## 2022 STATEWIDE ASSESSMENTS RESULTS

Presented by: Rick Cohen Natalie Dougherty Dr. Vincent Costanza Suzy Azevedo Ed Porowski Measuring Our Student Learning

Tuesday, November 1, 2022

## **ACCESS Testing Results**

Spring 2022

### Terminology

- English as a Second language (ESL)-Refers to our type of instructional delivery. Not a label for a student.
- English Language Learner (ELL) Refers to student
  - Asset Based Labels
    - Emerging Bilingual
    - Multilingual Learner

### Emerging Bilinguals Across the District

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1	3	9	9	8
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3	5	3	4	10
4	5	8	6	11
5	2	3	6	12
6	1	1	6	Тс

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10	3	1	2
11	2	2	1
12	3	2	2
Total	33	46	51

### **Participation Rate**

# 100%\*

\*Two students arrived after testing window had closed

### Interpreting the Data



### Score Distribution

Composite Score	# of students	% of Assessed
1-1.9	6	13.6%
2-2.9	10	22.7%
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>4.5	8	18.2%

### Interventions and Supports

- Double Block of ESL at Moss, EMS and MHS
- Creation of ELL Profiles
  - Background information
  - Can Do descriptors to guide instruction
  - Recommended Accommodations
- Ongoing professional development for ELL teacher
  - Focused on utilizing ACCESS data to drive instruction
- Trained 4 teachers in Sheltered Instruction Observation Protocols
  - Scheduled ELL students intentionally with trained staff members
- Trained administrators and school counselors
- Ongoing built in consultation with the ESL Teacher
- Ongoing content area teacher coaching with a Title III Consultant in SIOP strategies at CES
- Continuing to offer 10 hour SIOP Course for teachers to support ELLs in classroom
- ESSER Tutoring

#### **NJSLA** Test Participation

## Total NJSLA Participation Rate1.Valid data to inform usin Metuchen for 2022what our students are



#### **Benefits**

- . 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

### *ELA Results*: Comparing 2019 to 2022 in US NAEP Reading Results 1992-2022

#### FIGURE | Trend in fourth- and eighth-grade reading average scores



permitted

Accommodations permitted **\*** Significantly different (p < .05) from 2022.

### ELA Results: Comparing 2019 to 2022 in Metuchen Local Benchmark Assessments (LinkIt Grades 6-8)



## <u>*ELA Results*</u>: Comparing 2019 to 2022 in NJ 2015-2022 NJSLA ELA NJ State Proficiency Levels



### <u>Math Results</u>: Comparing 2019 to 2022 in US NAEP Math Results 1990-2022

FIGURE | Trend in fourth- and eighth-grade mathematics average scores





Accommodations not

Accommodations permitted ★ Significantly different (p < .05) from 2022.</p>

### <u>Math Results</u>: Comparing 2019 to 2022 in Metuchen Local Benchmark Assessments (Linklt Grades 6-8)



1%

## <u>Math Results</u>: Comparing 2019 to 2022 in NJ 2015-2022 NJSLA Math NJ State Proficiency Levels



### Differential between Metuchen and State ELA Proficiencies 2019 to 2022

Grade	2019% Prof. State	2019% Prof. Metuchen	Differential	2022% Prof. State	2022% Prof. Metuchen	Differential
3 2022 n=166	50	60	10	42	<mark>57</mark>	15
4 2022 n=196	57	78	21	49	<mark>64</mark>	15
5 2022 n=164	58	84	26	50	<mark>71</mark>	21
6 2022 n=192	56	89	33	48	<mark>75</mark>	27
7 2022 n=181	63	85	22	53	<mark>70</mark>	17
8 2022 n=169	63	88	25	51	<mark>73</mark>	22
9 2022 n=168	55	85	30	49	<mark>89</mark>	40

### Differentials 2019 to 2022 NJSLA ELA: NJ compared to Metuchen (Grades 3-9)



Grade 9

#### Differential between Metuchen and State Math Proficiencies 2019 to 2022 Grades 3 - 8th

Grade	2019% Prof. State	2019% Prof. Metuchen	Differential	2022% Prof. State	2022% Prof. Metuchen	Differential
3 2022 n=167	55	62	7	45	<mark>64</mark>	19
4 2022 n=197	51	64	13	39	<mark>61</mark>	22
5 2022 n=165	47	75	28	36	<mark>59</mark>	23
6 2022 n=192	41	63	23	31	<mark>56</mark>	25
7 2022 n=159	42	58	16	34	<mark>58</mark>	24
8 2022 n=88	30	34	4	15	20	5
Alg EMS 2022 n=92	43	92	48	35	<mark>89</mark>	54
Geo EMS 2022 n=15	31	100	69	44	<mark>100</mark>	56

### Differentials 2019 to 2022 NJSLA Math: NJ compared to Metuchen (Grades 3-9)

#### 2019 % Proficient Math - NJ Compared to Metuchen





#### Differential between Metuchen and State Math Proficiencies 2019 to 2022 MHS Grade 9

Grade	2019% Prof. State	2019% Prof. Metuchen	Differential	2022% Prof. State	<mark>2022% Prof.</mark> Metuchen	Differential
<b>Algebra I</b> 2022 n=79	43	24	-19	35	<mark>35</mark>	0
<b>Geometry</b> 2022 n=66	31	52	21	44	<mark>67</mark>	23
Algebra II 2022 n=21	46	73	27	53	<mark>100</mark>	47

### CAMPBELL ELEMENTARY SCHOOL

A GREAT place to LEARN! A GREAT place to BELONG!

Vincent, J. Costanza, Ed.D. Principal

Brooke Kirschner Assistant Principal



### Two-Year ELA Differential at CES

Grade	2019% Prof. State	2019% Prof. Metuchen	Differential	2022% Prof. State	2022% Prof. Metuchen	Differential
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### Continuous Improvement at CES 3rd & 4th Grade ELA Glows

#### English Language Arts Evidence Statements Glows:

Grade 3:

- Compare and contrast the most important points and/ or key details presented in two texts on the same topic
- Provides explanation of how characters' actions contribute to the sequence of events

- Ability to determine meaning of words and phrases as they are used in text
- Simile and metaphor
- Describe a setting or event with character thoughts, words, actions

### Continuous Improvement at CES 3rd & 4th Grade Math Glows

#### Math Evidence Statements Glows

Grade 3:

- Multiplication: word problems equal groups, arrays, or area
- Division: interpret whole number quotients as the number of each objects in each share
- Measurement & Data: recognize area

- One step word problems add/subtract
- Reading and writing multi-digit whole numbers
- Add/subtract multi-digit

### Continuous Improvement at CES 3rd & 4th Grade Grade ELA Grows

English Language Arts Evidence Statements Grows:

#### Grade 3:

- Literary Analysis
- Vocabulary within informational text

- Integrate information from two texts
- Interpret information presented visually
- Interpretation of information presented orally
- Main idea is supported by key details

### Continuous Improvement at CES 3rd & 4th Grade Grade Math Grows

Math Evidence Statements Grows:

Grade 3:

- Explain the equivalence of fractions & compare them by reasoning about their size
- Determine the unknown whole number in a multiplication or division equation
- Base explanations/reasoning on the properties of operations

- Denominator 10 to denominator 100
- Number/shape pattern rules
- Comparing fractions with different denominators or numerators benchmark fractions

### Edgar Middle School



Suzy Azevedo Principal

Neyda Evans Assistant Principal



#### Differential between EMS and State ELA Proficiencies 2019 to 2022

Grade	2019% Prof. State	2019% Prof. Metuchen	Differential	2022% Prof. State	2022% Prof. Metuchen	Differential
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8 n=169	63	88	25	51	73	22



### **ELA Evidence Statement Glows**

- Grade 5
  - Provide an answer that draws on information from multi print or digital sources.
  - Integrates information from several texts on the same topic.
- Grade 6
  - Analyze the author's purpose
  - Acquire and use accurately grade-appropriate vocabulary
- Grade 7
  - Determine the central ideas or conclusions of a text
  - Analyze how a drama's or poem's structure contributes to its meaning.
- Grade 8
  - Analysis of relationship between primary and secondary source
  - Determine central idea over the course of text



### **ELA Evidence Statement Grows**

- Grade 5
  - Provide a comparison and contrast of two or more characters in a story or drama, drawing on specific details in the text.
- Grade 6
  - Determine the central ideas or information of a primary or secondary source.
- Grade 7
  - Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.
- Grade 8
  - Compare and contrast the structure of two or more texts and analyze how the differing structure of each text contributes to its meaning and style.



### **ELA Strategies for Success**

- Data Dive Sessions
  - Previous/current year's data reviewed
- Guided/Strategy Reading Groups
- LLI Program
- Infusion of more inquiry based instruction and research in ELA and Social Studies.
  - More student voice and choice into their learning
- Reading Writing Workshop
- RTI in all grade levels
- Continue working with Literary Consultant
- Small group instruction through the Workshop Model



#### Differential between EMS and State Math Proficiencies 2019 to 2022

Grade	2019% Prof. State	2019% Prof. Metuchen	Differential	2022% Prof. State	2022% Prof. Metuchen	Differential
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### Math Evidence Statement Glows

#### • Grade 5

- Multiplication with fractions
- Ordered pairs and coordinate planes

#### • Grade 6

- Understanding statistics & Probability
- Understand solving an equation

#### • Grade 7

- Explains the relationship between the four operations
- Compute unit rates associated with ratios of fractions



### Math Evidence Statement Glows

- Grade 8
  - Use scientific notation
  - Graphing functions
- Algebra 1
  - Understands equivalent expression
  - Summarize and interpret data
- Geometry

0

- Similarity and transformations (100% correct)
- Understand trigonometric ratios (100% Correct)



### <u>Math Evidence Statement Grows</u>

- Grade 5
  - Find quotients based on place value, the properties of operations.
- Grade 6
  - Use reasonable estimates of known quantities in a chain of reasoning.
- Grade 7
  - Find probabilities of compound events
- Grade 8
  - Understand that every number has a decimal expansion; for rational numbers show that the decimal expansion repeats eventually
- Algebra
  - Relate the domain of a function to a graph and to the quantitative relationship it describes.
- Geometry
  - Construct chains of reasoning that will justify or refute geometric propositions or conjectures.



### Math Strategies for Success

- Real world problem solving strategies embedded into lessons
- IXL of prerequisite skills
- iReady weekly work
- Ensure Workshop Model fidelity
  - Lesson Plan review
  - Observations
- Full integration of real-world problem-solving
  - STEM projects
  - Integration into instruction



### Math Strategies for Success

- Data Dive Sessions
  - November, January, Spring
  - Use of Benchmarks and state test results to Target Student Support
  - Identify specific standards and groupings for improvement, both individually and collectively as appropriate.
- Use technology to support increased small group instruction within the Workshop Model.
- Individual Interventions: RTI all grade levels
- Teacher support PD, coaching, peer sharing, articulation

### Metuchen High School

Edward C. Porowski, Principal

Brian Stike, Assistant Principal





### English Language Arts Grade 9

#### State Proficiency Rates



#### Metuchen Proficiency Rates



→ State Decrease 6%

#### ★ Metuchen Increase 4%

Increase in differential between New Jersey & Metuchen Proficiency scores. 2019 30% 2022 40%



### GLOWS: English Language Arts Grade 9

#### **Reason to Celebrate**

All areas assessed on the assessment reflect student strength in understanding content.

#### Areas of Strength Reading Literature

- **Theme**
- Text Evidence
- Complex Character Analysis

#### Reading Informational Text

- Analysis of Events and Connections Drawn
- Analysis of Author's Claims
- Analysis of Author's Purpose
- Analysis of U.S. Documents of Historical & Literary Significance.

#### Writing

Research Simulation

Shift to Strength in Reading Informational Text



### GROWS: English Language Arts Grade 9

### **Targeting Areas for Growth**

Note: 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.

#### Language

 Use of context clues for developing meaning of vocabulary (<u>LINK</u>)

#### Writing

Narrative Writing



### Algebra I

#### **State Proficiency Rates**



→ State decrease 8%

#### Metuchen Proficiency Rates



★ Metuchen Increase 11%

Increase in differential between New Jersey & Metuchen Proficiency scores. 2019 -19% 2022 0%



### GLOWS & GROWS: Algebra I

Reason to Celebrate

- In comparison to 2019, the student scores increased. Strengths in:
- Understanding the graph of an equation and the plotting on a coordinate plane
- Graphing linear functions and showing intercepts
- Interpreting exponential expressions

#### **Targeting Areas for Growth**

- Solving linear equations and inequalities (<u>LINK</u>)
- Solving quadratic equations in one variable (<u>LINK</u>)
- Constructing linear and exponential functions (<u>LINK</u>)
- Rearranging formulas that are quadratic in the quantity of interest (<u>LINK</u>)



### Geometry



#### **Metuchen Proficiency Rates**

**NJSLA - Geometry** 

**Met/Exceeded Expectations** 

**Metuchen Results** 

2021-2022

2018-2019

Increase in differential between New Jersey & Metuchen Proficiency scores. 11% 2019 2022 23%



### GLOWS & GROWS: Geometry

#### Reason to Celebrate

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

- Multi-step problems
- Geometric reasoning in a coordinate setting
- Verify properties of dilations
- Rotations, reflections, & translations
- Proving theorems.
- Geometric descriptions of rigid motions to transform figures
- Properties of triangles
- Points on a line segment in a given ratio

#### **Targeting Areas of Growth**

- Derivation of the equation of a circle of given center and radius using the Pythagorean Theorem. (LINK)
- Identify and describe relationships among inscribed angles, radii, and chords to apply in problem-solving situations. (<u>LINK</u>)
- Find arc lengths and areas of sectors of circles. (<u>LINK</u>)



### Algebra II

#### **State Proficiency Rates**



→ State Increase 7%

#### Metuchen Proficiency Rates



Increase in differential between New Jersey & Metuchen Proficiency scores. 2019 27% 2022 47%



### GLOWS & GROWS: Algebra II

#### Reason to Celebrate

#### All students met the proficiency requirements! Strengths include:

- Calculating/interpreting rate of change with polynomial, exponential, logarithmic, and trigonometric functions
- Rewriting simple rational expressions in different forms
- □ Solving problems using modeling
- Writing arithmetic and geometric sequences both recursively and with an explicit formula
- Rewriting expressions involving radicals and rational exponents using the properties of exponents

#### **Targeting Areas for Growth**

- Solving complex, multi-step contextual word problems (<u>LINK</u>)
- Solving quadratic equations in one variable (<u>LINK</u>)

### **RESPONDING TO THE DATA**

- Use of state and local assessment data to drive planning for instruction.
- Differentiate instruction using data results and implementation of the workshop model.
- Data Dives data driven conversation to focus on power standards.
- Alignment of assessments to state assessment standards.

#### FOCAL POINT: ALGEBRA I

Goals and tasks established to support student learning and growth



### **RESPONDING TO THE DATA**

- Collaboration on design and implementation of exemplar lessons.
- Purchase and instruction on the use of math manipulatives (<u>Algebra tiles</u>) to aid in concrete understanding of abstract concepts.
- Instruction on assessment accommodations and how to teach students to use those accommodations on state assessments.
- NEXT STEP: Triangulation of the NJSLA Data with LinkIt Benchmark Data & Start Strong Assessment Data

#### FOCAL POINT: ALGEBRA I

Goals and tasks established to support student learning and growth



### NJSLA Sub-group Data District -wide (Grades 3-9) ELA and Math

Grade	Sub Group	Passing Percentage	Grade	Sub Group	Passing Percentage
ELA	Latino/Hispanic	63	Math	Latino/Hispanic	39
ELA	Asian	86	Math	Asian	76
ELA	Black	45	Math	Black	31
ELA	White	68	Math	White	57
ELA	Two or More Races	77	Math	Two or More Races	63
ELA	Spec. Ed.	32	Math	Spec. Ed.	26
ELA	Economic Disadvantage	41	Math	Economic Disadvantage	19
ELA	504	64	Math	504	45

### Dynamic Learning Map (DLM) Alternate Assessment

Grades: 3-8, 11 Subjects: ELA, Math, & Science Online and Adaptive 5 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

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