

Start Strong Results

Fall 2021

Presented by

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Participation Rate for Metuchen

Total eligible:	1445
Total part.:	1434
Participation:	99.24%

The Start Strong data has helped us identify:

1. successes worthy of celebrations
 - a. VPs (STCs), Chris Thumann and tech team
 - b. Teachers, Teachers, Teachers
 - c. Supervisors
 - d. Principals
 - e. Superintendent
 - f. Board of Education
 - g. Parents
 - h. Special Services and Ed. Specialists and Nurses
 - i. Special Ed. Teachers, Teachers, Teachers
 - j. Interventionist: Behavioral and RtI
 - k. Tutors, Summer programming staff
 - l. Students
2. Who needs “strong support”
3. What are some of the best supports we can give systematically

Conclusion: The kids in Metuchen overall are doing really well, all things considered.



What is Start Strong? Points to know...

“The Start Strong Assessment was developed in response to the disruption in education caused by the pandemic and was designed specifically to inform instruction going forward. Thus, all students are described as possibly needing support regardless of how well they perform on the Start Strong Assessment.

...should only be used with other supporting evidence (assignments, homework, etc.) when drawing conclusions about a student’s overall academic performance.”

NJDOE Start Strong Score Interpretation Guide

What is Start Strong? Points to know

Scoring:

- By amount of support that “may be needed”
 - Less support, some support or strong support needed
- By standard
 - Correct, incorrect, partial

Who was tested?

- ELA grades 4-10
- Math grades 4-8, Algebra I and II, Geometry
- Science Grades 6, 9 and 12

What Start Strong is not...

“not designed to predict future student performance on the NJSLA,
...nor was it designed to estimate what score a student would have gotten if they had taken the NJSLA in spring 2021.
...not a summative assessment of student learning following a period of instruction.
...does not cover the full breadth and depth of the NJSLs;”

NJDOE Start Strong Score Interpretation Guide

- No data to compare to other districts, county or rest of the state
- No growth scores or mSGPs

What can Start Strong tell us?

- Where do our students need the least support: ELA
- Where do our students need some support: Math
- Which students need the strongest support:
 - Special Education
 - Black
 - Hispanic
- Not a lot of trends, but a lot of info about individual student needs:
 - Which students need more support with which standards this year
 - Individual Student Score Reports will be sent by NJDOE to districts soon and then mailed home to all parents of test takers

What is our big plan?

Provide targeted interventions at the individual level through targeted **small group instruction** and **RtI services**

Provide stronger supports for sub-groups needing stronger supports through targeted **small group instruction** and **RtI services** as well as **One-on-One Tutoring** with funding through the use of federal funds (ARP ESSER III) - 20% of which is mandated for student sub-groups that Start Strong data show need the strongest supports



ARP ESSER Use of Funds Requirements



LEAs must reserve at least 20% of funds to address learning loss through implementation of evidence-based interventions and ensure that those interventions respond to students' social, emotional, and academic needs and address the disproportionate impact of COVID-19 on underrepresented student subgroups:

- Each major racial and ethnic group
- Children from low-income families
- Children with disabilities
- Children and youth in foster care
- English learners
- Gender
- Migrant students
- Students experiencing homelessness



ELA Proficiency by Grade

<i>ELA Test Name</i>	<i>N</i> <i>2021</i>	Less Support May Be Needed	Some Support May Be Needed	Strong Support May Be Needed
Grade 04 ELA	191	49.74%	25.65%	24.61%
Grade 05 ELA	160	66.25%	23.13%	10.63%
Grade 06 ELA	189	60.32%	23.81%	15.87%
Grade 07 ELA	185	66.49%	19.46%	14.05%
Grade 08 ELA	167	67.07%	16.77%	16.17%
Grade 09 ELA	166	74.10%	15.66%	10.24%
Grade 10 ELA	170	79.41%	11.76%	8.82%

ELA Proficiency Grades 4-12 by Race

Race	N	Less Support May Be Needed	Some Support May Be Needed	Strong Support May Be Needed
Asian	303	74.59%	12.87%	12.54%
Black	55	52.73%	18.18%	29.09%
Hispanic	168	60.71%	23.81%	15.48%
Multiple Races	92	65.22%	21.74%	13.04%
White	606	64.03%	21.78%	14.19%

ELA Celebrations

- Grade 4
 - High Performance Standards
 - RL.3.3. Describe the characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the plot.
 - RL.3.7. Explain how specific aspects of a text's illustrations contribute to what is conveyed by the words in a story (e.g., create mood, emphasize aspects of a character or setting).
- Grade 5
 - Over 65% of 5th graders need less support
 - High Performance Standards
 - RL.4.5. Explain major differences between poems, drama, and prose, and refer to the structural elements of poems (e.g., verse, rhythm, meter) and drama (e.g., casts of characters, settings, descriptions, dialogue, stage directions) when writing or speaking about a text.
 - RI.4.3. Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.

ELA Grades K-5: Interventions for all

- Focus with teachers on utilizing DIBELS & iReady data to plan small group instruction in Department meetings and individual data meetings
 - This will also include a focus on creating interventions for Black and Hispanic students in alignment with the district's goal
- Push in Rtl services to allow for students to stay in least restrictive environment
 - Incidental benefit for all students having access to extra support
 - Building capacity of classroom teacher's skills
- Both 4th and 5th grade have identified textual evidence as an area of growth
 - Systematic implementation of inquiry based research projects
 - We have started to stress this in observations

ELA Grade 4- Interventions

- DIBELS and Start Strong identified comprehension as an area in need of growth specifically in utilizing textual evidence to support claims
 - The 4th grade team will focus on asking and answering questions and comparing texts supporting thinking with textual evidence
 - Diving deeper into topics to build schema by utilizing text sets
 - Implementation of mClass instructional groupings and activities

ELA Grade 5– Interventions

- iReady and Start Strong identifying vocabulary and informational text as an area in need of growth for 5th grade
 - The 5th grade team already identified this last spring looking at incoming data and have started to integrate text sets to build vocabulary and background knowledge
 - This is also an area the NJDOE has identified in the acceleration guide as an area of focus
 - Utilizing iReady instructional groupings and activities

ELA Celebrations – Grades 6 – 8

- An average of 65% of total students in Grades 6 - 8 scored in the Less Support Needed Category

High performance anchor standards

NJSLS.R1. Read closely to determine what the text says explicitly and to make logical inferences and relevant connections from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

NJSLS.R4. Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.

(with correlations between Link-It & Start Strong)

ELA Celebrations – Grades 9 – 10

- An average of 76% of total students in Grades 9 - 10 scored in the Less Support Needed Category

High performance anchor standards

NJSLS.R4. Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone

NJSLSA.R8. Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.

(with correlations between Link-It & Start Strong)

ELA Grades 6 – 8: Interventions

- Use of department, PLC, and Data Meeting time for:
 - Planning for explicit instruction in identified standards of need:
 - NJSL.R3. Analyze how and why individuals, events, and ideas develop and interact over the course of a text.
 - NJLSA.R6. Assess how point of view or purpose shapes the content and style of a text.
 - Emphasis on close reading, metacognitive awareness, and self-monitoring strategies
 - Gathering resources, sharing best practices, building teacher capacity
- RTI Programming:
 - Continued identification of students in need of support using multiple data points
 - Expansion of RTI support options to include push-in support during ELA
 - Progress monitoring for specific learning targets, formative assessments, and benchmarks

ELA Grades 9 – 10: Interventions

- Use of department, PLC, and Data Meeting time for:
 - Planning for explicit instruction in identified standards of need:
 - NJSLA.R5. Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.
 - NJSLA.R9. Analyze and reflect on how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.
 - Emphasis on close reading, metacognitive awareness, and self-monitoring strategies
 - Gathering resources, sharing best practices, building teacher capacity
- RTI Programming:
 - Continued identification of students in need of support using multiple data points
 - Expansion of RTI support options to include support at the high school in both small group & push-in setting
 - Progress monitoring for specific learning targets, formative assessments, and benchmarks

ELA Grades K – 10 Sub Group Interventions

- Use of department, PLC, and Data Meeting time for:
 - Teacher review of class specific district assessment data to identify student gaps for Black and Hispanic students
 - Consultation and support from district Reading Specialists
 - Plan for small group or individual instruction during “You-Do”/independent practice class time to provide targeted support.
 - One-on-one afterschool tutoring

Math Proficiency by Grade

<i>Math Test Name</i>	<i>N</i> <i>2021</i>	Less Support May Be Needed	Some Support May Be Needed	Strong Support May Be Needed
Grade 04 Mathematics	193	44.04%	24.35%	31.61%
Grade 05 Mathematics	162	38.89%	25.93%	35.19%
Grade 06 Mathematics	188	45.74%	29.26%	25.00%
Grade 07 Mathematics	159	49.69%	37.11%	13.21%
Grade 08 Mathematics	84	22.62%	44.05%	33.33%
Algebra I	183	30.05%	39.34%	30.60%
Algebra II	167	62.28%	24.55%	13.17%
Geometry	155	49.68%	23.87%	26.45%

Math Proficiency 4-12 by Race

Race	N	Less Support May Be Needed	Some Support May Be Needed	Strong Support May Be Needed
Asian	304	64.14%	23.36%	12.50%
Black	62	24.19%	32.26%	43.55%
Hispanic	184	32.61%	33.70%	33.70%
Multiple Races	94	47.87%	31.91%	20.21%
White	643	38.88%	32.04%	29.08%

Mathematics Celebrations

- Grade 4
 - Almost 45% of students in need of less support
 - High Performance Anchor Standards:
 - 3.OA.B.6 6. Understand division as an unknown-factor problem.
 - 3.OA.A.3 . Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem
- Grade 5
 - Almost 40% of students in need of less support
 - High Performance Anchor Standards:
 - 4.OA.A.1 . Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations
 - 4.OA.A.2 . Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.
 - 4.OA.A.3 . Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
 - 4.NBT.A.1 Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right

Math Grades 4 & 5– Interventions for All

- Teachers utilizing iReady Prerequisite report to provide small group instruction
- Completion of 40-60 minutes of personalized instruction on iReady My Path
- Math Coach is supporting teachers by providing resources and activities for centers/small group instruction to address prerequisite skills
- Implementation of Math Pacing Guides

Math Grade 4- Interventions

- Grade 4 identified Fractions (Major Cluster), Measurement and Data (Supporting Cluster) and Geometry (Additional Cluster) as areas of focus
 - Infusion of Geometry skills in the new Math Pacing Guides
 - Spiraling these skills in small and whole group instruction
 - Grade 4 Push in RtI Services to allow for students to stay in least restrictive environment
 - Incidental benefit for all students having additional support in the room for all students

Math Grade 5– Interventions

- Grade 5 identified Fraction (Major Cluster) and Division (Major Cluster) as areas of focus
 - Utilizing Do Nows and small group instruction to focus on prerequisite skills
 - Providing differentiated support utilizing technology platforms like iReady and iXL
 - Frequent Formative assessments to adjust instruction in response to student learning

Math Grades 4 & 5– Interventions for Subgroups

- The Math Coach will be providing resources to support Black and Hispanic students in need of Strong Support to close subgroup data
- One on One Tutoring

Mathematics Celebrations – EMS

Top 2 Topics of success by grade level:

Grade 6: 46% of students in need of less support (includes all Gr. 6 students)

Base 10 concepts and computations

Ratio and Rate Reasoning

Grade 7: 50% of students in need of less support (includes Math 7 and Pre-Algebra)

Fraction and integer concepts and graphing

Solve real-world and mathematical problems with the four
operations

Grade 8: 23% of students in need of less support (includes only Math 8 students)

Ratios and Proportional Relationships

Square and cube roots



Mathematics Celebrations – MHS

Top Topics of success by course:

Algebra 1: 30% of students in need of less support (includes Gr. 7-9)

Radicals, Integer Exponents, Proportional
Relationships, Lines, and Linear Equations
Linear Equations and System of Two Linear Equations

Geometry: 50% of students in need of less support

Linear Equations and System of Two Linear Equations

Algebra 2: 62% of students in need of less support

Interpreting Functions
Data from surveys, experiments, observational studies



Mathematics Interventions for all students

All grades 6-12:

All students in grades 6-12 Math and Science are experiencing implementation of real-world problem solving instruction through the introduction of interdisciplinary STEM projects with a focus on student engagement in a formal problem solving process.

As part of this process, students will engage in structured self-questioning and documentation of the problem solving process.

Mathematics Interventions for all students

Targeted instruction, differentiation and RTI focusing on:

- Grade 6: Identify when two expressions are equivalent
 - Write, read and evaluate expressions with letter variables
- Grade 7: Rewriting an expression in a problem context.
 - Apply properties to add, subtract, factor and expand linear expressions with rational coefficients.
- Grade 8: A range of standards.

Mathematics Interventions for EMS Sub-groups

Targeted instruction, differentiation, RTI and one-on-one tutoring focusing on:

- Grade 6: Reason about and solve one-variable equations and inequalities
- Grade 7: Rewriting an expression in a problem context.
 - Use proportional relationships to solve multi-step ratio and percent problems.
- Grade 8: Use and evaluate square and cube roots.
 - Analyze and solve pairs of simultaneous linear equations.

Mathematics Interventions for MHS students

Targeted instruction, differentiation and RTI focusing on:

- Algebra 1: Use the structure of an expression to identify ways to rewrite it.
- Geometry: Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems.
- Algebra 2: Know and apply the remainder theorem.
 - Use the structure of an expression to identify ways to rewrite it.

Mathematics Interventions for MHS Sub-groups

Targeted instruction, differentiation, RTI and one-one-one tutoring focusing on:

- Algebra 1: Perform arithmetic operations on polynomials.
 - Create equations that describe numbers or relationships.
- Geometry: Understand congruence in terms of rigid motions.
- Algebra 2: Understand the relationship between zeros and factors of polynomials.
 - Interpret the structure of expressions.

Science Proficiency by Grade

<i>Science Test Name</i>	<i>N</i>	Less Support May Be Needed	Some Support May Be Needed	Strong Support May Be Needed
Grade 06 Science	185	49.19%	30.81%	20.00%
Grade 09 Science	166	32.53%	43.37%	24.10%
Grade 12 Science	197	42.13%	27.41%	30.46%

Science Proficiency by Race

Race	N	Less Support May Be Needed	Some Support May Be Needed	Strong Support May Be Needed
Asian	131	54.96%	25.95%	19.08%
Black	20	25.00%	15.00%	60.00%
Hispanic	75	37.33%	36.00%	26.67%
Multiple Races	31	41.94%	45.16%	12.90%
White	289	37.72%	35.99%	26.30%

Science Celebrations for all students

Areas of success:

- Grade 6 Science: Sensemaking, particularly in Physical Science and Life Science.
- Grade 9 Science: Sensemaking
- Grade 12 Science: Fairly even across Sensemaking, Investigating, Critiquing in Earth, Physical and Life Sciences.

Science Interventions for all students

Targeted instruction, differentiation focusing on specific areas for each student.

Specific emphasis on:

- Critiquing in Physical Science.
- Authentic STEM 3.0/4.0 Problem Solving (real world)

ELA Special Ed Proficiency by Grade

<i>ELA Test Name</i>	<i>N 2021</i>	Less Support May Be Needed	Some Support May Be Needed	Strong Support May Be Needed
Grade 04 ELA	31	19.35%	19.35%	61.29%
Grade 05 ELA	29	24.14%	34.48%	41.38%
Grade 06 ELA	33	21.21%	36.36%	42.42%
Grade 07 ELA	27	25.93%	37.04%	37.04%
Grade 08 ELA	20	20.00%	35.00%	45.00%
Grade 09 ELA	22	27.27%	27.27%	45.45%
Grade 10 ELA	26	57.69%	19.23%	23.08%

Math Special Ed Proficiency by Grade

<i>Math Test Name</i>	N	Less Support May Be Needed	Some Support May Be Needed	Strong Support May Be Needed
Grade 04 Mathematics	31	25.81%	22.58%	51.61%
Grade 05 Mathematics	29	10.34%	17.24%	72.41%
Grade 06 Mathematics	33	12.12%	24.24%	63.64%
Grade 07 Mathematics	26	23.08%	38.46%	38.46%
Algebra I	28	7.14%	25.00%	67.86%
Geometry	22	22.73%	9.09%	68.18%

Science Special Ed Proficiency by Grade

<i>Science Test Name</i>	<i>N</i>	Less Support May Be Needed	Some Support May Be Needed	Strong Support May Be Needed
Grade 06 Science	31	12.90%	22.58%	64.52%
Grade 09 Science	23	4.35%	13.04%	82.61%
Grade 12 Science	26	7.69%	34.62%	57.69%

Special Education Department Celebrations

10th grade ELA

- highest percentage of students categorized as needing “Less Support
- lowest percentage of students categorized as needing “Strong Support”
- Start Strong was consistent with ELA Link It with the percentage of students “Meeting or Exceeding”

Algebra II

- highest percentage of students categorized as needing “Less Support”
- lowest percentage of students categorized as needing “Strong Support”
- Start Strong was consistent with Link It with the highest percentage of math high school students “Meeting or Exceeding”

Special Education Needs & Interventions

Needs- Focus on individual student data to drive small group instruction

- Professional development related to areas of need:
 - Comprehension strategies across content areas
 - Targeted small group reading instruction
 - Paraprofessional training in Workshop Model and assisting teachers during small group instruction
- Teacher Coaching (by Reading Specialists, Orton Gillingham specialists, Supervisor)
 - Data analysis to inform small group instruction
 - Strategy based instruction
 - Utilizing Four Square Problem Solving Strategy
 - Targeted, differentiated instruction across content areas based on individual student needs
- Providing teachers with differentiated resources
- Department meetings focused on data, growth and progress monitoring
- Department Meetings and Lunch and Learns to share strategies aligned to specific areas of need
- Individual data meetings with Supervisor to support teachers