



The Scholars' Academy

Mission Statement: To Prepare for College and Careers of the 21st Century
"Technology Today, Smarter Tomorrow: Removing Time and Place from Teaching and Learning"

27Q323 is an Accelerated College Preparatory School for Grades 6-12

320 Beach 104 Street, Rockaway Park, NY 11694

<http://schools.nyc.gov/SchoolPortals/27/Q323>

Tel: (718) 474-6918 Fax: (718) 945-8958

Principal

Brian O'Connell

Assistant Principals

Math/Arts: Michele Smyth

Humanities/Foreign Language: Toni Marie Sorrentino

Science/Technology/Safety/PE: Scott Milczewski

College Statistics Summer Performance Based Assessment

Focus Questions: How is data used to make predictions? Why do some predictions fail while others succeed?

Standards:

- **S-IC.1** Understand statistics as a process for making inferences about population parameters based on a random sample from that population
- **S-IC.2** Decide if a specified model is consistent with results from a given data-generating process
- **S-IC.6** Evaluate reports based on data
- **RST.11-12.1** Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account
- **RST.11-12.2** Determine the central idea or conclusion of a text; summarize complex concepts, processes or information presented in a text by paraphrasing them in simpler but still accurate terms
- **WHST.11-12.1** Write arguments focused on discipline-specific content

Task: Why do some predictions fail while others succeed? After reading *The Signal and the Noise*, by Nate Silver, write an essay that compares predictions that fail to predictions that succeed and argues how the prediction-making process can be improved. Be sure to support your position with evidence from the text.

Task Steps and Requirements:

- Over the summer, you will need to read *The Signal and the Noise*, by Nate Silver. This book can be purchased at bookstores, on amazon.com, or found at your local library.
- As you read the book, complete the graphic organizer below.
- Using the graphic organizer, write an essay that addresses the task above
- In your essay, you must cite specific page numbers when you use evidence from the book.
- You will be assessed on the quality of your arguments, your analysis of the examples provided in the text, and your command of the content using the rubric on page 3.

Graphic Organizer:

You should use this graphic organizer to make notes as you read. Choose 3 case studies of successful predictions and 3 case studies of unsuccessful predictions. Fill out the graphic organizer for each case study. Please cite specific page numbers.

Prediction(s) (Describe the prediction(s) you are analyzing.)	Context (Describe why the prediction is significant.)	Supporting data (What types of models/data were used to support this prediction?)	Assumptions (What assumptions were made when making this prediction?)	Outcome (Was the prediction successful? Why or why not?)

Scoring Elements	Not Yet		Approaches Expectations		Meets Expectations		Advanced
	1	1.5	2	2.5	3	3.5	4
Focus	Attempts to address prompt, but lacks focus or is off-task.		Addresses prompt appropriately and establishes a position, but focus is uneven.		Addresses prompt appropriately and maintains a clear, steady focus. Provides a generally convincing position.		Addresses all aspects of prompt appropriately with a consistently strong focus and convincing position.
Controlling Idea	Attempts to establish a claim, but lacks a clear purpose. (L2) Makes no mention of counter claims.		Establishes a claim. (L2) Makes note of counter claims.		Establishes a credible claim. (L2) Develops claim and counter claims fairly.		Establishes and maintains a substantive and credible claim or proposal. (L2) Develops claims and counter claims fairly and thoroughly.
Reading/ Research	Attempts to reference reading materials to develop response, but lacks connections or relevance to the purpose of the prompt.		Presents information from reading materials relevant to the purpose of the prompt with minor lapses in accuracy or completeness.		Accurately presents details from reading materials relevant to the purpose of the prompt to develop argument or claim.		Accurately and effectively presents important details from reading materials to develop argument or claim.
Development	Attempts to provide details in response to the prompt, but lacks sufficient development or relevance to the purpose of the prompt. (L3) Makes no connections or a connection that is irrelevant to argument or claim.		Presents appropriate details to support and develop the focus, controlling idea, or claim, with minor lapses in the reasoning, examples, or explanations. (L3) Makes a connection with a weak or unclear relationship to argument or claim.		Presents appropriate and sufficient details to support and develop the focus, controlling idea, or claim. (L3) Makes a relevant connection to clarify argument or claim.		Presents thorough and detailed information to effectively support and develop the focus, controlling idea, or claim. (L3) Makes a clarifying connection(s) that illuminates argument and adds depth to reasoning.
Organization	Attempts to organize ideas, but lacks control of structure.		Uses an appropriate organizational structure for development of reasoning and logic, with minor lapses in structure and/or coherence.		Maintains an appropriate organizational structure to address specific requirements of the prompt. Structure reveals the reasoning and logic of the argument.		Maintains an organizational structure that intentionally and effectively enhances the presentation of information as required by the specific prompt. Structure enhances development of the reasoning and logic of the argument.
Conventions	Attempts to demonstrate standard English conventions, but lacks cohesion and control of grammar, usage, and mechanics. Sources are used without citation.		Demonstrates an uneven command of standard English conventions and cohesion. Uses language and tone with some inaccurate, inappropriate, or uneven features. Inconsistently cites sources.		Demonstrates a command of standard English conventions and cohesion, with few errors. Response includes language and tone appropriate to the audience, purpose, and specific requirements of the prompt. Cites sources using appropriate format with only minor errors.		Demonstrates and maintains a well-developed command of standard English conventions and cohesion, with few errors. Response includes language and tone consistently appropriate to the audience, purpose, and specific requirements of the prompt. Consistently cites sources using appropriate format.
Content Understanding	Attempts to include disciplinary content in argument, but understanding of content is weak; content is irrelevant, inappropriate, or inaccurate.		Briefly notes disciplinary content relevant to the prompt; shows basic or uneven understanding of content; minor errors in explanation.		Accurately presents disciplinary content relevant to the prompt with sufficient explanations that demonstrate understanding.		Integrates relevant and accurate disciplinary content with thorough explanations that demonstrate in-depth understanding.

