



Deborah A. Gist
Commissioner

State of Rhode Island and Providence Plantations
DEPARTMENT OF EDUCATION
Shepard Building
255 Westminister Street
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Dear Parents and Guardians of Rhode Island students,

I hope that your children are enjoying and benefitting from an excellent year of teaching and learning in Rhode Island public schools. One way our teachers understand how well their students are performing and whether some students may need extra support is through quizzes, tests, and other assessments. Similarly, one way that we understand the performance not only of individual students but also of our schools and of our state as a whole is through statewide assessments. Students take these statewide assessments in mathematics, reading, and science. (Federal law requires that we administer these statewide assessments every year.)

Last May, students in grades 4, 8, and 11 took our statewide NECAP (New England Common Assessment Program) science assessment. In September we received the preliminary results from our testing company, and we shared these results with each school district for local review. On reviewing the results, many of us were concerned about the scores some students received, particularly in grades 4 and 8. To ensure that the results were accurate, we decided to undertake a review of the science assessments and of the scoring process and to hold off on release of the assessment results until we completed this review.

We have now completed this review, and I can report to you that the assessment itself and the scoring process met all technical requirements needed to report results accurately. We did, however, find several items on the “inquiry task” section science assessments for grades 4 and grade 8 that were borderline in meeting these requirements. These items ask students to design or critique scientific investigations, to analyze data, and to draw conclusions or explanations. You can see examples of these items – known as “constructed-response items” – on our website, under “practice tests,” on this page:

<http://www.ride.ri.gov/InstructionAssessment/Science/NECAPScience.aspx#17622-resources>

In our review, we looked at these items, materials used to score the items, and selected student responses. We found that, because of the wording of some items, students were not clear about the question and did not provide the required response. This lack of clarity led some students to receive no credit (0 points) on an item even though their response included some accurate scientific information. We concluded, however, that only a small percentage of students who received zero points on one of these test items could have received partial credit (1 point) based on the information that they included in their response. Overall, the adjusted scores would change student scores for a small percentage of students by 1 point only and would very rarely raise the scoring level – partially proficient, proficient, or proficient with distinction – of any student.

You should, therefore, use caution in reviewing scores on the “inquiry task” section of the assessment if your child took the assessment in grade 4 or grade 8. We are confident, however, that the overall scores and proficiency levels are accurate at the state levels.

I appreciate your patience in waiting for the release of these results. If you have questions or concerns about your child's performance in science, I encourage you to speak with your child's science teacher or with the principal of your child's school. Let's continue working together to make sure our students receive a world-class education in science throughout their years in school.

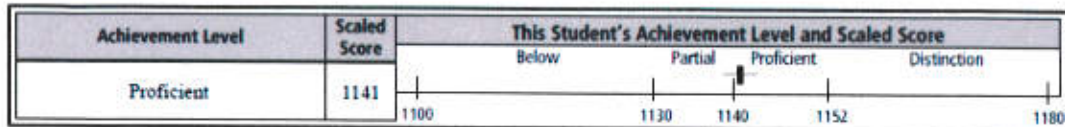
Best,

A handwritten signature in black ink, appearing to read 'D. Gist', with a large loop on the left side.

Deborah A. Gist, Commissioner

Student Alexandra Conway	Grade 11	School Demonstration School 1	District Demonstration District A	State NH
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Spring 2013 - Grade 11 NECAP Science Test Results



Interpretation of Graphic Display

The line (|) represents the student's score. The bar (shaded) surrounding the score represents the probable range of scores for the student if he or she were to be tested many times. This statistic is called the standard error of measurement. See the reverse side for the achievement level descriptions.

	Student	School	District	State
Proficient with Distinction		0%	0%	1%
Proficient	✓	25%	27%	20%
Partially Proficient		43%	45%	47%
Substantially Below Proficient		32%	27%	23%

	Possible Points	Student	Average Points Earned				Students at Beginning of Proficient
			School	District	State		
Physical Science	15	10	8.1	8.3	8.6	8.5-11.6	
Earth Space Science	10	10	7.7	7.7	8.1	8.2-11.9	
Life Science	15	11	6.4	7.0	7.0	6.8-10.3	
Inquiry	10	8	6.1	6.6	7.1	6.1-11.6	

All test items in the Physical Science, Earth Space Science, and Life Science domains met technical requirements for accurate results.

Two items in the grades 4 and 8 Inquiry domain were borderline in meeting technical requirements. These inquiry points should be interpreted with caution.

Description of the Inquiry Task
<p>There are many interesting and essential facts, formulas, and processes that students should know across the three content domains of science. But science is more than content. Inquiry skills are skills that all students should have in addition to the content. Inquiry skills are the ability to formulate questions and hypothesize, plan investigations and experiments, conduct investigations and experiments, and evaluate results. These are the broad areas that constitute scientific inquiry. Content from Physical Science, Earth Space Science, and Life Science forms the basis of each NECAP Science Inquiry Task. Instead of measuring student knowledge of content, inquiry tasks measure the student's ability to make connections, express ideas, and provide evidence of scientific thinking.</p> <p>The grade 11 inquiry task, <i>Lifetime of the Sun</i>, required students to use data to explain relationships and make predictions regarding the life cycle of stars. Students used authentic astronomical data and graphs to analyze the relationship among luminosity, star size, and temperature. Students applied this information to determine the best way to plot and analyze data about stars. Students worked independently during this task.</p>