NJSLA Science Results: Spring 2019 Administrations

Teaneck Public Schools May 18, 2020

New Jersey Student Learning Assessment – Science (NJSLA-Science)

The NJSLA-Science:

- Is a federally required state assessment administered to students in grades 5, 8, and 11
- Provides a snapshot of student performance on the New Jersey Student Learning Standards for Science (NJSLS-Science).
- Was developed in collaboration with NJ educators, the New Jersey Department of Education (NJDOE), and New Jersey's contracted science vendors
- Is significantly different from the New Jersey Assessment of Skills and Knowledge (NJ ASK) because NJSLS-Science are more rigorous standards and NJSLA-Science focuses on the application of science knowledge and skills rather than memorization of content.

Teaneck Public Schools Number of Students Tested in Spring 2019 NJSLA Administrations Science

Grade	Students Tested 2019
5	233
8	275
11	274
Total	782

Note: "Students Tested" represents individual valid test scores for Science.

Comparison of Teaneck Public Schools Spring 2019 NJSLA Administrations Science to New Jersey Percentages for 2019

Grade	Level 1, District	Level 1, State	Level 2, District	Level 2, State	Level 3, District	Level 3, State	Level 4, District	Level 4, State
5	39.2	34.8	37.5	36.0	20.7	22.7	2.6	6.6
8	42.0	35.7	42.8	44.5	13.4	15.3	1.9	4.5
11	55.8	49.0	26.6	23.6	15.3	19.5	2.2	7.8

Notes: Percentages may not total 100 due to rounding.

Teaneck Public Schools 2019 Spring NJSLA School- & Grade-Level Outcomes Science Grade 5 - Percentages

	Level 1	Level 2	Level 3	Level 4	% of students at Level 3 and 4
Benjamin Franklin Middle School	46.8	27.9	21.6	3.6	25.2
Thomas Jefferson Middle School	32.2	46.3	19.8	1.7	21.5

Teaneck Public Schools 2019 Spring NJSLA School- & Grade-Level Outcomes Science Grade 8 - Percentages

	Level 1	Level 2	Level 3	Level 4	% of students at Level 3 and 4
Benjamin Franklin Middle School	46.0	38.8	12.9	2.2	15.1
Thomas Jefferson Middle School	37.7	46.9	13.8	1.5	15.4

Teaneck Public Schools 2019 Spring NJSLA School- & Grade-Level Outcomes Science Grade 11 - Percentages

	Level 1	Level 2	Level 3	Level 4	% of students at Level 3 and 4
Teaneck High School	55.8	26.6	15.3	2.2	17.5

Comparison of Benjamin Franklin Middle School's Spring 2019 Administration Science to Teaneck Public Schools Percentages in 2019

Benjamin Franklin Middle School Performance Compared to District Performance									
Grade	Level 1, School	Level 1, District	Level 2, School	Level 2, District	Level 3, School	Level 3, District	Level 4, School	Level 4, District	
BFMS 5	47	39	28	38	22	21	4	3	
BFMS 8	46	42	39	43	13	13	2	2	

Comparison of Thomas Jefferson Middle School's Spring 2019 Administration Science to Teaneck Public Schools Percentages in 2019

Thomas Jefferson Middle School Performance Compared to District Performance									
Grade	Level 1, School	Level 1, District	Level 2, School	Level 2, District	Level 3, School	Level 3, District	Level 4, School	Level 4, District	
TJMS 5	32	39	46	38	20	21	2	3	
TJMS 8	38	42	47	43	14	13	2	2	

National Environmental Education Foundation partnered with the Teaneck Creek Conservancy and Benjamin Franklin Middle School

- 7th-grade students in a water quality monitoring project
 - https://youtu.be/So2ssMLYJuI?t=1
- 8th-grade students in a macroinvertebrate and biomonitoring study at their local watershed.
 - https://youtu.be/3yjuN-G-e5I?t=113

Hydroponic Garden at Benjamin Franklin Middle School

 Conducted a joint project with students from the Bergen Academies who had received a grant to work with middle school students on Hydroponics using STEM









Activist / Environmental Club at Thomas Jefferson Middle School

- Recipients of the 2019 Environmental Awareness Challenge Grant Program from the Bergen County Utilities Authority (BCUA)
- Awarded \$1000 to promote sustainability of the Michelle Obama Interdisciplinary Outdoor Garden and to incorporate a composting program
- Students maintained the garden this year by planting perennials, fall crops, and flowers that have natural pesticide chemical properties



Cell City Project

- 8th grade students created Cell City models simulating animal and plant cell structure and their function
- Each building within the city represents a part of an animal or plant cell and the function of the building represents the function of the part of the cell.
- These models were displayed in the TJMS entrance foyer during the parent conference night at TJMS.



Teaneck High School - Participation in the Rutgers Oncology Olympiad

- Competition designed to raise awareness for cancer education and for supporting the Rutgers Cancer Institute of New Jersey
- After taking a qualifying test, current 10th grade student Alieyah Ordillano qualified to move on to the finals event that took place on Saturday, April 6, 2019 at Rutgers Cook Student Center

Teaneck High School - 3D Printing and Design

- Students have completed the assembly of 15 3D Printer Kits
- Learning and using the 3D Printers to solve problems
- Learning how to use Slicing and 3D Modeling software
- Exposed to the Engineering Design Process by designing and building solutions to problems



Teaneck Public Schools Intervention Strategies

One week Summer Institute professional development at Raritan

Community College

- One teacher from each elementary school, one science teacher from each middle school, three high school science teachers and the Science Supervisor
- Week-long sessions from 9 am to 3:30 pm
- K-12 sessions and breakout sessions for grades K-5 and 6-12

FOLLOWED BY

- Three in-district professional development sessions
 - The sessions to include all high school and middle school science teachers and select elementary teaching staff (include the teachers that participated in the Summer Institute PD)
 - The teaching staff that participated in the Summer Institute would facilitate the K-5 and 6-12 breakout sessions

Science Supervisor will present to district administrators:

- Exemplars of K-12 Science lessons and lesson plans that implement NGSS and the proposed intervention strategies
- How these science lessons should look like when implemented in a science class.

Subgroup Charts

Science Performance by Race



Why did we need a new test?

- A new test was needed to measure the State's new, more rigorous science standards (NJSLS-Science) that are informing classroom instruction.
- The NJSLS-Science standards were adopted by the State in 2014. The timeline for transition to the new standards for districts required full implementation in grades 6-12 by September 2016 and full implementation in grades K-5 by September 2017.

When will the NJSLA-Science scores be utilized in NJQSAC?

NJQSAC for school year 2021-2022 will be the first year in which results from the NJSLA-Science will be factored into NJQSAC, utilizing the results from the 2020-2021 administration of the assessment.

Does a student have to pass the NJSLA-Science to graduate?

The NJSLA-Science is not a state graduation assessment requirement. Why do NJSLA-Science scores look different from those of the previous state science tests?

- The NJSLA-Science assessment reflects new expectations outlined in the new science standards, the NJSLS-Science, which focuses on the application of science knowledge and skills.
- The prior assessment, New Jersey Assessment of Skills and Knowledge (NJ ASK), emphasized the memorization of content.

How can schools and districts use data from the NJSLA-Science?

- The NJSLA-Science data should be used to evaluate the district's science curriculum and school and classroom instruction.
- This data, in combination with classroom level data collected through formative, summative, and benchmark assessments, can provide schools and districts feedback on students' strengths and weaknesses with particular skills.
- The reports can be used as a catalyst for conversation and exploration of questions such as, but not limited to;
 - What do the patterns in the data suggest about the effectiveness of our program for English Language Learners, students who receive special education services, gifted and talented, general education students, and/or students who qualify for free or reduced lunches?
 - What do the patterns in the data suggest about the allocation of time and resources to our science program?

What resources are available for further support?

- The NJDOE Office of Standards has a repository of various resources to help support educators and districts with the implementation of the NJSLS-Science:
 - https://www.nj.gov/education/aps/cccs/science/mc.htm
- NJSLA-Science practice tests are also available online at the following site:
 - <u>https://measinc-nj-science.com/</u>

The NJDOE plans to continue to develop additional resources, such as K-12 instructional units based on the 2020 NJSLS-Science and connect educators with free resources and course materials.