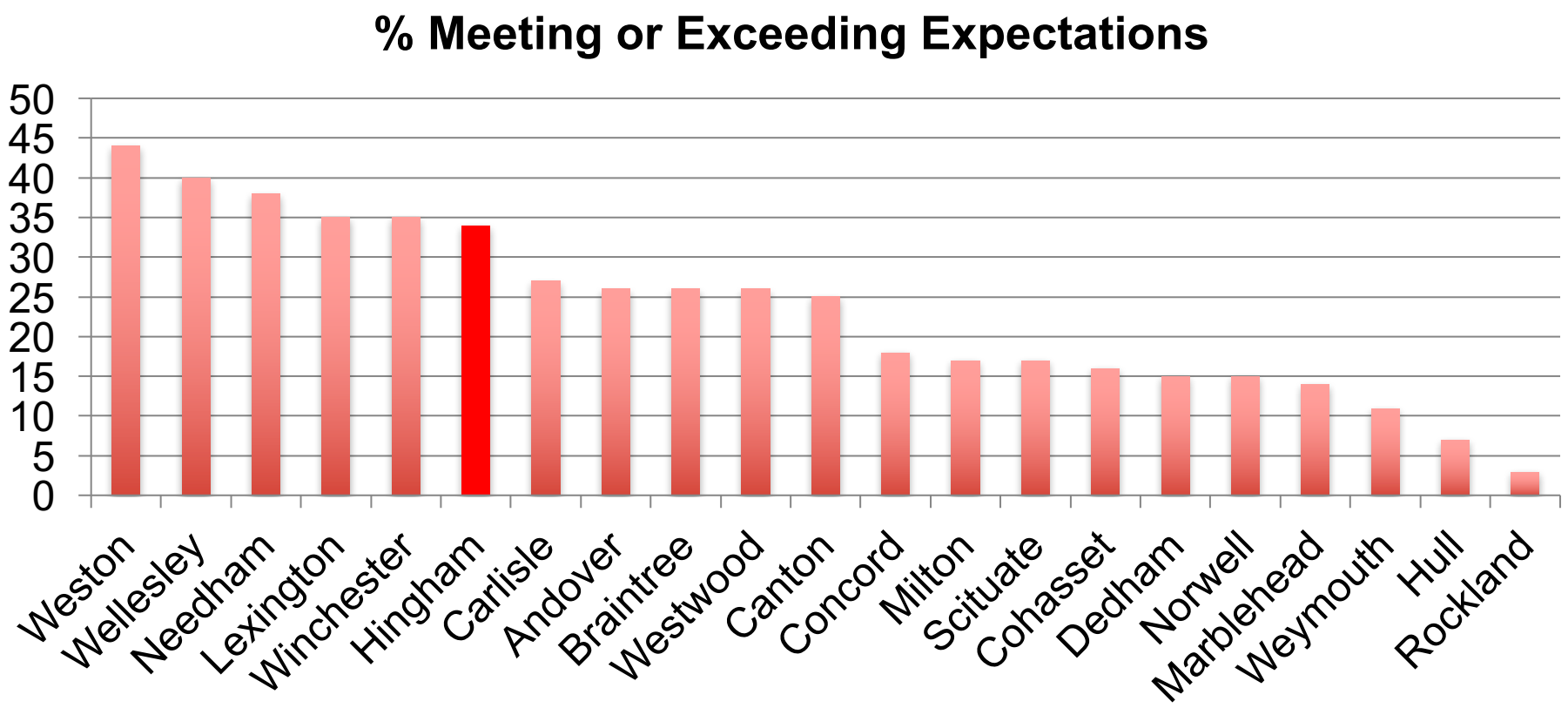
Students with Disabilities: Grade 5 STE



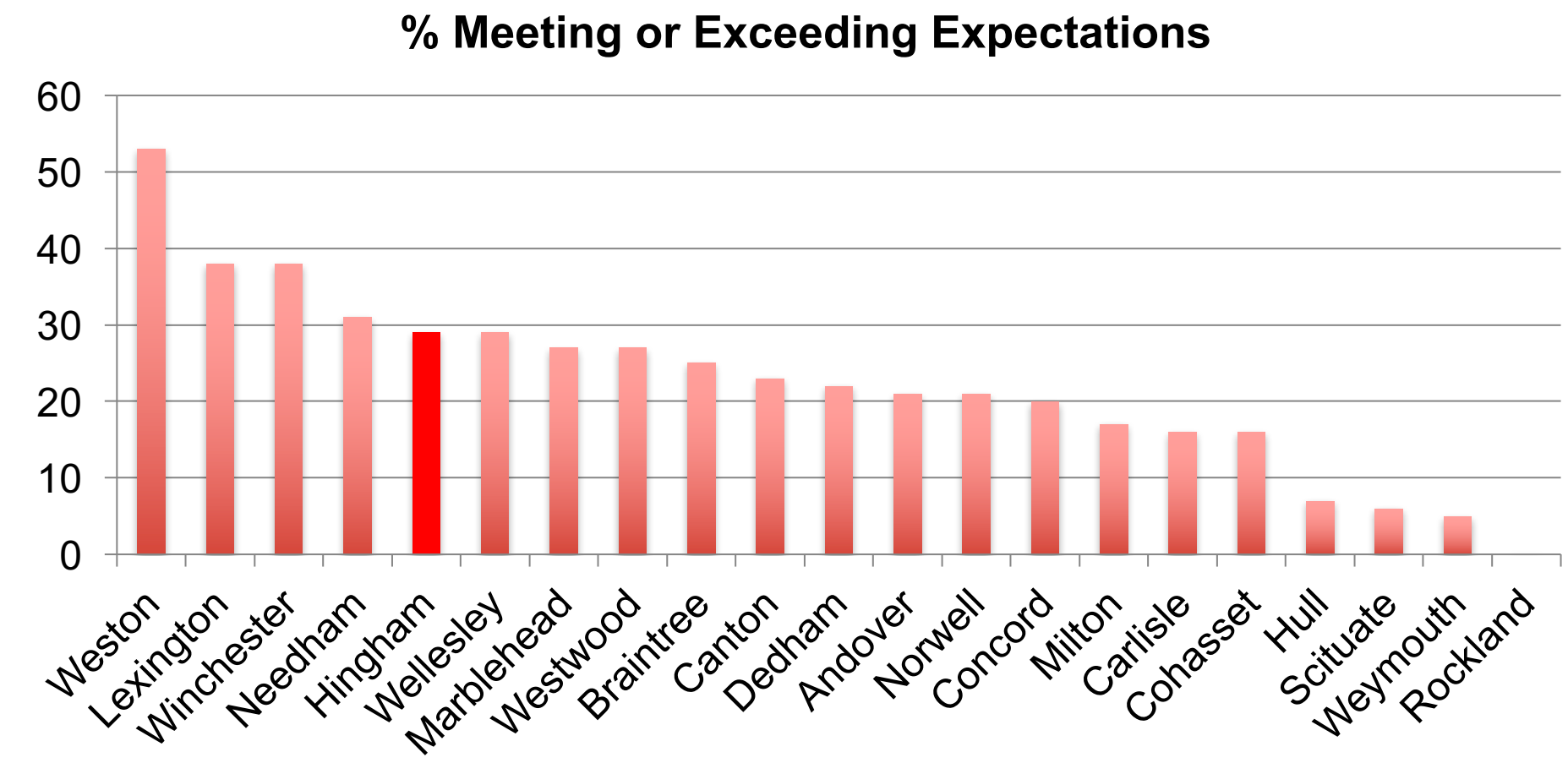
Grade 5: Areas of Strength & Opportunity

Subject	Strength	Opportunity for Growth
ELA	• Performed at or above the state average for SWD on 25 of 27 test items	• Challenge areas included integrating information from multiple passages to determine an additional source, and using descriptive language for identification of inferences
Math	• Performed above the state average for SWD on 39 of 40 test questions	• Challenge areas included converting like measurement units, classifying two-dimensional figures, multiplication and division of fractions
Science	• Performed above the state average for SWD on 40 of 42 test questions • Performed on average 15 points above the state performance levels for SWD	• Examine misconceptions related to abstract physical science; improvement on open response questions include reading comprehension strategies and addressing each part of a multi-step question

Students with Disabilities: Grade 6 ELA



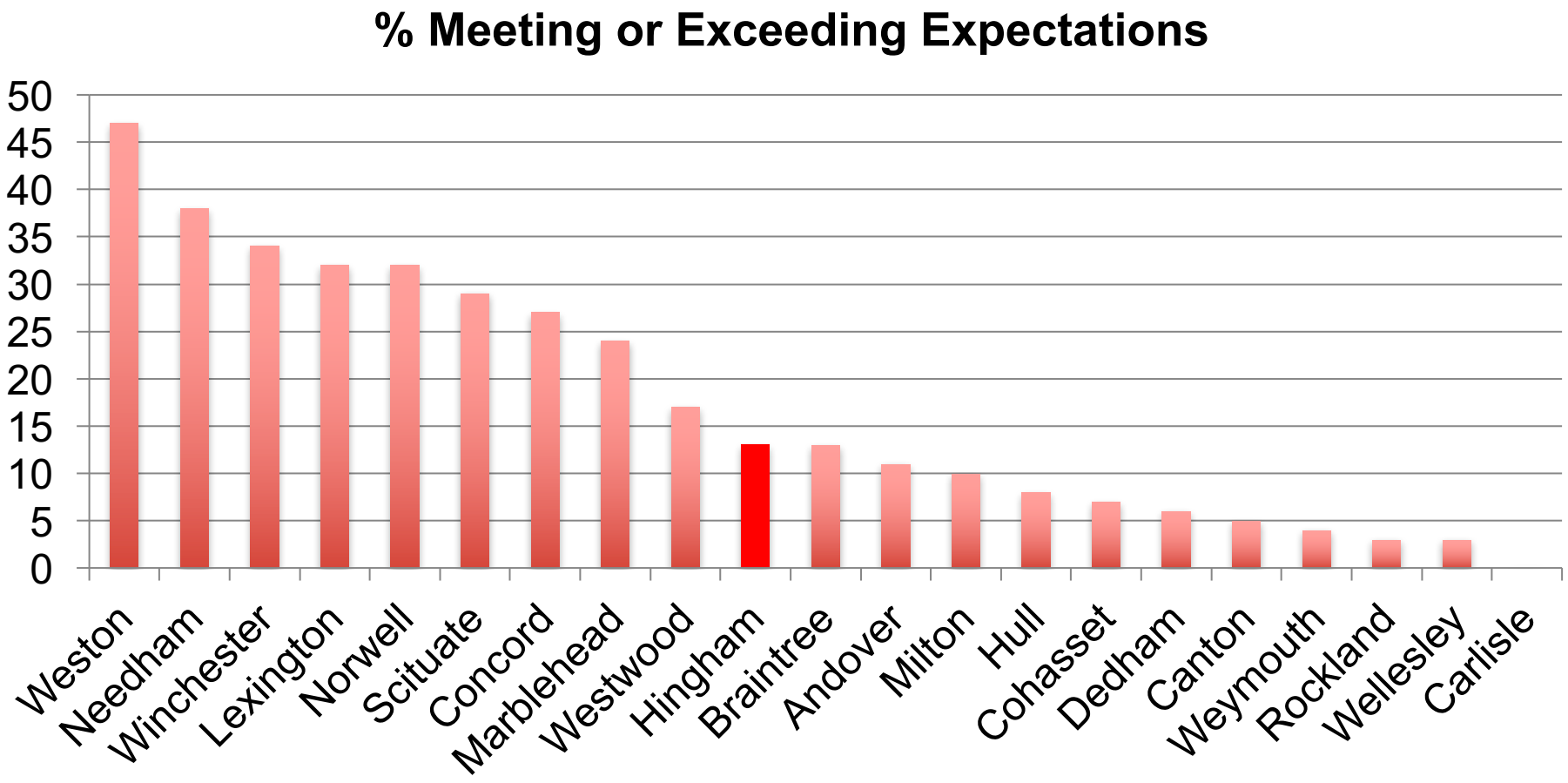
Students with Disabilities: Grade 6 Math



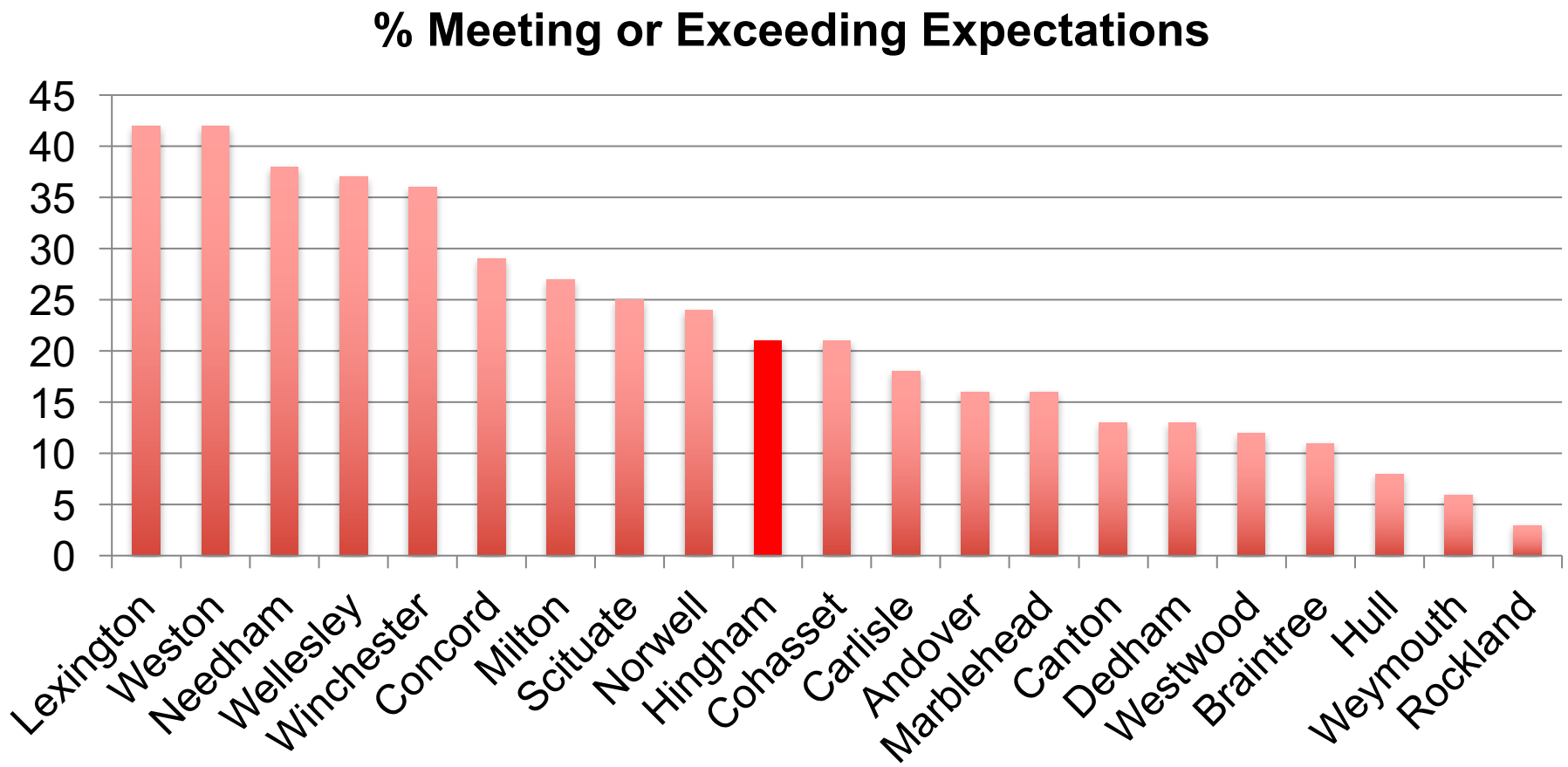
Grade 6: Areas of Strength & Opportunity

Subject	Strength	Opportunity for Growth
ELA	• Performed at or above the state average for SWD on 26 of 27 test items	• Challenge areas included identifying how paragraphs contribute to plot, comparing ideas from multiple passages using textual evidence, analyzing diction
Math	• Performed above the state average for SWD on 39 of 40 test questions	• Writing equations, translating from words to equations, simplifying expressions with an exponent

Students with Disabilities: Grade 7 ELA



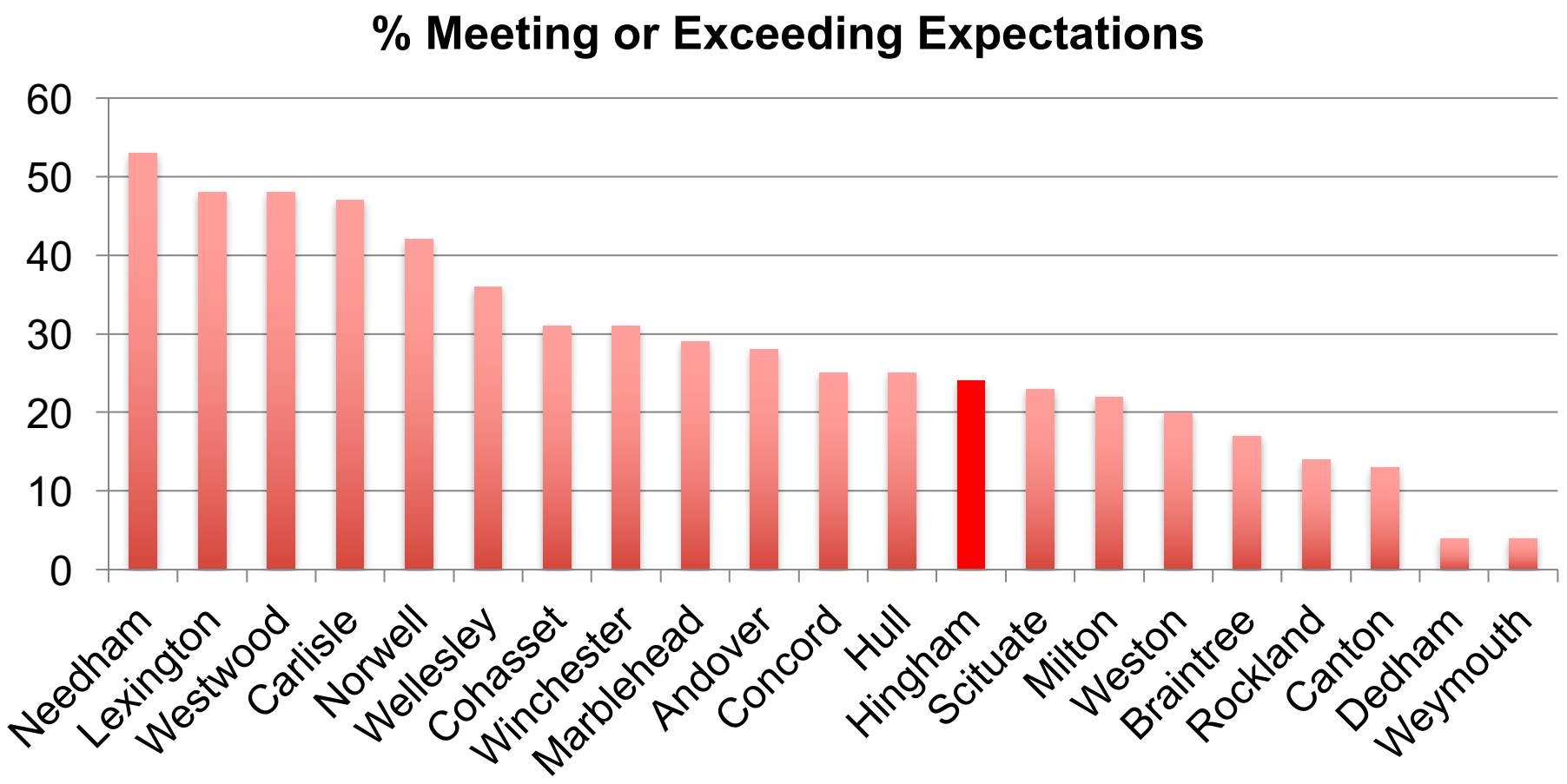
Students with Disabilities: Grade 7 Math



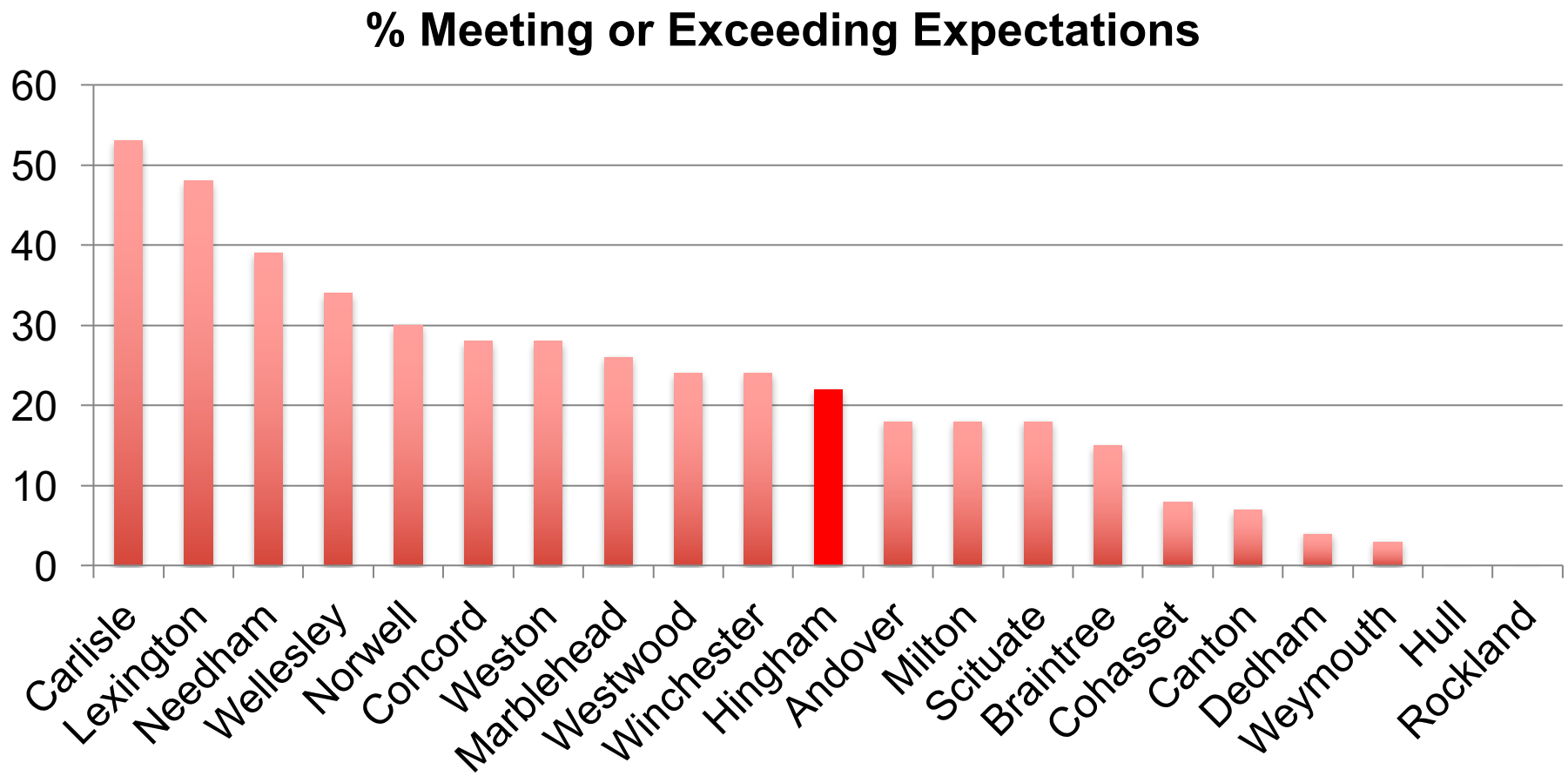
Grade 7: Areas of Strength & Opportunity

Subject	Strength	Opportunity for Growth
ELA	• Performed at or above the state average for SWD on 24 of 27 test items	• Challenge areas included identifying vocabulary in-context, finding supporting evidence, and analyzing an internal monologue
Math	• Performed at or above the state average for SWD on 37 of 40 test questions	• Geometry: scale drawings (unreleased question) • Surface Area and Volume (unreleased question) • Factoring a binomial along

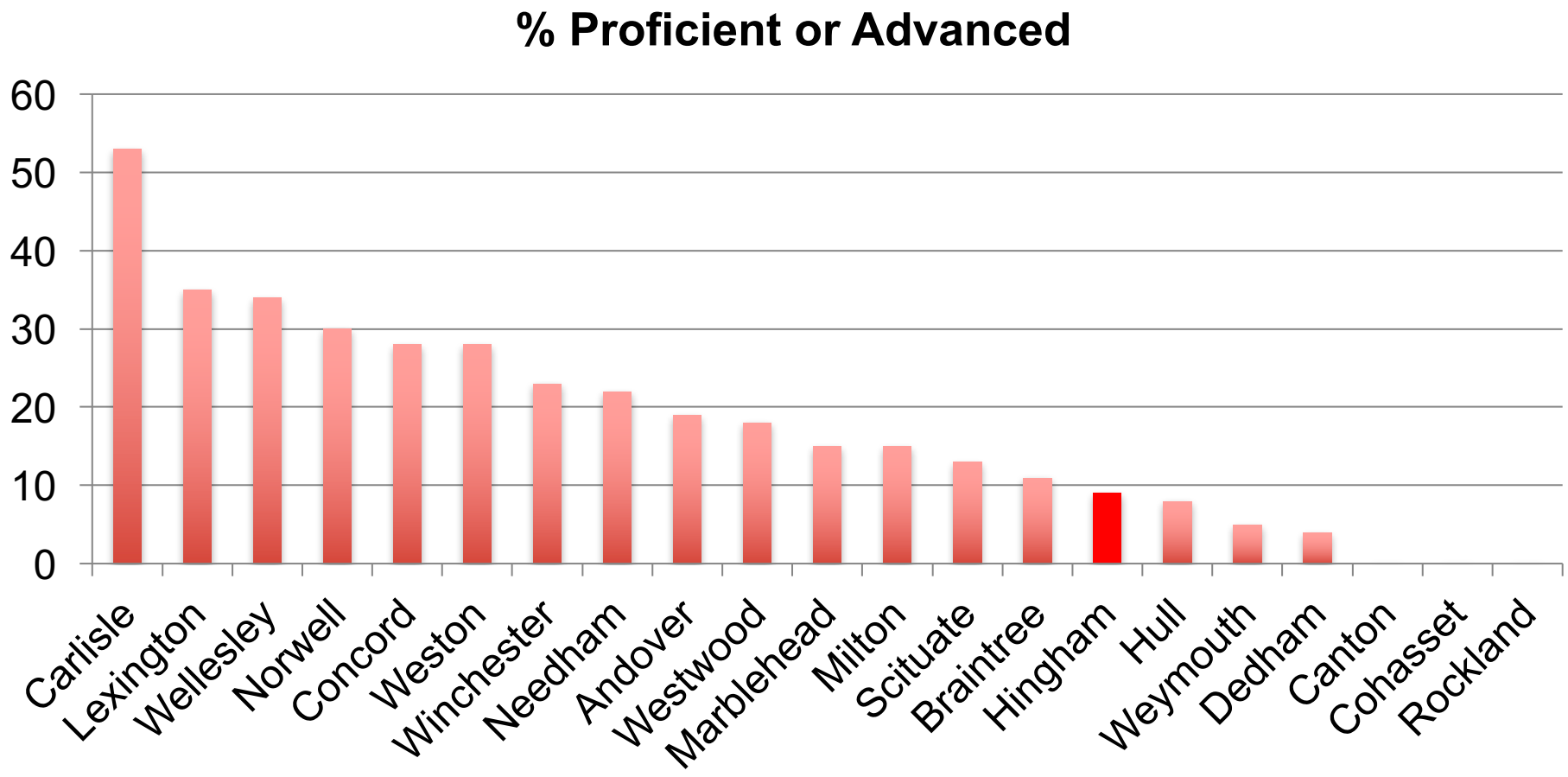
Students with Disabilities: Grade 8 ELA



Students with Disabilities: Grade 8 Math



Students with Disabilities: Grade 8 STE



Grade 8: Areas of Strength & Opportunity

Subject	Strength	Opportunity for Growth
ELA	• Performed at or above the state average for SWD on 25 of 27 test items	• Challenge areas included analyzing text for theme, identifying vocabulary in-context, finding supporting evidence, interpreting descriptive language, and understanding point of view selection
Math	• Performed at or above the state average for SWD on 29 of 40 test questions	• Rotations in a plane • Graphing using y=mx+b • Determining if a relation is a function from a table of values
Science	• Performed at or above the state average for SWD on 33 of 42 test questions • performed on average 7 points above the state performance levels for SWD	• Open response questions and multiple choice are an area of focus

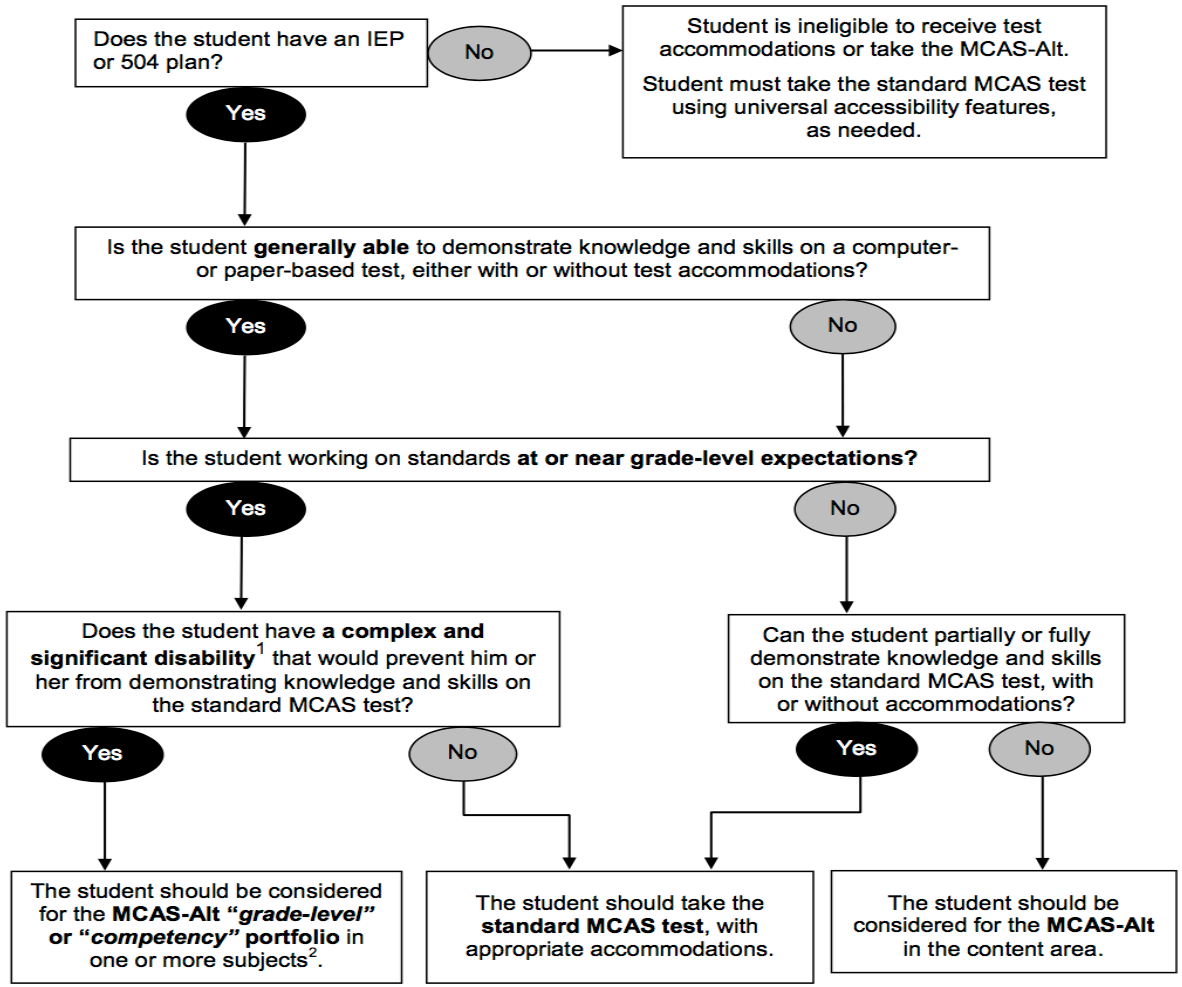
MCAS Alt – Hingham

School	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
East	2	3	1	0	2	1
Foster	0	0	0	0	2	1
PRS	0	0	1	1	1	1
South	0	1	1	4	4	4
HMS	7	6	6	5	5	3
HHS	0	0	5	0	2	3
Total	**9**	**10**	**14**	**10**	**16**	**13**

MCAS Alt – Decision Making

Decision-Making Tool for MCAS Participation by Students with Disabilities

The decision chart shown below may be used by IEP teams and 504 plan coordinators to make annual decisions regarding appropriate student participation in MCAS *for each content area* being assessed.



Part V: Next Steps

District Data-Based Action Plan

- Analysis of district, school and student results, item analyses, and disaggregated results with teaching staff
- Continued use of MCAS scores, item analyses, and additional assessment results to track and monitor individual student performance and cohort results.
- Continued opportunities for students to practice answering a variety of types of questions and assessment measures and to practice test-taking strategies.
- Continued emphasis on the use of instructional strategies which promote critical thinking, extended problem solving, and writing for a variety of purposes.
- Use of supervision and evaluation process to ensure consistent implementation of curriculum standards.
- Title I Programming to support eligible students
- Redesign of K-5 intervention program; implementation of 6-8 intervention program.

Strategies for Improvement: Elementary ELA

- Targeted implementation of the standards-based reading program, *Journeys*
- Integration of *Journeys* reading program with *Empowering Writers* program to best scaffold and reinforce writing in the narrative, expository, and persuasive forms
- District-wide small group tiered instruction K-5
- Regular practice with standards-based reading assessments
- Incorporation of writing strategies across all content areas
- Direct instruction on responding to questions that compare multiple texts
- Review document/MCAS prep guide created by reading specialists and shared with teachers, grades 3-5
- Ample opportunities for online test-taking practice to ensure familiarity with format, especially with regard to essay-writing in required text boxes
- Inclusion of special education teachers in curriculum meetings and ongoing discussions concerning MCAS findings and strategies for improvement

Strategies for Improvement: Elementary Math

- District-wide Tier 1 instructional coaching for all classroom teachers with a particular focus on differentiated instruction using Math Workshop Model
- District-wide instructional coaching on Number Talks to help classroom teachers promote flexible thinking with Base-Ten arithmetic
- Increase practice modules on new question types
- Team meetings between grade level teachers and Elementary Math Specialist to discuss building based areas of strength and growth
- More coordination between Math Department and special education department to discuss areas for improvement
- Continued Development of Power Standards and elementary progression of standards through multiple grades
- Increased support for struggling learners via elementary math tutors
- Review the depth and rigor of EM4 units of study and add supplementary materials as needed.
- Grade 3: Geometry and Measurement with Area and Perimeter
- Grade 4: Multi-digit arithmetic on numbers less than 1,000,000.
- Grade 5: Classifying two- dimensional figures based upon their attributes
- Maintain a focus on the Everyday Math 1 and 2-day Open Response units

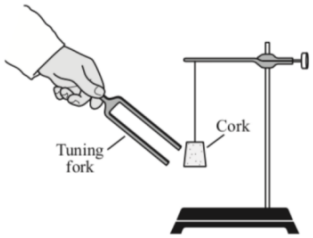
Strategies for Improvement: Grade 5 Science

Strategies for Improvement

Grade 5 Science MCAS

- **Examine misconceptions** related to abstract physical science content by analyzing most common "second choice" answer. (See examples provided.)
- Strategies for improvement on **open response questions** include reading comprehension strategies (*highlight relevant content/circle action words*) and addressing each part of a multi-step question.

24 In a science investigation, a student holds a vibrating tuning fork near a piece of cork, as shown below.

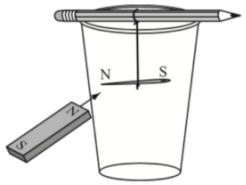


The student observes that the cork moves. Which of the following conclusions can be made from this investigation?

A. Sound is a form of energy. ← "correct" answer
B. Sound does not travel in air.
C. Sound cannot travel through the cork.
D. Sound is transformed into magnetic energy. ← 2nd choice

District: 65%
State: 50%

26 A student builds a compass from a pencil, a clear plastic cup, some thread, and a magnetized needle. The student then brings the north end of a bar magnet near the north end of the needle, as shown below.



What happens when the north end of the bar magnet is brought near the north end of the compass needle?

A. The needle and cup stay in place.
B. The needle and cup slide across the table.
C. The north end of the needle sticks to the bar magnet. ← 2nd choice
D. The north end of the needle spins away from the bar magnet. ← "correct" answer

District: 75%
State: 69%

Strategies for Improvement: Middle School English

- Adoption of department-wide goal to implement strategies from *Reading Nonfiction: Notice and Note Stances, Signposts, and Strategies* in efforts to promote improved reading comprehension of non-fiction
- Small-group instruction in reading labs for students demonstrating need for additional reading support
- Incorporation of current events articles for expository, non-fiction practice
- Targeted grammar instruction through *Language Network* and other resources
- Collaboration across disciplines to incorporate common reading comprehension strategies
- Review document/MCAS prep guide created through ELA teacher and reading specialist collaboration, and shared with teachers, grades 6-8
- Direct vocabulary instruction using *Classical Roots* program
- Direct instruction on responding to questions that compare multiple texts
- Ample opportunities for on-line test-taking practice to ensure familiarity with format, especially with regard to essay-writing in required text boxes
- Inclusion of special education teachers in curriculum meetings and ongoing discussions concerning MCAS findings and strategies for improvement

Strategies for Improvement: Middle School Math

- Grade 6-8 computer based MCAS are in their infancy.
  - Math Department Staff will have multiple professional development sessions to continue prepare for technology rich questions.
  - All 6-8 grade students will practice 2 different online math tests as part of their preparation.
  - Math Department staff is adapting exams to include more multiple select items
  - Math Department staff is working to learn new technologies to help create technology rich questions similar to those on the new MCAS
  - Increased communication between math and special education departments to ensure a smooth transition to the online platform.
- Grade 6 Title 1 support will continue to identify gaps in students' knowledge.
- Shifted staff priorities to offer very small math class size to our most struggling 8th grade learners.
- Blended learning offering in Grade 6, 7, and 8 so that students can independently work toward improving areas of weakness.
- Evaluation of Math 8 curriculum decisions MCAS vs progress towards Algebra 1 proficiency

Strategies for Improvement: Grade 8 Science

- Strategies for improvement on multiple choice include practice interpreting **data tables, graphs & diagrams**.
- Strategies for improvement on **open response questions** include reading comprehension strategies (*highlight relevant content/circle action words*) and addressing each part of a multi-step question.
- New **inquiry-based kits** in Grades 6 and 8 target curriculum areas highlighted in the next generation standards. **Potential expansion of HMS STEM program** would further align curriculum to technology & engineering standards.

SAMPLE MULTIPLE CHOICE QUESTIONS

Methane and propane are two compounds that are composed only of carbon and hydrogen atoms. The table below shows some of the properties of these two compounds.

	Compound	
	Methane	Propane
Formula	CH_4	C_3H_8
Boiling Point (°C)	–161.6	–42.1
Gas Density at 15°C (kg/m^3)	0.68	1.9

Which of the following conclusions is **best** supported by the information in the table?

A. When two elements combine, the mass of each element changes.

B. When two compounds are mixed, the state of matter of the mixture changes.

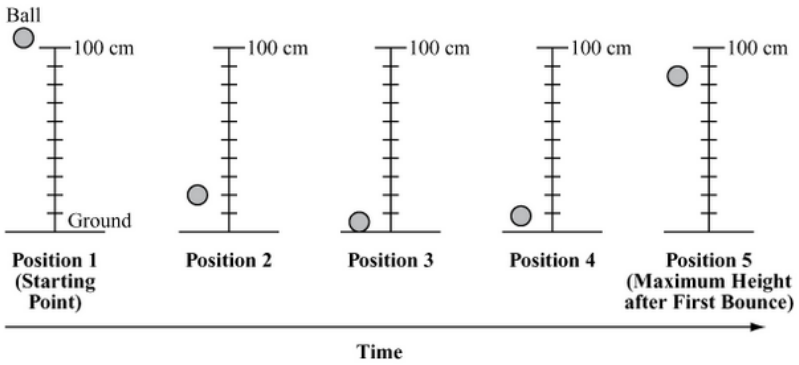
C. Two elements can combine to produce different substances with different properties.

Strategies for Improvement: Grade 8 Science

SAMPLE OPEN RESPONSE QUESTION (Multi-part)

This question has four parts.

A student releases a ball from a height of 100 cm above the ground. The ball bounces to a height of 80 cm. The diagram below shows the ball's position at five different times from its starting point to its maximum height after the first bounce.



Part A

Explain why the ball has kinetic energy at positions 2 and 4.

B I U 1500

Part B

Explain why the ball has potential energy at positions 2 and 4.

B I U 1500

Part C

Describe the energy transformation that occurs from position 1 to position 2 **and** the energy transformation that occurs from position 4 to position 5.

B I U 1500

Part D

As the ball falls from position 1 to position 3, determine the height at which the ball has approximately equal amounts of kinetic energy and potential energy. Include units in your answer.

B I U 1500

SWD Improvement Plan

- Focus on measurable goal writing and associated data collection methods to track and monitor student performance
- Ensure IEP goals are aligned with grade level learning expectation and content
- Content-directed professional development in ELA, Math and Science and teacher level data analysis of student responses
- Increase tiered instruction support at Elementary level
- Provide frequent, high quality, professional development opportunities for faculty and staff

SWD Improvement Plan

- Targeted Professional development in the following areas:
  - New Special Education Teacher Induction
  - New Paraeducator Institute
  - Early Childhood Fundamental and Strategies for Best Practice
  - Differentiated Instruction for General Education Teachers
  - How to Become an Effective Paraeducator at the Secondary Level
  - Basic Functional Behavior Assessments to Behavior Support
  - Language-Based Learning Disabilities and Executive Function
  - Executive Function: Impact on Academic Proficiency
  - Using a Strengths and Challenges Model to Hold IEP Meetings and Write Individualized Education Programs
  - Three-Part Special Education Workshop (Using Metacognitive Strategies to Support Academic Acquisition; Using Metacognitive Strategies to Promote Executive Functioning Skills; Defining and Conceptualizing Specialized Instruction
  - District Curriculum Accommodation Plan Overview

SWD Improvement Plan

- Student support activities, including:
  - Monthly Elementary, Middle, and High Special Education Department Meetings
  - Monthly Department Meetings with Psychologists
  - Monthly Department Meetings with Team Chairs
  - HHS after-school targeted Math instruction
  - HMS after-school targeted Math instruction
  - HHS and HMS Executive Function pilot programs
  - Administrative Support – update to the Special Education Procedure Manual and professional training on implementation

Questions…