NJSLA Test Participation

Total NJSLA Participation Rate in Metuchen for 2023

99.84%

Benefits

1. Valid data to inform us what our students are learning and what they can learn more of
2. The effectiveness of our:
   - Curriculum
   - Instruction
   - Assessments
   - Professional Development

Differential between State and Metuchen ELA Proficiencies 2019 - 2023

Grade	% Prof. State 2019	% Prof. Metuchen 2019	Differential 2019	% Prof. State 2022	% Prof. Metuchen 2022	Differential 2022	% Prof State 2023	% Prof Metuchen 2023	Differential 2023
3 n=156	50	60	10	42	57	15	42	58	16
4 n=171	57	78	21	49	64	15	51	76	25
5 n=204	58	84	26	50	71	21	53	76	23
6 n=192	56	89	33	48	75	27	49	72	23
7 n=181	63	85	22	53	70	17	56	81	25
8 n=169	63	88	25	51	73	22	55	75	20
9 n=162	55	85	30	49	89	40	52	75	23

Differential between State and Metuchen Math Proficiencies 2019 - 2023

Grade	% Prof. State 2019	% Prof. Metuchen 2019	Differential	% Prof. State 2022	% Prof. Metuchen 2022	Differential	% Prof State 2023	% Prof Metuchen 2023	Differential
3 n=162	55	62	7	45	64	19	46	70	24
4 n=174	51	64	13	39	61	22	44	70	26
5 n=206	47	75	28	36	59	23	40	75	35
6 n=174	41	63	23	31	56	25	34	62	28
7 n=169	42	58	16	34	58	24	34	58	24
8 n=104	30	34	4	15	20	5	18	44	26
Alg EMS n=92	43	92	48	35	89	54	35	89	54
Geo EMS n=24	31	100	69	44	100	56	50	90	40

Differential between State and Metuchen Math Proficiencies 2019 - 2023

Grade	% Prof. State 2019	% Prof. Metuchen 2019	Differential	% Prof. State 2022	% Prof. Metuchen 2022	Differential	% Prof State 2023	% Prof Metuchen 2023	Differential
Algebra I 2023 n=91	43	24	-19	35	35	0	35	35	0
Geometry 2023 n=66	31	52	21	44	67	23	50	83	33
Algebra II 2023 n=21	46	73	27	53	100	47	54	100	46

Metuchen School District Trends Analysis
2013 - 2023

Math Data Sets

- **Historical Data**
  - **2013**
    - **NJASK**

- **Baseline Data**
  - **2019**
    - **NJSLA**

- **Comparative Data**
  - **2019 - 2023**
    - **NJSLA**
    - **NJGPA**

ELA Data Sets

- **Historical Data**
  - **2013**
    - **NJASK**

- **Baseline Data**
  - **2016-2017**
    - **PARCC**
  - **2019**
    - **NJSLA**

- **Comparative Data**
  - **2019 - 2023**
    - **NJSLA**

Metuchen School District Trends Analysis
2013 - 2023
A Decade of Growth

From Grows in 2013

- **Solving Multi-step Math Word Problems**

- **Reading Informational Text**

- **Geometry**

To Glows in 2023

- **Solving Multi-step Math Word Problems**

- **Reading Informational Text**

- **Research**

- **Character Analysis**

ANALYSIS OF ASSESSMENT DATA PRESENTATION (NJASK) 2012 - 2013

Presented by:
Rick Cohen
Director of Curriculum
Metuchen Public Schools
October 8, 2013

Edgar School Analysis
Total Population: Math Cluster Analysis

Math Cluster Area in Need of Development:

Problem Solving

Action Plan:
- Align Math curriculum to CCSS expectations
- Continue to train staff on Math Workshop / small group instruction
- Continue to train staff on using data to drive instruction
- Continue to train staff to use formative assessment to differentiate instruction and meet individual student needs
- Conduct evaluation of Math programming
- Implement K-12 Math Action Plan to enhance Math programming district-wide

MHS HSPA School Analysis
Total Population: Math Cluster Analysis

Overall: MHS students are at or closer to DFG

Math Cluster Area in Need of Development:

Problem Solving

Action Plan:
- Align Math curriculum to CCSS expectations
- Continue to train staff on using data to drive instruction
- Continue to train staff to use formative assessment to differentiate instruction and meet individual student needs
- Research best practices in problem solving instruction
- Conduct evaluation of Math programming
- Implement K-12 Math Action Plan to enhance Math programming district-wide

Stop and Think

What is the question?

Gather Information

What do I know?

Brainstorm, Plan and Choose:

How can I solve the problem?
What is the best choice?

Try, Check/Revise:

Does it work?
Do I need to try another way?

Increasing Modeling & Reasoning in 1st year
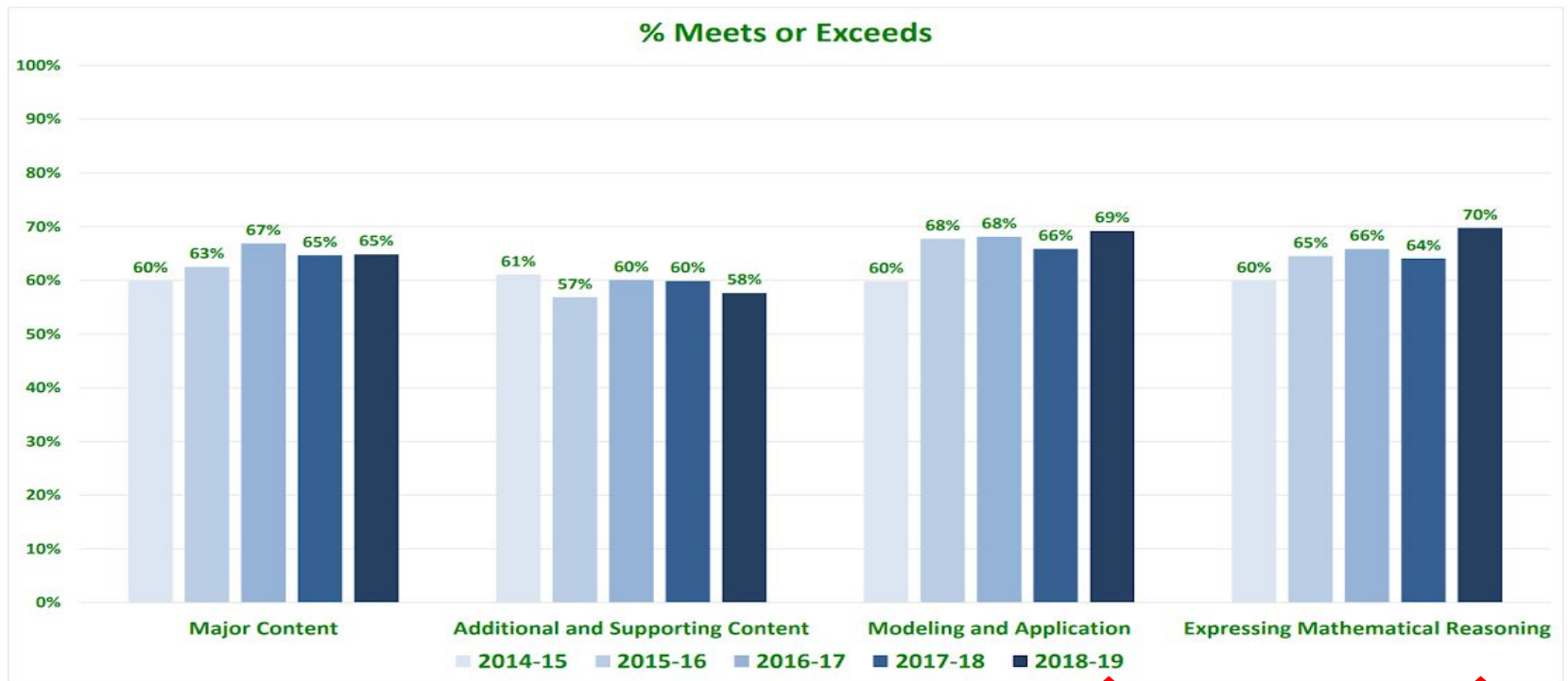
8th Grade Math 2019 NJSLA

8.D1 and 2: **Solve multi-step contextual word problems** with degree of difficulty appropriate to Grade 8, requiring application of knowledge and skills articulated
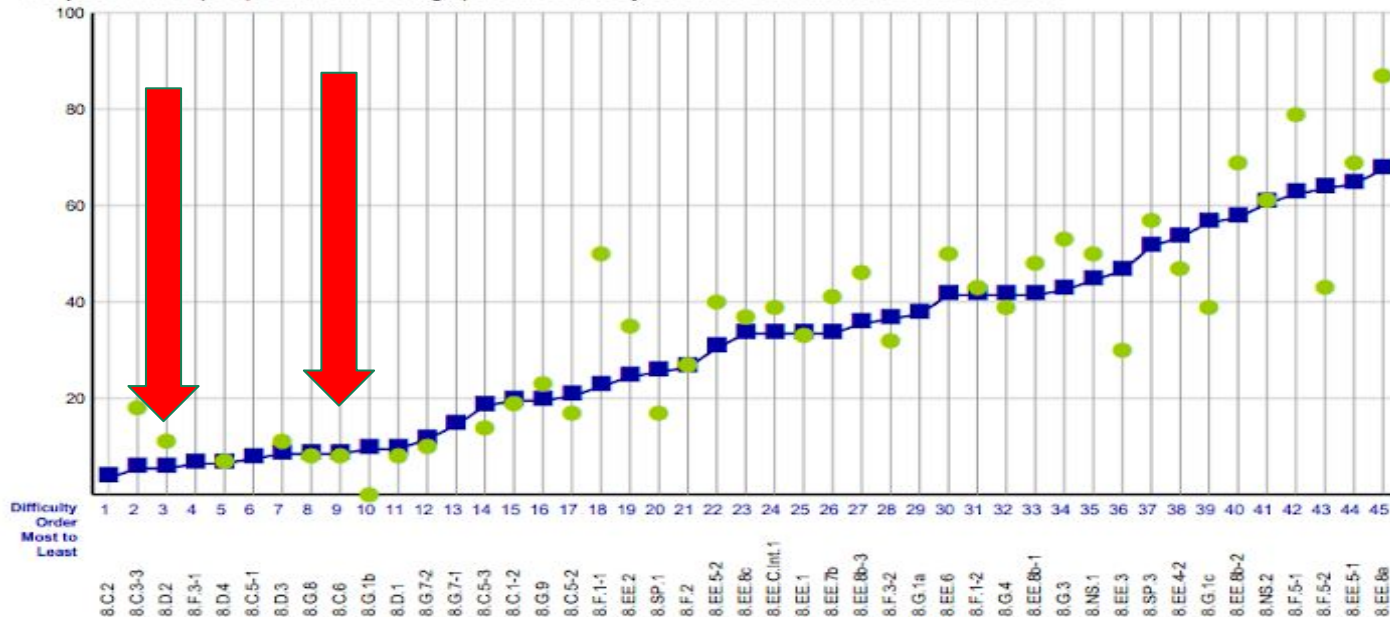
8th Grade Math 2023 NJSLA

8.D1 and 2: **Solve multi-step contextual word problems** with degree of difficulty appropriate to Grade 8, requiring application of knowledge and skills articulated
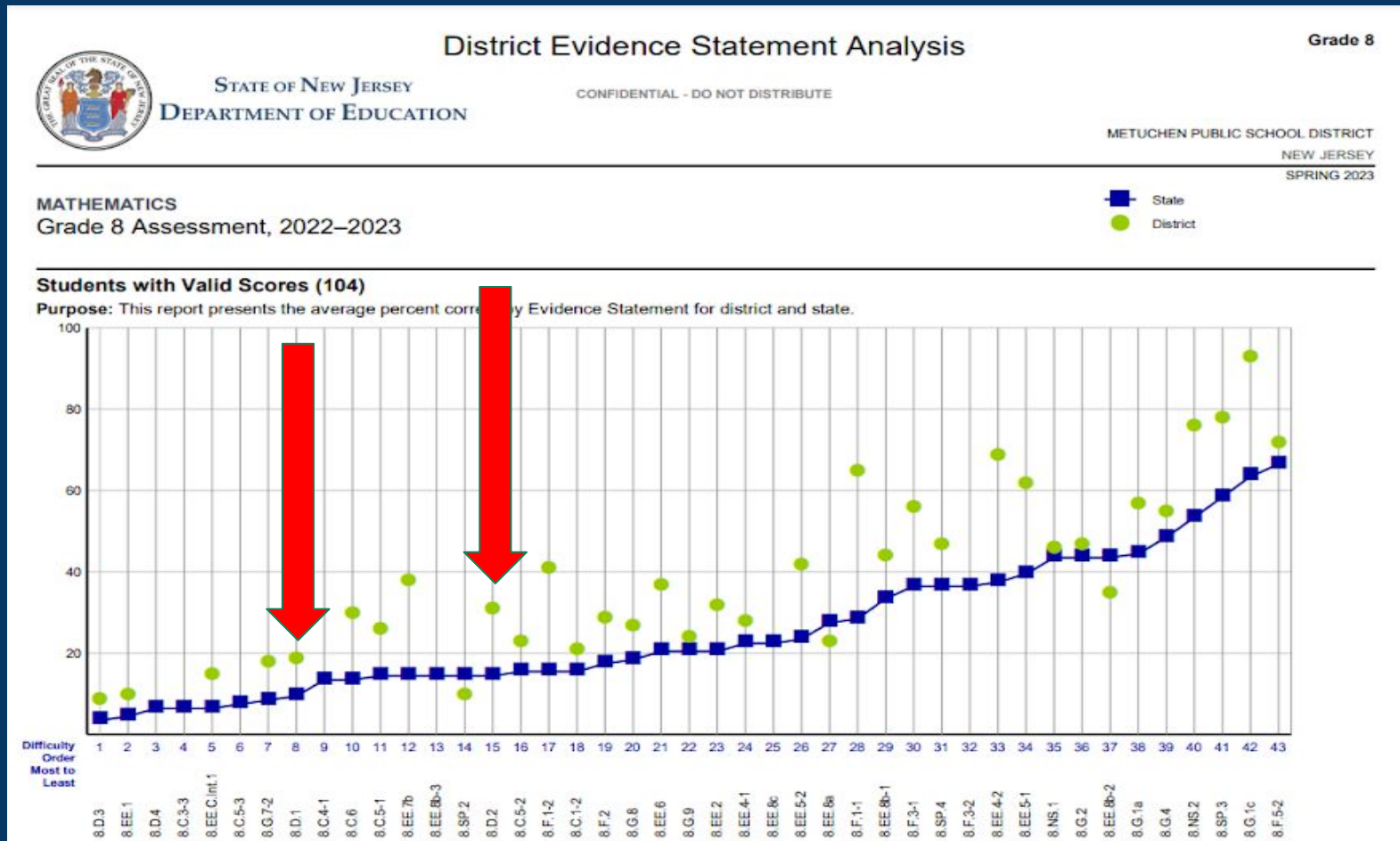
11th Grade Math 2023 NJGPA

HS-D.2 **Solve multi-step contextual word problems** with degree of difficulty appropriate to the course, requiring application of course-level knowledge and skills articulated
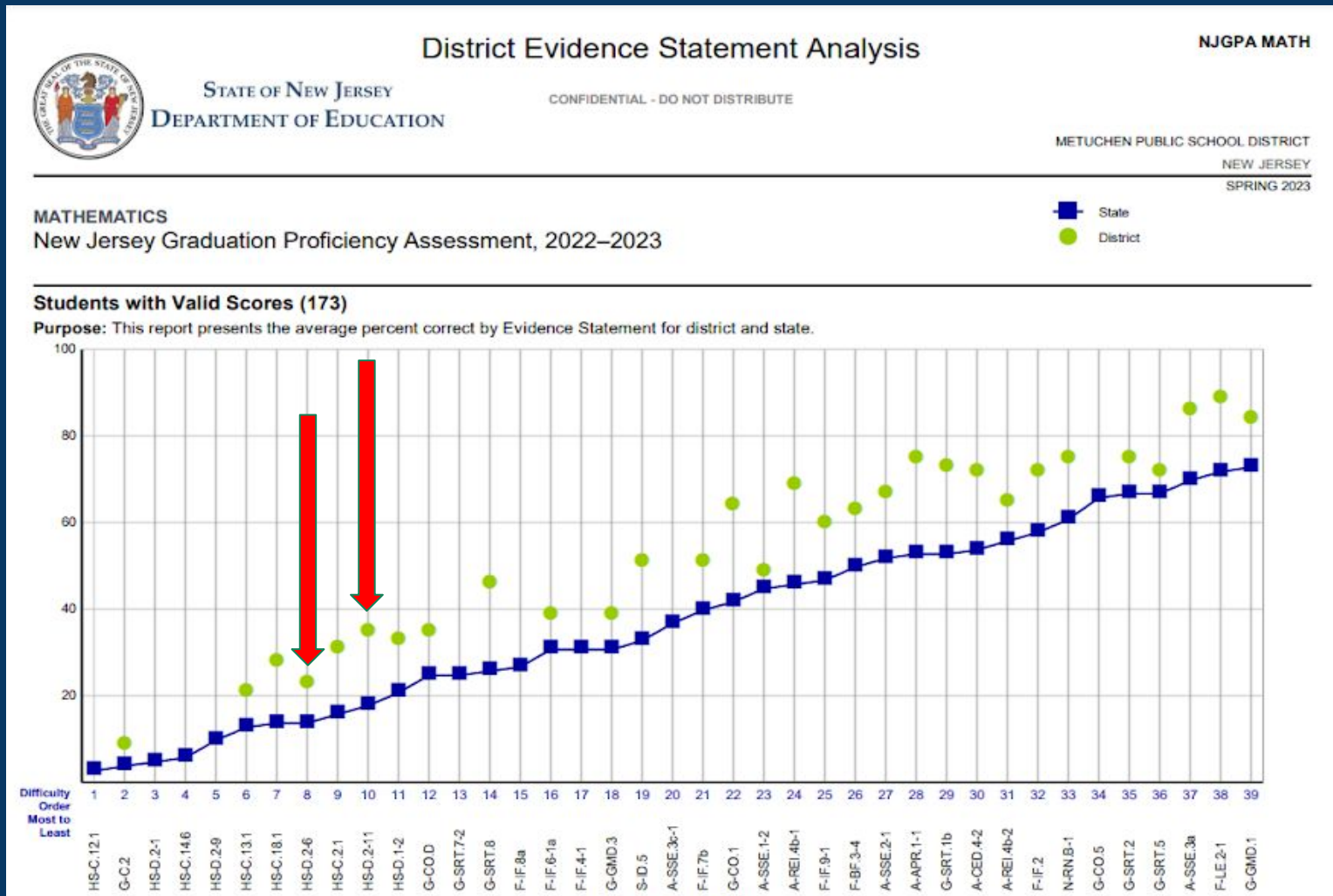
Campbell School Analysis
Total Population: ELA Cluster Analysis

<u>ELA Cluster Area in Need of Development:</u>
Reading
Informational Text

<u>Action Plan:</u>
- Align ELA Curriculum to Reading Strategies
- Purchase Additional Informational Texts
- Teachers utilizing more informational texts to model reading strategies application to informational texts
- Students writing in response to informational texts in Reader's Notebook
- More extensive integration of reading and writing instruction
- Additional, focused support of Balanced Literacy Consultant

Edgar School Analysis
Total Population: ELA Cluster Analysis

ELA Cluster Area in Need of Development:
Reading
Informational Text

Action Plan:

▫ Teachers utilizing more informational texts to model reading strategies application to informational texts

▫ Students writing in response to informational texts

▫ Support of Balanced Literacy Consultant

2016 ELA PARCC Grade 6 District Evidence Statements

2017 ELA PARCC Grade 6 District Evidence Statements

Embedding SEL

Academic Glows in 2023

- Solving Multi-step Math Word Problems

- Reading Informational Text

- Research

- Character Analysis

Embedded SEL Competencies

- Responsible Decision Making

- Social Awareness

Metuchen School District
Reaping the Benefits of Embedding SEL

Embedding SEL

Academic Glows in 2023

- Solving Multi-step Math Word Problems

- Reading Informational Text

- Research

- Character Analysis

Embedded SEL Competencies

- Responsible Decision Making

- Social Awareness
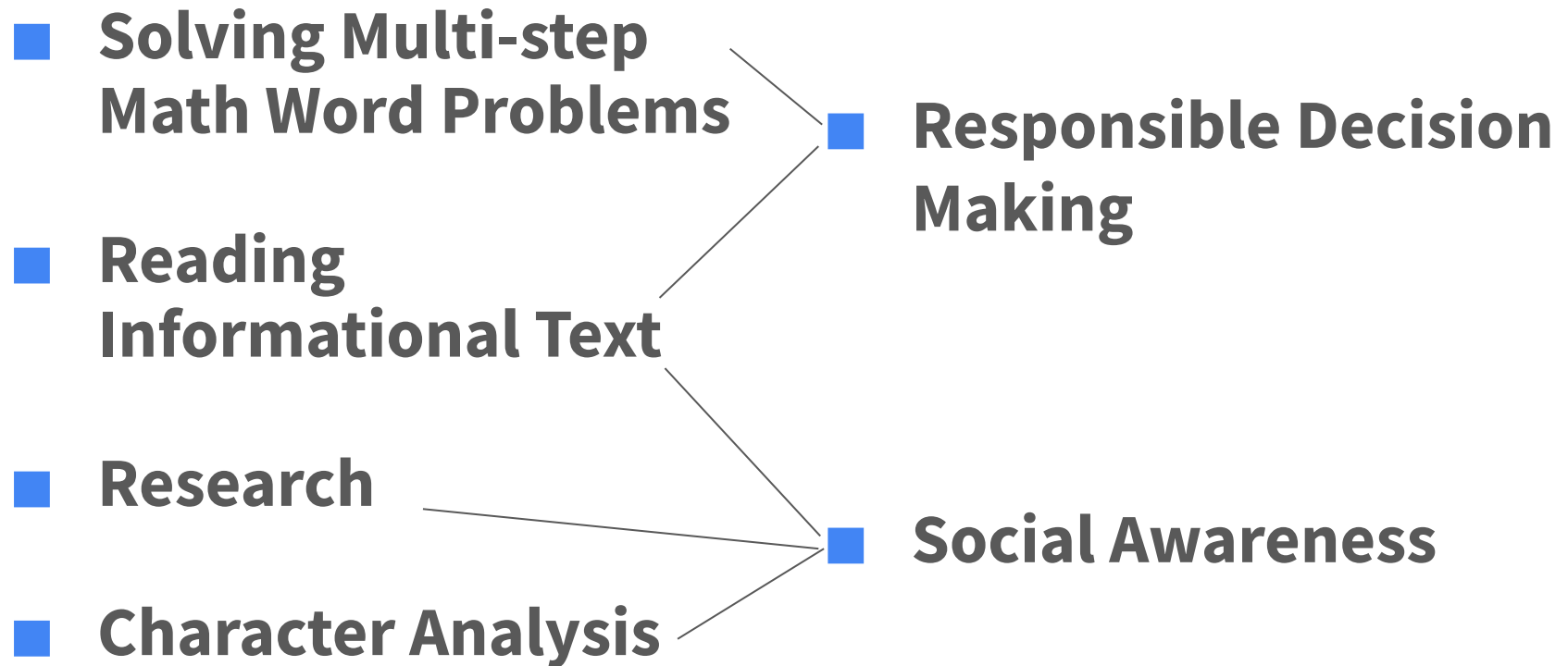
CAMPBELL ELEMENTARY SCHOOL

A GREAT place to LEARN! A GREAT place to BELONG!
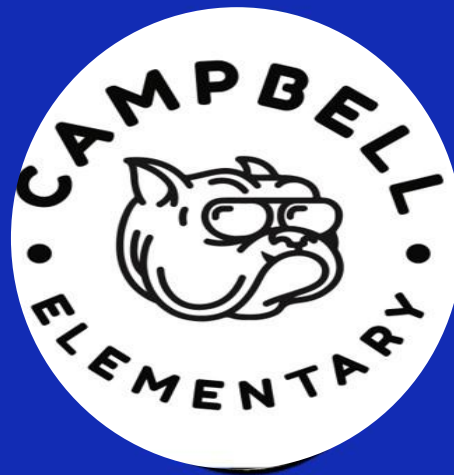
Vincent, J. Costanza, Ed.D.
Principal

Brooke Kirschner
Assistant Principal

Natalie Franzi Dougherty
Supervisor of Elementary Education
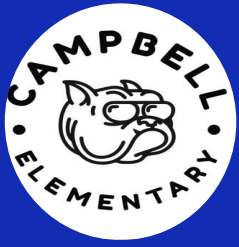
Reasons to Celebrate

Continued increase in across Literary, Information, Vocabulary, Written Expression, & Writing Conventions from previous year.

Larger differential than pre-pandemic.

Areas of Strength

- ❏ Interactions of characters and events over a text
- ❏ Research Simulation
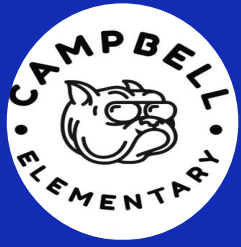
Students are becoming strong writers.

There is a progression moving into 4th grade across all three forms of writing with literary analysis growing and research growing throughout.

Targeting Areas for Growth

❏ Text Structure

❏ Integration of different forms of literature (ie. poems, prose, drama)
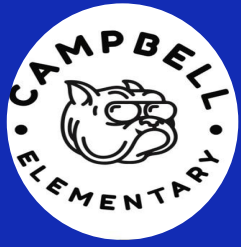
Strategies for Success

Focal Point-
Intentional Implementation of
Evidence-Based Strategies

Increase student opportunities to engage in reading strategies with grade level complex text.

- ❏ Creation of cross curricular grade level complex text sets in grades K-4

- ❏ Increase volume of writing

- ❏ Departmentalization of 4th grade to dive deeper into content

- ❏ Small group instruction through the Workshop Model

- ❏ On-going teacher support with Literacy Consultant
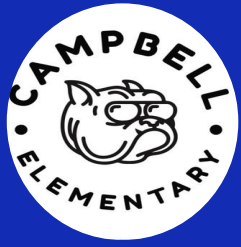
GLOWS: Mathematics Grade 3 & 4

Reasons to Celebrate

Continued growth in a variety of domains building on coherent standards across the grade levels.

Scores are higher than pre-pandemic and differentials continue to grow.

All grade levels are about 20 percentage points or more than the state in standards for mathematical practice.

Areas of Strength

❏   Geometry

❏   Operation in Algebraic Thinking

❏   Standards for Mathematical Practice: Modeling and Reasoning
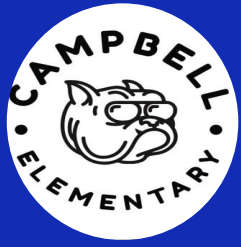
GROWS: Mathematics Grades 3 & 4

Student are growing as mathematicians.

Teachers are embedding opportunities to examine data in math and science to build on these skills.

Targeting Areas for Growth

❏ Measurement and data
❏ Numbers in Operations in Base Ten
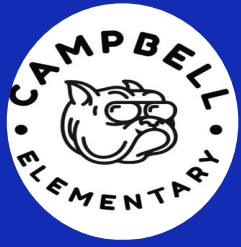
Strategies for Success

Focal Point-Scaffolding of Mathematical Skills

We will continue to work to provide opportunities to spiral math content.

- ❏ Intentional spiral review of major content

- ❏ Continuation of real-world problem solving

- ❏ Departmentalization of 4th grade to dive deeper into content

- ❏ Differentiation in small group instruction through the Workshop Model for academic support and enrichment

- ❏ Cross curricular integration of measurement and data through Science and Engineering Practices (STEM Connection)

- ❏ Ongoing teacher support through Math Coach

EDGAR MIDDLE SCHOOL

**Suzy Azevedo,
Principal**

**Neyda Evans,
Assistant Principal**

Reasons to Celebrate

All areas assessed on the NJSLA reflect student strength in understanding content in reading and writing.

Previously targeted areas of reading information and vocabulary have yielded growth.

Areas of Strength

Literature & Information:

- ❑ Analyzing and understanding different perspectives
- ❑ Analyzing texts' structure and meaning
- ❑ Analyzing dialogue and how it shapes characters

Writing

- ❑ Research Simulation

Targeting Areas for Growth

Students are becoming strong writers.

There is a progression moving into 8th grade across all three forms of writing with literary analysis growing and research growing throughout.

Literature and Information:
❑ Compare and contrast
❑ Analyzing themes and central ideas

Writing:
❑ Literary Analysis

Focal Point-
Responding to the Data:

Goals and tasks established to support student learning and growth

- ❏ Infusion of more inquiry-based instruction and research in ELA and Social Studies.
- ❏ Increase volume of writing
- ❏ Creation of text sets in grade 5
- ❏ Small group instruction through the Workshop Model
- ❏ On-going teacher support with Literary Consultant and Drew National Writing Project Grades 6-8.

GLOWS: Mathematics Grades 5-8

Reasons to Celebrate

Continued growth in a variety of domains building on coherent standards across the grade levels.

All grade levels are about 20 percentage points or more than the state in standards for mathematical practice.

Areas of Strength

❑ Equations and Expressions: solve real-life and mathematical problems using numerical and algebraic thinking

❑ Standards for Mathematical Practice: Modeling and Reasoning

Student are growing as mathematicians.

Geometry has been identified as an area of growth in grades 3-4 and changes in instruction are beginning to yield changes.

Statistics and Probability has cross over with Science and Engineering Practices which allow for cross curricular exposure and support.

Targeting Areas for Growth

- ❏ 5th-6th Geometry
- ❏ 7th-8th Statistics and probability

Focal Point-
Scaffolding of Mathematical
Skills

We will continue to work to provide opportunities to spiral math content.

- ❏ Intentional spiral review of major content
- ❏ Change of pacing to account for topics that are not typically covered before the assessment
- ❏ Continuation of real-world problem solving
- ❏ Differentiation in small group instruction through the Workshop Model for academic support and enrichment
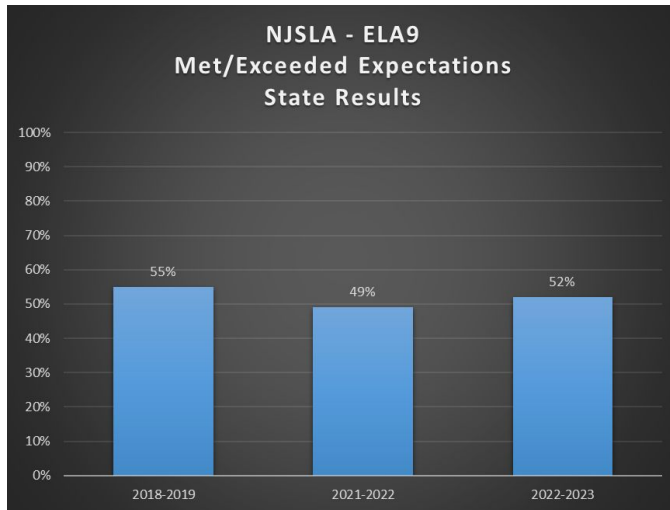
METUCHEN HIGH SCHOOL

Edward C. Porowski, Principal

Brian Stike, Assistant Principal

English Language Arts Grade 9

State Proficiency Rates

Metuchen Proficiency Rates
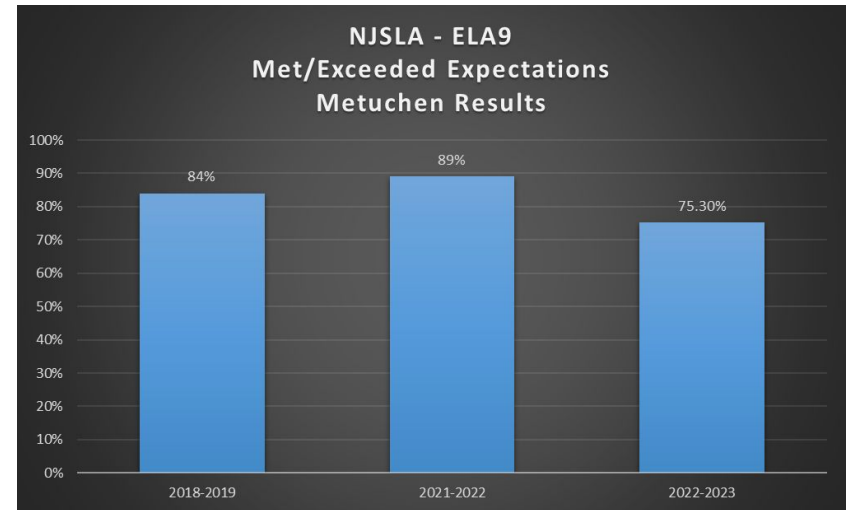
➔ State Increase 3%

★ Metuchen Decrease 13.7%

Increase in differential between New Jersey & Metuchen Proficiency scores.

2019	30%
2022	40%
2023	23.3%

GLOWS: English Language Arts Grade 9

Reason to Celebrate

All areas assessed on the NJSLA reflect student strength in understanding content in reading and writing.

Students are analyzing author's choices, purpose, theme and its connection to characters.

There is continued strength in reading informational text.

Areas of Strength

Reading Literature
- ❏ Analysis of Author's Choices
- ❏ Analysis of Text Structure
- ❏ Complex Character Analysis develop the Theme

Reading Informational Text
- ❏ Analysis of Author's Purpose
- ❏ Compare and Contrast of Multiple Sources
- ❏ Analysis and statement of the central idea
- ❏ Accurate summary of texts' ideas

Writing
- ❏ Research Simulation

GROWS: English Language Arts Grade 9

Students are continuing to move into deeper analysis, as they progress through MHS.

All areas assessed reflected higher performance than the state. While both of these categories reflect strong performance, these are the areas that can be a focus for more instruction.

Targeting Areas for Growth

Literature:

❑ Analysis Theme and Central Idea
❑ Analyzing Character Conflicts and Plot Advancement

Writing:

❑ Growth in Narrative Writing

Strategies for Success

Focal Point- Responding to the Data:

English Language Arts

Goals and tasks established to support student learning and growth

- ❏ Reviewing grade level data in department teams across ELA and Social Studies
- ❏ Continued infusion of inquiry-based instruction and research in ELA and Social Studies
- ❏ Partnering with Drew National Writing Project with Social Studies and ELA
- ❏ Developing more opportunities for informal and formal writing.

Algebra I

State Proficiency Rates
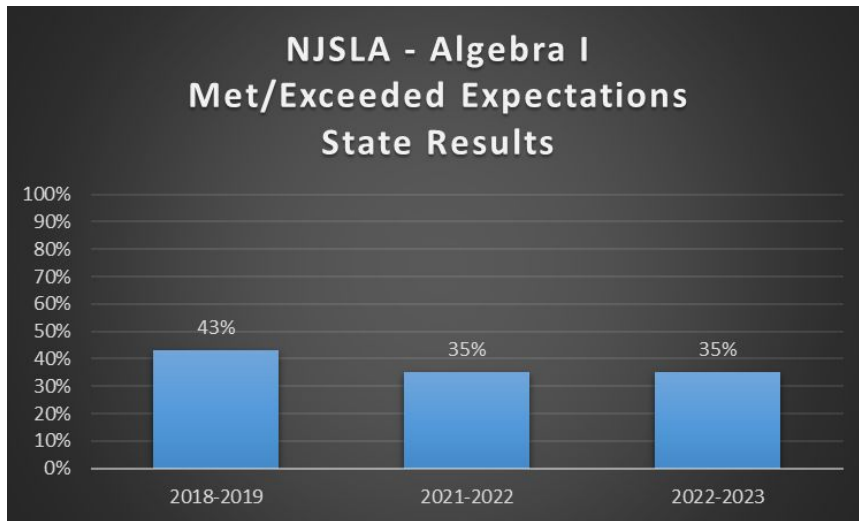
Metuchen Proficiency Rates
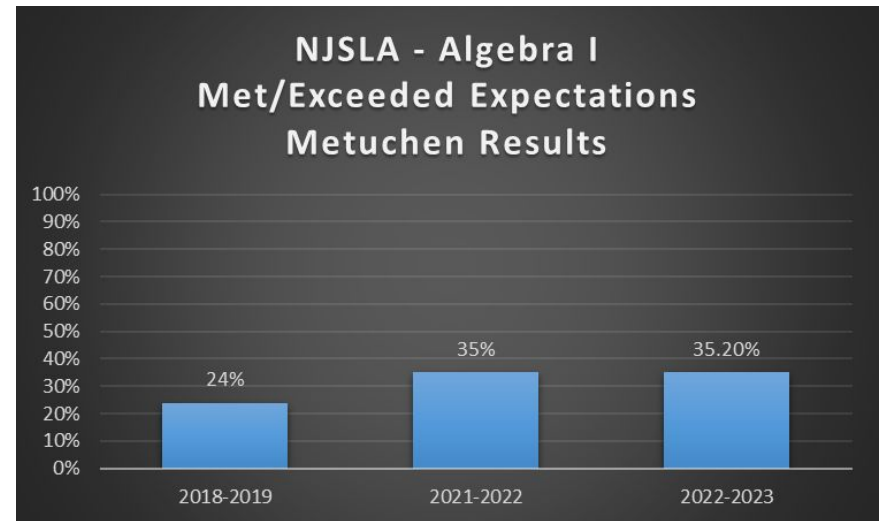
→ State - No Change   ★ Metuchen Increase 0.2%

Increase in differential between New Jersey & Metuchen Proficiency scores.

2019	-19%
2022	0%
2023	0.2%

GLOWS & GROWS: Algebra I

Reason to Celebrate

- ❏ Relating the domain of a function to a graph and to the quantitative relationship it describes, limiting to quadratic functions.
- ❏ Understanding that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve.
- ❏ Choosing and producing an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.
- ❏ Comparing properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions).

Targeting Areas for Growth

- ❏ Solving quadratic equations in one variable.
- ❏ Identifying the effect on the graph of replacing f(x) + K, kf(x), f(kx), and f(x+k) for specific values of k given the graphs limiting the function types to linear and quadratic functions.
- ❏ Rearrange formulas that are quadratic in the quantity of interest to highlight the quantity of interest, using the same reasoning as in solving equations.
- ❏ Graph the solutions to a linear inequality in two variables as a half-plane and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes.
- ❏ Interpret quadratic expressions that represent a quantity in terms of its context.
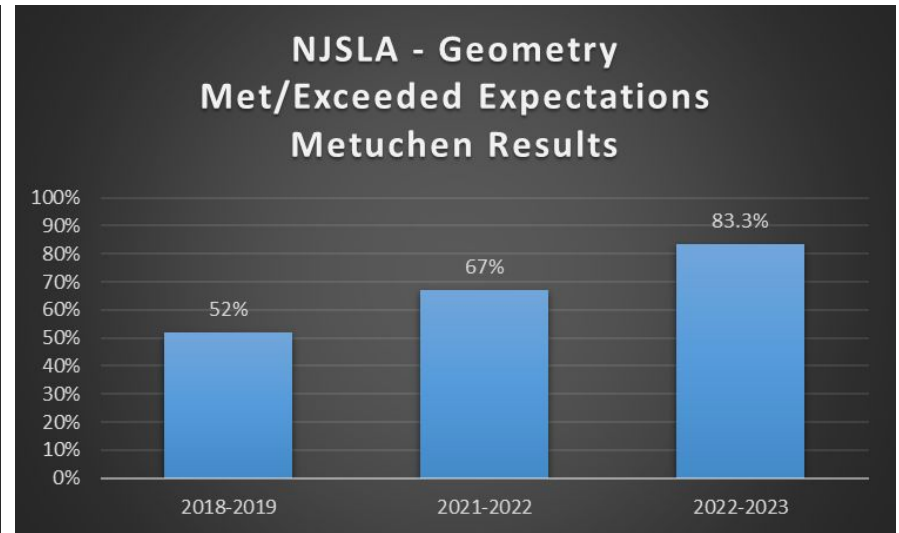
Geometry

State Proficiency Rates
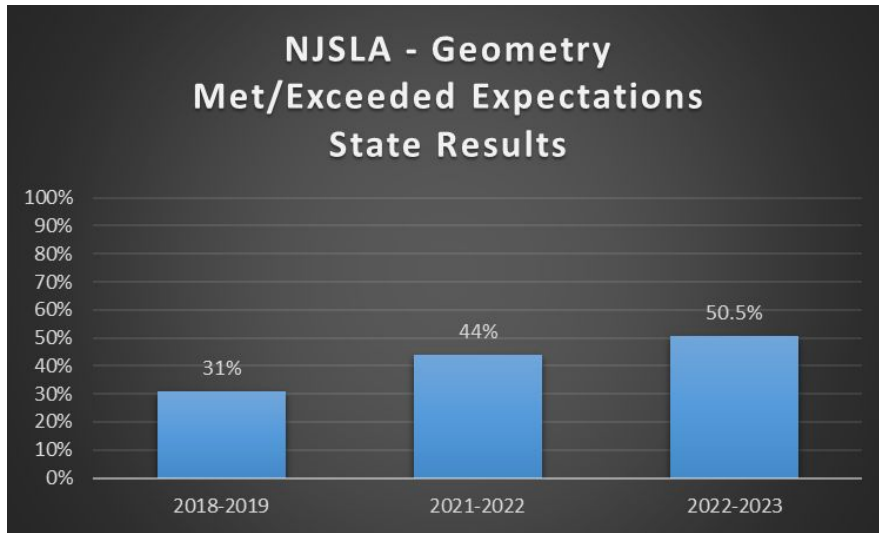
➔ State Increase 6.5%

Metuchen Proficiency Rates

★ Metuchen Increase 16.3%

Increase in differential between New Jersey & Metuchen Proficiency scores.

2019	11%
2022	23%
2023	32.8%

GLOWS & GROWS: Geometry

Reason to Celebrate

Students met or exceeded expectations in the majority of performance standards.

- ❏ Understanding or completing a derivation of the equation of a circle of given center and radius using the Pythagorean Theorem.
- ❏ Applying geometric reasoning in a coordinate setting, and/or using coordinates to draw geometric conclusions.
- ❏ Understanding that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles.
- ❏ Proving geometric theorems.

Targeting Areas of Growth

- ❏ Make and understand geometric constructions.
- ❏ Given a rectangle, parallelogram, trapezoid, or regular polygon, describe the rotations and reflections that carry it onto itself.
- ❏ Verify experimentally the properties of dilations given by a center and a scale factor.

Algebra II

State Proficiency Rates
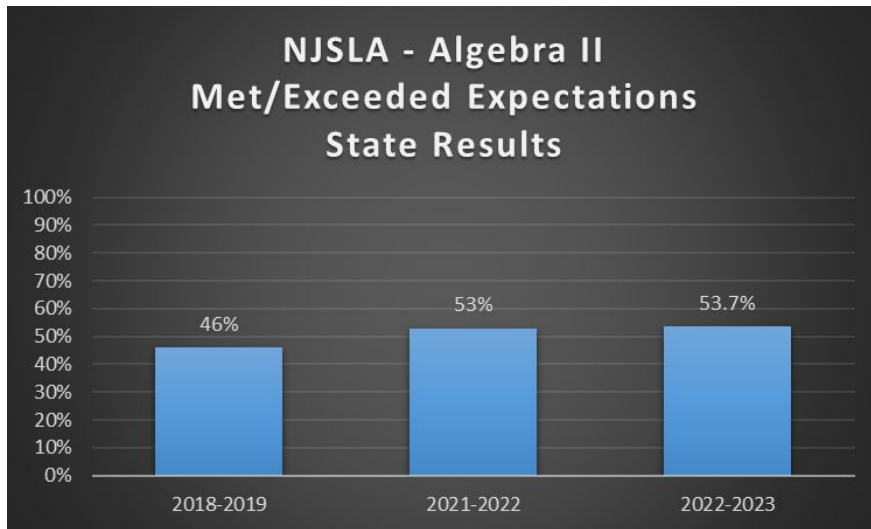
→ State Increase 0.7%

Metuchen Proficiency Rates

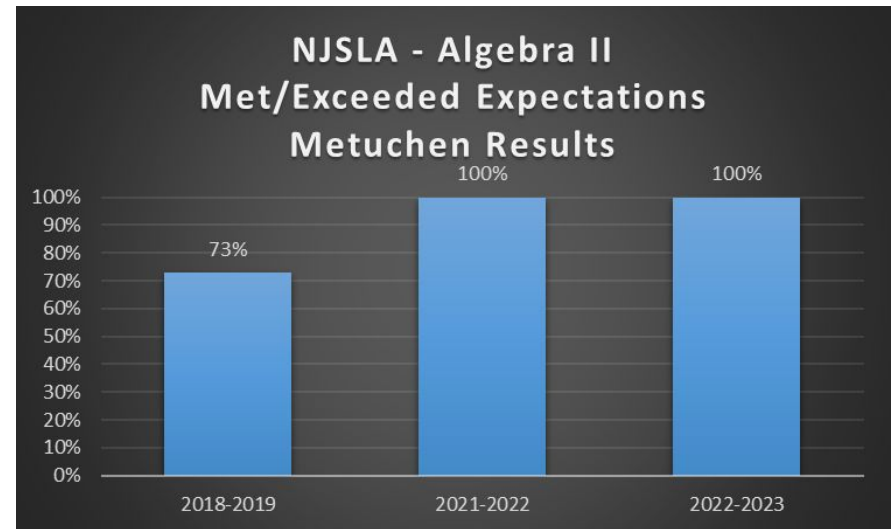★ Metuchen MAINTAINED

Increase in differential between New Jersey & Metuchen Proficiency scores.

2019	27%	
2022	47%	
2023	47% WOW!	

GLOWS & GROWS: Algebra II

Reason to Celebrate

All students met the proficiency requirements!

Strengths include:

- ❑ Finding the solutions of where the graphs of the equations y = f(x) and y = g(x) intersect.
- ❑ Find inverse functions to solve contextual problems. a. Solve an equation of the form f(x) = c for a simple function f that has an inverse and write an expression for the inverse.
- ❑ Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval with functions limited to polynomial, exponential, logarithmic, and trigonometric functions.

Targeting Areas for Growth

- ❑ Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.
- ❑ Use the structure of polynomial, rational or exponential expressions to identify ways to rewrite it.
- ❑ Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically.

Strategies for Success

**Focal Point-
Responding to the Data:**

Mathematics

Goals and tasks established to support student learning and growth

❏ Use of state and local assessment data to drive planning for instruction.

❏ Collaboration on design and implementation of exemplar lessons.

❏ Differentiate instruction using data results and implementation of the workshop model.

❏ Alignment of assessments to state assessment standards.

2022-2023 NJSLA Sub-group Data
District -wide ELA

Grade	Sub Group	Passing Percentage 2022	Passing Percentage 2023	Year to year change
ELA	Latino/Hispanic	63	59	-4
ELA	Asian	86	86	0
ELA	Black	45	54	+9
ELA	White	68	71	+3
ELA	Two or More Races	77	75	-2
ELA	Spec. Ed.	32	30	-2
ELA	Economic Disadvantage	41	45	+4
ELA	504	64	63	-1

2022-2023 NJSLA Sub-group Data
District -wide Math

Grade	Sub Group	Passing Percentage 2022	Passing Percentage 2023	Differential
ELA	Latino/Hispanic	39	39	0
ELA	Asian	76	78	-2
ELA	Black	31	31	0
ELA	White	57	59	+2
ELA	Two or More Races	63	59	-4
ELA	Spec. Ed.	26	27	+1
ELA	Economic Disadvantage	19	39	+20
ELA	504	45	53	+9

Dynamic Learning Map (DLM) Alternate Assessment

Grades: 3-8, 11

Subjects: ELA, Math, & Science

Online and Adaptive

8 Students participated

Participation Criteria:

- Significant cognitive disability
- Primary instruction based on modified content standards
    - (DLM Essential Elements)
- Requires extensive individualized instruction and substantially adapted materials to achieve measurable gains in the grade-and age-appropriate curriculum.
- Emerging, Approaching the Target, At Target and Advanced

Thank you

Q&A