# The New England Common Assessment Program



# Guide to Using the 2007 NECAP Reports

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# Introduction

# **NECAP Background**

The New England Common Assessment Program (NECAP) is the result of collaboration among New Hampshire, Rhode Island and Vermont to build a set of assessments for grades 3 through 8 & 11 to meet the requirements of the No Child Left Behind Act (NCLB). The states decided to work together for three important reasons:

- Working together brings together a team of assessment and content specialists with experience and expertise greater than any individual state.
- Working together provides the capacity necessary for the three states to develop quality, customized assessments consistent with the overall goal of improving education.
- Working together allows the sharing of costs in the development of a customized assessment program of a quality that would not be feasible for any individual state.

# **Document Purpose**

The primary purpose of this document is to support local educators' use of test data from the October 2007 administration of the New England Common Assessment Program (NECAP) tests. This document describes and explains the information included in the following NECAP reports:

- NECAP Tests of Fall 2007: NECAP Student Report
- NECAP Tests of Fall 2007: NECAP Item Analysis Report
- NECAP Tests of Fall 2007: NECAP School/District Results Report
- NECAP Tests of Fall 2007: NECAP School/District Summary Report
- NECAP Tests of Fall 2007: NECAP District Student-Level Data Files

These reports contain information valuable to schools and districts in their efforts to better serve the academic needs of individual students and to evaluate and improve curriculum and instruction. In addition, this document can help school and district personnel communicate with their communities about the NECAP test results. It is important to note that these reports contain results from the student assessment program, and not individual state accountability systems. Please note that the appendices contain important information about NECAP assessment instruments and procedures.

# Accessing Reports

School, district, and state level NECAP reports can be accessed through the NHDOE<br/>website homepage: (http://www.ed.state.nh.us/education/) and clicking on the link to the<br/>NH School District Profile site.NHNECAP Item Analysis Reports and student-level data files can be accessed using the<br/>following URL: <a href="http://iservices.measuredprogress.org">http://iservices.measuredprogress.org</a>. Principals and superintendents are<br/>able to access the confidential reports and files by selecting New England Common<br/>Assessment Program (NECAP) from the drop down menu, clicking on the NECAP<br/>Reporting link, and entering their secure username and password.

RI	All NECAP reports and data files (confidential and non-confidential) can be accessed using the following URL: <u>http://iservices.measuredprogress.org</u> Principals and superintendents are able to access the reports and files by selecting New England Common Assessment Program (NECAP) from the drop down menu, clicking on the NECAP Reporting link, and entering their secure username and password. School, district, and state level NECAP reports can also be accessed through the RIDE website homepage: ( <u>http://www.ride.ri.gov</u> ) and clicking on the link to Public Schools, and then clicking the School and District Data link.
VT	State- and school-level NECAP results, as well as results from other assessments, can be accessed on the VT DOE website using the following URL: (http://education.vermont.gov/new/html/pgm_assessment/data.html). To obtain copies of other NECAP reports and support materials, including grade-level results, contact the local school administrator.

# **General Guidelines for the Use of NECAP Reports**

# Alignment of Curriculum and the NECAP Tests

All test items appearing on the NECAP grades 3 through 8 tests are designed to measure specific NECAP *Grade Level Expectations*. All test items appearing on the NECAP grade 11 tests are designed to measure specific NECAP *Grade Span Expectations* for high school. As schools align their curriculum and instructional programs with these standards, test results should reflect student progress towards these standards.

# **Use of NECAP Student-Level Results**

NECAP results are intended to evaluate how well students and schools are achieving the learning targets contained in the *Grade Level and Grade Span Expectations*. NECAP was designed primarily to provide detailed school-level results and accurate summary information about individual students. NECAP was not designed to provide, in isolation, detailed student-level diagnostic information for formulating individual instructional plans. However, NECAP results can be used, along with other measures, to identify students' strengths and weaknesses. NECAP is only one indicator of student performance and should not be used for referring students to special education or for making promotion and/or graduation decisions.

# **Multiple Data Points Needed for Trend Analysis**

A single year's test results provide limited information about a school or district. As with any evaluation, school and district test results are most meaningful when compared with other indicators and when examined over several years for long-term trends in student performance. This is especially true in small schools where changes in student cohorts from year to year can have a noticeable influence on school results for any given year.

# **Regulations Regarding Confidentiality of Student Records**

The Family Educational Rights and Privacy Act (FERPA) requires that access to individual student results, including those provided in the *NECAP Item Analysis Report* and the *NECAP Student Report*, be restricted to the student, the student's parents/guardians, and authorized school personnel. Superintendents and principals are responsible for maintaining the privacy and security of all student records. In accordance with this federal regulation, authorized school personnel shall have access to the records of students to whom they are providing services when such access is required in the performance of their official duties.

For more information about FERPA please visit the following website: <u>http://www.ed.gov/policy/gen/guid/fpco/ferpa/index.html</u>

# National Council on Measurement in Education (NCME) Code of Professional Responsibilities in Educational Measurement

The Departments of Education in NH, RI and VT and Measured Progress adhere to the NCME code. Local educators also have responsibilities under this code. The entire document can be found in Appendix B. More information about NCME can be found at <u>www.ncme.org</u>.

# Understanding the NECAP Student Report

The section below discusses the *NECAP Student Report*, which provides schools and parents/guardians with information about individual student performance. Schools will receive two copies of the *NECAP Student Report*. The colored copy of the report is for distribution to parents/guardians and the black and white copy of the report is for school files. The *NECAP Student Report* is confidential and should be kept secure within the school and district. Remember, the Family Educational Rights and Privacy Act (FERPA) requires that access to individual student results be restricted to the student, the student's parents/guardians, and authorized school personnel.

Details about the NECAP tests and achievement levels are provided on the cover of the *NECAP Student Report*. Details about the student's performance on the NECAP tests are included on the inside of the report, which is explained in detail below. Parents/guardians are encouraged to contact the student's school for more information on their child's overall achievement after reviewing the *NECAP Student Report*.

The NECAP Student Report is divided into three sections.

# Student's Achievement Level and Score

This section of the report shows the achievement level attained for each content area. Achievement level descriptions can be found in Appendix C of this guide and are provided on the reverse side of the report. The *NECAP Student Report* for grades 3 through 8 shows the scaled score earned for each content area. The *NECAP Student Report* for grade 11 shows the scaled score earned for reading and mathematics and the raw score earned for writing. Each scaled score is reported with a score band that indicates the standard error of measurement surrounding each score. The standard error of measurement indicates how much a student's score could vary if the student was examined repeatedly with the same test (assuming that no learning occurs between test administrations).

# Student's Achievement Level Compared to Other Students by School, District, and State

This section of the report lists the four achievement levels—Proficient with Distinction, Proficient, Partially Proficient, and Substantially Below Proficient—for each content area. This student's performance is noted with a check mark in the appropriate box. The percentage of students at each achievement level is listed for the student's school, district, and state.

# **Student's Performance in Content Area Subcategories**

This section of the report shows the student's performance compared to school, district, and statewide performance in a variety of areas. Each of the three content areas assessed by NECAP is reported by subcategories. For **reading**, with the exception of Word ID/Vocabulary items, items are reported in two ways – Type of Text and Level of Comprehension. The two types of text are Literary and Informational. The two levels of comprehension are Initial Understanding and Analysis and Interpretation. Numbers and Operations, Geometry and Measurement, Functions and Algebra, and Data, Statistics, and Probability are the subcategories reported for **mathematics**. The content area subcategories for **writing** at grades 5 and 8 are reported as Structures of Language and Writing Conventions, displayed in the student's writing and in response to multiple-choice items, and by the

type of response – short or extended. The content area subcategory for **writing** at grade 11 is reported on the extended-response item.

Student performance in all content area subcategories is presented as a table including possible points, points earned by this student, average points earned for the school, district, and state, and the average points earned by students at the Proficient level on the total content area test.

Students in grades 5, 8 and 11 were administered the NECAP Writing test, which was scored by two independent scorers. To give a more complete picture of this student's performance on the writing assessment, each scorer chose up to three comments from a predetermined list. The comments selected by the student's scorers appear in the table at the bottom right-hand corner of the *NECAP Student Report* for grades 5 and 8 and at the bottom left-hand corner for grade 11. Since the NECAP writing test at grade 11 does not contain multiple-choice or constructed-response items and the score is based only on an extended-response item, if a student earns the score of 0 on the item the reason is provided on the student report. Below are the two reasons for why a student response will earn the score of 0.

- 1) **Off Topic** Student received a score of 0 in writing because response did not address topic, text was insufficient to produce a score, or response was unreadable.
- 2) **Non-English** Student received a score of 0 in writing because response was not produced in English.

The following four pages contain sample grade 5 and grade 11 NECAP Student Reports.

# NECAP Student Report - Fall 2007



This report contains results from the Fall 2007 New England Common Assessment Program (NECAP) tests. The NECAP tests are administered to students in New Hampshire, Rhode Island, and Vermont as part of each state's statewide assessment program. The NECAP tests are designed to measure student performance on grade level expectations (GLE) developed and adopted by the three states. Specifically, the tests are designed to measure the content and skills that students are expected to have as they begin the current enrolled grade. In other words, content and skills which students have learned through the end of the previous grade.

NECAP test results are used primarily for school improvement and accountability. Achievement level results are used in the state accountability system required under No Child Left Behind. More detailed

school and district results are used by schools to help improve curriculum and instruction. Individual student results are used to support information gathered through classroom instruction and assessments. Contact the school for more information on this student's overall achievement.

#### Achievement Levels and Corresponding Score Ranges

Student performance on the NECAP tests is classified into one of four achievement levels describing students' level of proficiency on the content and skills required through the end of the previous grade. Performance at Proficient or Proficient with Distinction indicates that the student has a level of proficiency necessary to begin working successfully on current grade content and skills. Performance below Proficient suggests that additional instruction and student work may be needed on the previous grade content and skills as the student is introduced to new content and skills at the current grade. Refer to the Achievement Level Descriptions contained in this report for a more detailed description of the achievement levels.

There is a wide range of student proficiency within each achievement level. NECAP test results are also reported as scaled scores to provide additional information about the location of student performance within each achievement level. NECAP scores are reported as three-digit scores in which the first digit represents the grade level. The remaining digits range from 00 to 80. Scores of 40 and higher indicate a level of proficiency at or above the Proficient level. Scores below 40 indicate proficiency below the Proficient level. For example, scores of 340 at grade 3, 540 at grade 5, and 740 at grade 7 each indicate Proficient performance at each grade level.

#### **Comparisons to Other Beginning of Grade Students**

The tables in the middle section of the report provide the percentage of students performing at each achievement level in the student's school, district, and statewide. Note that one or two students can have a large impact on percentages in small schools and districts. Results are not reported for schools or districts with nine (9) or fewer students.

#### Performance in Content Area Subcategories

This section of the report provides information about student performance on sets of items measuring particular content and skills within each test. These results can provide a general idea of relative strengths and weaknesses in comparison to other students. However, results in this section are based on small numbers of test items and should be interpreted cautiously.

#### Students at Proficient Level

This column shows the average performance on these items of students who performed near the beginning of the Proficient achievement level on the overall test. Students whose performance in a category falls within the range shown performed similarly to those students. This comparison can provide some information about the level of performance needed to perform at the Proficient level.

#### Comments about this student's writing performance

Students in grades 5 and 8 took the NECAP writing test which included a writing prompt that required students to produce a written response up to three pages long. Student responses were scored independently by two scorers. Each scorer was able to choose up to three comments from a prepared list to provide feedback about each student's performance on the writing prompt. If both scorers selected the same comment, it is listed only once.

# **Achievement Level Descriptions**

Proficient with Distinction (Level 4) - Students performing at this level demonstrate the prerequisite knowledge and skills needed to participate and excel in instructional activities aligned with the GLE at the current grade level. Errors made by these students are few and minor and do not reflect gaps in prerequisite knowledge and skills.

Proficient (Level 3) - Students performing at this level demonstrate minor gaps in the prerequisite knowledge and skills needed to participate and perform successfully in instructional activities aligned with the GLE at the current grade level. It is likely that any gaps in prerequisite knowledge and skills demonstrated by these students can be addressed during the course of typical classroom instruction.

Partially Proficient (Level 2) - Students performing at this level demonstrate gaps in prerequisite knowledge and skills needed to participate and perform successfully in instructional activities aligned with the GLE at the current grade level. Additional instructional support may be necessary for these students to meet grade level expectations.

Substantially Below Proficient (Level 1) - Students performing at this level demonstrate extensive and significant gaps in prerequisite knowledge and skills needed to participate and perform successfully in instructional activities aligned with the GLE at the current grade level. Additional instructional support is necessary for these students to meet grade level expectations.

Student	Grade 5	School	District	State
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# Fall 2007 - Beginning of Grade 5 NECAP Test Results

Content Area	Achievement Level	Scaled	TI	nis Student's Ach	ievem	ent Level and S	core			
content Area	Achievement Lever	Score	Belov	v Pa	rtial	Proficient	Distinction			
Reading	Proficient	548	500	530	540		56	580		
Content Area	Achievement Level	Scaled Score	Ti	nis Student's Ach	i <b>evem</b> Partial	ent Level and So Proficient	core Distinction			
Mathematics	Proficient	540	500	E.	33 540					
			3 300	5.	5 540	554		300		
Content Area	Achievement Level	Scaled	This Student's Achievement Level and Score							
content Area	Achievement Lever	Score	Below	Pa	rtial	Proficient	Distinction			
Writing	Partially Proficient	535			•			$\rightarrow$		
			J 500	528	540	555	5	580		

### Interpretation of Graphic Display

The line () represents the student's score. The bar (\_\_\_\_\_\_) 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.

### This Student's Achievement Level Compared to Other Beginning of Grade 5 Students by School, District, and State

		Rea	ding		Mathematics				Writing			
	Student	School	District	State	Student	School	District	State	Student	School	District	State
Proficient with Distinction		5%	5%	15%		0%	0%	17%		5%	5%	10%
Proficient	1	47%	47%	52%	1	49%	49%	46%		40%	40%	41%
Partially Proficient		30%	30%	22%		28%	28%	19%	1	40%	40%	33%
Substantially Below Proficient		19%	19%	11%		23%	23%	18%		16%	16%	15%

### This Student's Performance in Content Area Subcategories

					Average	Points Earr	ned	]					Average	Points Earn	ed
Reading		Possible Points	Student	School	Students of Whitelentile		Possible Points Student		School	District	State	Students at Proficient Level			
Word ID/ Vocabular	у	9	8	5.8	5.8	6.5	4.7-7.3		Numbers and Operations	d 30 11 11.7 11.7 14.9		9.2-14.5			
Type of Text*	Literary	22	12	10.5	10.5	11.8	9.6-13.1		Geometry and	13	4	4.5	4.5	5.9	3-6.5
type of text	Informational	21	12	9.5	9.5	11.2	7.5-11.7	Measurement							
	Initial Understanding	19	12	11.9	11.9	14.2	10.5-14.9		Functions and Algebra	13	8	6.7	6.7	7.4	4.9-8.5
Level of Comprehension*	Analysis and Interpretation	24	12	8.2	8.2	8.8	6.7-9.9		Data, Statistics, and Probability	10	4	3.7	3.7	4.6	2.2-5.1

				Average	Points Earr	ned	Comments about t
Writing	Possible Points	Student	School	District	State	Students at Proficient Level	Writing has some organiz Writing has some support
Structures of Language & Writing Conventions	10	9	8.5	8.5	8.7	8.1-10	Writing has limited word
Short Responses	12	3	4.9	4.9	5.4	4.2-6.4	
Extended Response	15	9	8.4	8.4	8.4	6.5-10.8	

#### this student's writing performance:

- ization. rting details.
- d choice and/or control of sentence structure.

\*With the exception of Word ID/Vocabulary items, reading items are reported in two ways - Type of Text and Level of Comprehension

\*\*Student received no credit for all or parts of the test that were administered under non-standard conditions.

§ This score should be viewed with caution because student did not complete all parts of the test.

# NECAP Student Report - Fall 2007



This report contains results from the Fall 2007 New England Common Assessment Program (NECAP) tests. The NECAP tests are administered to students in New Hampshire, Rhode Island, and Vermont as part of each state's statewide assessment program. The NECAP tests are designed to measure student performance on grade span expectations (GSE) developed and adopted by the three states. Specifically, the tests are designed to measure the content and skills that students are expected to have as they begin the current enrolled grade. In other words, content and skills which students have learned through the end of the previous grade.

NECAP test results are used primarily for school improvement and accountability. Achievement level results are used in the state accountability system required under No Child Left Behind. More detailed

school and district results are used by schools to help improve curriculum and instruction. Individual student results are used to support information gathered through classroom instruction and assessments. Contact the school for more information on this student's overall achievement.

#### Achievement Levels and Corresponding Score Ranges

Student performance on the NECAP tests is classified into one of four achievement levels describing students' level of proficiency on the content and skills required through the end of the previous grade. Performance at Proficient or Proficient with Distinction indicates that the student has a level of proficiency necessary to begin working successfully on current grade content and skills. Performance below Proficient suggests that additional instruction and student work may be needed on the previous grade content and skills as the student is introduced to new content and skills at the current grade. Refer to the Achievement Level Descriptions contained in this report for a more detailed description of the achievement levels.

There is a wide range of student proficiency within each achievement level. NECAP test results are also reported as scaled scores to provide additional information about the location of student performance within each achievement level. Grade 11 NECAP scores are reported as four-digit scores in which the first two digits represent the grade level. The remaining digits range from 00 to 80. Scores of 40 and higher indicate a level of proficiency at or above the Proficient level. Scores below 40 indicate proficiency below the Proficient level. For example, a score of 1140 indicates Proficient performance at this grade level. The writing score is reported as the total points earned on the NECAP scoring rubric for writing. This rubric describes the most important features expected in student writing.

#### **Comparisons to Other Beginning of Grade Students**

The tables in the middle section of the report provide the percentage of students performing at each achievement level in the student's school, district, and statewide. Note that one or two students can have a large impact on percentages in small schools and districts. Results are not reported for schools or districts with nine (9) or fewer students.

#### Performance in Content Area Subcategories

This section of the report provides information about student performance on sets of items measuring particular content and skills within each test. These results can provide a general idea of relative strengths and weaknesses in comparison to other students. However, results in this section are based on small numbers of test items and should be interpreted cautiously.

#### Students at Proficient Level

This column shows the average performance on these items of students who performed near the beginning of the Proficient achievement level on the overall test. Students whose performance in a category falls within the range shown performed similarly to those students. This comparison can provide some information about the level of performance needed to perform at the Proficient level.

### Comments about this student's writing performance

Students in grade 11 took the NECAP writing test which required students to produce a written response up to three pages long. Student responses were scored independently by two scorers. Each scorer was able to choose up to three comments from a prepared list to provide feedback about each student's performance on the writing prompt. If both scorers selected the same comment, it is listed only once.

# Achievement Level Descriptions

Proficient with Distinction (Level 4) - Students performing at this level demonstrate the prerequisite knowledge and skills needed to participate and excel in instructional activities aligned with the grade 9-10 GSEs. Errors made by these students are few and minor and do not reflect gaps in prerequisite knowledge and skills.

These students are prepared to perform successfully in classroom instruction aligned with grade 11-12 expectations.

Proficient (Level 3) - Students performing at this level demonstrate minor gaps in the knowledge and skills needed to participate and perform successfully in instructional activities aligned with the grade 9-10 GSEs.

It is likely that any gaps in the prerequisite knowledge and skills demonstrated by these students can be addressed by the classroom teacher during the course of classroom instruction aligned with grade 11-12 expectations.

Partially Proficient (Level 2) - Students performing at this level demonstrate gaps in the knowledge and skills needed to participate and perform successfully in instructional activities aligned with the grade 9-10 GSEs.

Additional instructional support may be necessary for these students to perform successfully in courses aligned with grade 11-12 expectations.

Substantially Below Proficient (Level 1) - Students performing at this level demonstrate extensive and significant gaps in the prerequisite knowledge and skills needed to participate and perform successfully in instructional activities aligned with the grade 9-10 GSEs.

Additional instruction and support is necessary for these students to meet the grade 9-10 GSEs.

Student	Grade	School	District	State

# Fall 2007 - Beginning of Grade 11 NECAP Test Results

Reading     Proficient     1145       Reading     Proficient     1145       Content Area     Achievement Level Substantially Below Proficient     Scaled Score     This Student's Achievement Level and Scaled Score       Mathematics     Substantially Below Proficient     1132       Content Area     Achievement Level Proficient     Tatal Proficient       Mathematics     Substantially Below Proficient     1132       Content Area     Achievement Level Proficient     Total Points     This Student's Achievement Level and Total Points       Writing     Partially     Partially	Content Area	Achievement Level	Scaled		This Studen	t's Achieveme	nt Level and Sca	led Score	
Content Area     Achievement Level Score     Scaled Score     This Student's Achievement Level and Scaled Score       Mathematics     Substantially Below Proficient     1132     III32       Content Area     Achievement Level Proficient     1132     III32       Content Area     Achievement Level Points     Total Points     This Student's Achievement Level and Total Points       Writing     Partially     6     I	content Area	Achievement Lever	Score		Below	Partial	Proficient	Distinction	
Content Area     Achievement Level Substantially Below Proficient     Scaled Score     This Student's Achievement Level and Scaled Score       Mathematics     Substantially Below Proficient     1132     1132       Content Area     Achievement Level Points     Total Points     This Student's Achievement Level and Scaled Score       Writing     Partially     6     Image: Content Area     Proficient	Reading	Proficient	1145				-		
Content Area     Achievement Level     Score     Below     Partial     Proficient     Distinction       Mathematics     Substantially Below Proficient     1132     1132     1132     1134     1140     1152       Content Area     Achievement Level Points     Total Points     This Student's Achievement Level and Total Points     Distinction       Writing     Partially     6     I     I     I				1100		1130 11	40 1154		118
Mathematics     Substantially Below Proficient     1132       Content Area     Achievement Level Partially     Total Points     Total Below     This Student's Achievement Level and Total Points       Writing     Partially     6	Content Area	Achievement Level							
Mathematics     Substantially Below Proficient     1132       Content Area     Achievement Level Points     Total Points     This Student's Achievement Level and Total Points       Writing     Partially     6     I			Jeone		Below		Proficient	Distinction	
Content Area     Achievement Level Points     Total Points     This Student's Achievement Level and Total Points       Writing     Partially     6	Mathematics	Substantially	1122						1
Content Area         Achievement Level         Total Points         This Student's Achievement Level and Total Points           Writing         Partially         6         I         Proficient         Distinction	maulematics	Below Proficient	1152	1100		1134 11	40 1152		118
Content Area         Achievement Level         Points         Below         Partial         Proficient         Distinction           Writing         Partially         6         I				1100		1154 11	40 1152		110
Points         Peints         Below         Partial         Proficient         Distinction           Writing         Partially         6         1         1         1         1	Content Area	Achievement Level			This Stude	nt's Achieveme	nt Level and Tot	al Points	
Writing	contentrated	Admerennent Lever	Points	Below		Partial	Proficient	Distincti	on
Writing		Partially				1			
	Writing	Proficient	6						

### Interpretation of Graphic Display

10

12

The line () represents the student's score. The bar (\_\_\_\_\_\_) 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.

### This Student's Achievement Level Compared to Other Beginning of Grade 11 Students by School, District, and State

		Rea	ding		Mathematics				tics Writing				
	Student	School	District	State	Student	School	District	State	Student	School	District	State	
Proficient with Distinction		11%	10%	17%		0%	0%	2%		2%	2%	3%	
Proficient	1	60%	59%	50%		17%	17%	26%		16%	16%	30%	
Partially Proficient		17%	17%	22%		31%	30%	28%	1	66%	65%	49%	
Substantially Below Proficient		13%	13%	12%	1	53%	53%	45%		17%	17%	18%	

### This Student's Performance in Content Area Subcategories

					Average	Points Earr	ed					Average	Points Earn	ed	
Reading		Possible Points	Student	School	District	State	Students at Proficient Level	Mathematics	Possible Points	Student	School	District	State	Students at Proficient Level	
Word ID/ Vocabular	y	10	7	7.3	7.3	7.3	5.4-7.9	Numbers and Operations	10	0	1.9	1.9	2.2	1.7-4.4	
Type of Text*	Literary	21	12	11.4	11.4	11.2	8.5-12.3	Geometry and	19	6	5.1	5.1	5.9	5.5-9.6	
.,,,	Informational	21	13	11.2	11.2	11.7	9.1-12.8	Measurement Functions							
	Initial Understanding	18	13	11.3	11.3	11.5	9.3-12.7	and Algebra	25	6	8.7	8.7	10.3	11.8-16.3	
Level of Comprehension*	Analysis and Interpretation	24	12	11.3	11.3	11.4	8.3-12.4	Data, Statistics, and Probability	10	4	3.1	3.1	3.2	3.0-5.8	

### Comments about this student's writing performance:

Writing has a general purpose with attempted focus.						Average	Points Earn	ed
Writing has some supporting details.	v	Writing	Possible Points	Student	School	District	State	Students at Proficient Level
Writing has limited word choice and/or control of sentence structure.		Extended Response	12	6	5.1	5.1	5.5	7

\*With the exception of Word ID/Vocabulary items, reading items are reported in two ways - Type of Text and Level of Comprehension

# **Understanding the Item Analysis Report**

The *NECAP Item Analysis Report* provides schools and districts with information on the released items. It also includes summary information on the scaled score and achievement level for each student in the school in reading and mathematics. The *NECAP Item Analysis Report* for grades 5 and 8 writing provides the scaled score and achievement level for each student in the school. Because of differences in the test design, the grade 11 writing report provides the raw score and achievement level for each student. In addition to showing raw data for students, it provides additional information for each released item. Using this report, together with the actual released items, one can easily identify test items on which groups of students did well or poorly. There is a separate *NECAP Item Analysis Report* for each content area. There is a legend after the last page of data for each content area that defines the terms used.

The data used for the *NECAP Item Analysis Report* are the results of the fall 2007 administration of the NECAP tests. The NECAP tests are based on the *Grade Level Expectations* (GLE) from the prior year in grades 3 through 8 and on the *Grade Span Expectations* (GSE) from the prior years in grade 11. For example, the Grade 7 NECAP test, administered in the fall of seventh grade, is based on the grade 6 GLEs. Therefore, many students receive the instruction they need for this fall test at a different school from where they are currently enrolled. The state Departments of Education determined that it would be valuable for both the school where the student tested and the school where the student received instruction to have access to information that can help improve curriculum. To achieve this goal, separate *NECAP Item Analysis Reports* have been created for the "testing" school and the "teaching" school report, and most students will also be represented in a "testing" school report. In some instances, such as when the student has recently moved into the state, it is not possible to provide information about a student in the "teaching" school report. For more information on teaching and testing year reports see page 24 of this guide.

When reviewing the NECAP Item Analysis Reports it is important to note the following:

- enrollment and not tested data are not reported for the "teaching" school;
- not every student is represented in the "teaching" school reports; and
- the subtitle on the report indicates if the report is based on "teaching" or "testing" year. For example, on a grade 4 report, the subtitle "Grade 4 Students in 2007-2008" means that this report shows the item analysis for the school where the student was enrolled at the time of testing. The subtitle "Grade 3 Students in 2006-2007" indicates that this report shows the item analysis for the school where the student learned the grade 3 material he or she is tested on for the grade 4 NECAP.

The top portion of the NECAP Item Analysis Report contains seven rows of information.

- The first row lists the **released item number** (not the position of the item in the actual student test booklet).
- The second row lists the **content strand** for the item.
- The third row lists the **GLE** or **GSE code** for the item.
- The fourth row lists the **Depth of Knowledge code** for the item.

- The fifth row lists the **item type**.
- The sixth row lists the **correct response** letter for each multiple choice item.
- The final row lists the **total possible points** for each item.

When reviewing the multiple-choice section of this report please keep in mind that a (+) indicates a correct response, a letter indicates the incorrect response selected, and a blank indicates that no response was selected. In the columns for the short-answer and constructed-response results, the numbers indicate the points awarded per item and a blank indicates that the item was not answered. All responses to released items are reported in the *NECAP Item Analysis Report*, regardless of the student's participation status.

The first column of this report lists each student alphabetically by last name followed by each student's state assigned student ID number. The column after the released items shows Total Test Results, broken into several categories. Subcategory Points Earned columns report the points the student earned in each content strand. The Total Points Earned column is a summary of all of the points earned in each of the content areas. The last two columns show the Scaled Score and Achievement Level for each student. For students who are reported as Not Tested, a code appears in the Achievement Level column to indicate the reason the student did not test. The descriptions of these codes can be found on the legend, after the last page of data on the *NECAP Item Analysis Report*. It is important to note that not all items used to compute student scores are included in this report. Only those items that have been released are included. The Percent Correct/Average Score for the school, district, and state are listed at the end of each report after the student data.

The *NECAP Item Analysis Reports* are confidential and should be kept secure within the school and district. Remember, the Family Educational Rights and Privacy Act (FERPA) requires that access to individual student results be restricted to the student, the student's parents/guardians, and authorized school personnel.

The following page is a sample NECAP Item Analysis Report for grade 3 mathematics.

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Fall 2007 - Beginning of Grade 3 NECAP Tests Grade 3 Students in 2007-2008 Item Analysis Report Mathematics

School: District: State: Code: Page 1 of 1

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<b>Total Test Results</b>	rned		lity	ided	Pro		0											1	-	m	
Tota	Points Earned	8	elics,	idebi		2 2	10						- · ·					7.1	7.1	9	
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	Subcategory		nent vy &	item item			10	~	, e	• •	n 0	о ш		•	2	9		6.8	6.8	6.1	
				nber Deti			35	26	22	2	27		64 K	3	22	25		25.3	25.3	23.2	
	16	DP	2-1	m	SA		2	-	. 0	0	4 0	~ <	0 0	4	0	2	16		-	0.7	
	15	В	2-1	2	S		2	$ ^{\sim}$	. ~		4 0	2 0	7 [	-	0	2	15	1.4	1.4	=	
	14	NO	2-2	m	SA		2		1 -		4 C	4 0	7 (	4	2	-	14	1.8	1.8	1.5	
	13	EA (	3 2-1	2	SA		-		C			- C	-		0		13	0.4	6.0	0.4	
	12	NO	1 2-3	2	A SA		-	-	. 0			- <	- C	-	0		12	0.6	0.6	9.0.6	
S	1	NO	2 2-1	2	C SA		-	-						-	Ļ	-	11	-	-	6.0	
l Item	10	DP	4 2-2	2	MC MC	8	-	+	- A	<	τ.	+ <	1 4	2		+	10	0 38	0 38	2 46	
Released Items	6	FA	1 2-4	-	¥	A	-	+	. +		+ •	+ •	+ +	-	+	-	6	100	100	92	
Re	8	A FA	7 2-1	2	¥	8	-						+ +			+	8	3 75	3 75	8	
	7	MB 0	5 2-7	1	U W U	0	-			: -			+ +		+		7	88	88	3 74	
	9	NO NO	5 2-5	-	MC MC	8	-				+ •		z +			< <	9	3 50	3 50	59 53	
	4 5	NO	2-3 2-	1 2	MC M	DB	1						+ ¤ + ¤		+	+	4 5	75 63	75 63	76 5	
	۰ ۳	NO	2-2 2	2	MC	A	-		+ +			+ .	+ +	-		• +	° m	88 7	88 7	87 7	
	2	NO	2-1 2	2	MC	8	-		+ +	+	÷ .	+ -	+ +	+	+		2	100 8	100 8	76 8	
	-	NO	2-1 2	-	MC	٥	-	_		. +	÷ .	+ -	+ +		+		-	88 1	88	74 7	
	Released Item Number	Content Strand <sup>1</sup>	GLE Code	Depth of Knowledge Code	Item Type <sup>2</sup>	Correct MC Response	Total Possible Points										Released Item Number	Percent Correct/Average Score: School	Percent Correct/Average Score: District	Percent Correct/Average Score: State	
							Name/Student ID														CI trat Chand. NO

The top portion of the *NECAP Item Analysis Report* for grade 11 writing consists of a single row of information.

- The **content strand** for the item.
- The **GSE codes** for the item.
- The **Depth of Knowledge code** for the item.
- The item type writing prompt.
- The total possible points for the item

The students' names are listed in a dual-column format, alphabetically by last name followed by the students' state assigned student ID number. The Total Test Results section to the right includes the Total Points Earned and Achievement Level for each student. For students who are reported as Not Tested, a code appears in the Achievement Level column to indicate the reason the student did not test. The descriptions of these codes can be found on the legend, after the last page of data on the *NECAP Item Analysis Report*. The Average Points earned by the school, district, and state are listed at the end of each report after the student data.

The *NECAP Item Analysis Reports* are confidential and should be kept secure within the school and district. Remember, the Family Educational Rights and Privacy Act (FERPA) requires that access to individual student results be restricted to the student, the student's parents/guardians, and authorized school personnel.

The following page is a sample NECAP Item Analysis Report for grade 11 writing.

# Fall 2007 - Beginning of Grade 11 NECAP Tests Grade 11 Students in 2007-2008 ltem Analysis Report Writing

1 of 1	Page	
		Code:
		State:
		District:
		School:

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1	
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Content Strand		GSE Codes	SS	Depth of Knowledge Code	Item Type	Type	Total Possible Points
Response to Informational Text	xt	10-2, 10-3, 10-1, 10-9	1, 10-9	œ	Extended Response	Response	12
		Total Teel	Total Tact Doculto			Totha	Total Teet Beculte
			t health			10141	
		Total Points Earned	Achievement Level	-		Total Points Earned	Achievement Level
ut ID	one of the second s	,		Name/Student ID	10011010		c
Andrews, Ethan	123456789	_	m	Ladder, Adam Y	123456/89	4	7
	123456789	2	-	Leach, Sara	123456789	7	~ ·
Brooks, John M	123456789	2	m	Lyons, David U	123456789	1	m
Broken, Amanda M	123456789	6	3	Martel, Tristan O	123456789	9	2
Brun, Richard D	123456789	∞	m	Park, Tina K	123456789	10	4
Bunnell, Jon Y	123456789	9	2	Place, Brussel I	123456789	8	m
Chapin, Marcia E	123456789	4	2	Potter, Ashley S	123456789	6	m
Choice, Adam †	123456789	0	Z	Raymond, Jordan J †	123456789	0	z
Craft, Steven M	123456789	7	£	Rice, Jeffrey R	123456789	9	2
Cross, Alex Q	123456789	7	c	Robot, Laura P	123456789	7	m
Doe, Jane A	123456789	∞	m	Silver, Misty D	123456789	5	2
Elliott, Cathy N	123456789	с	-	Silver, Vickie C	123456789	4	2
Gold, Brian R	123456789	7	m	Smith, Taylor L	123456789	9	2
Gorman, Cole A	123456789	9	2	Smythe, Elizabeth A	123456789	9	2
Gold, Jeremy M	123456789	c	-	Sweat, Carla A †	123456789	0	z
Grant, Austin K	123456789	5	2	Whale, Allison Q	123456789	80	m
Gray, Melissa L	123456789	9	2	Wheat, Kristina M	123456789	2	-
	123456789	9	2				
Harris, Rachel A †	123456789	0	Z				
Hebert, Travis	123456789	9	2				
Hibbard, Heath O	123456789	∞	S				
Howe, Shera M	123456789	6	ſ				
Howe, Susan M †	123456789	0	z				
Howard, Elizabeth K	123456789	m	+				
Huck, Brad A †	123456789	0	z				
Jackson, Chris L	123456789	∞	3			Summary	
Kenney, Jack L	123456789	6	œ	Average Points: School		6.4	
King, Mike D	123456789	10	4	Average Points: District		6.4	
King, Jessie	123456789	9	2	Average Points: State		5.5	

t This student is not included in the school, district, and state summary results at the end of this report. King, Mike D King, Jessie

# **Understanding the School and District Results Reports**

# Overview

The *NECAP School Results Report* and the *NECAP District Results Report* provide NECAP results for schools and districts based on the testing of local students in grades 3 through 8 & 11. A separate school report and district report has been produced for each grade level tested.

Although text in this section refers only to the NECAP School Results Report, educators and others who are reviewing the NECAP District Results Report should also refer to this section for applicable information. The data reported, report format, and guidelines for using the reported data are identical for both the school and district reports. The only real difference between the reports is that the NECAP District Results Report includes no individual school data.

# **IDENTIFICATION**

The box in the upper-right corner of each page shows the school name, district name, state, and district and school code.

# BASIS FOR RESULTS

Results in the *NECAP School Results Report* are based on common items (with one exception described on page 31 of this guide), and represent the aggregate of individual student scores (achievement level results and scaled scores).

# MINIMUM NUMBER OF STUDENTS NEEDED TO GENERATE REPORTS

To ensure confidentiality of individual student results and discourage generalizations about school performance based on very small populations, the Departments of Education in NH, RI and VT have established that groups of students must be larger than nine in order to report results in any particular reporting category. Consequently, schools with a very small number of students enrolled in a grade may not show results in some sections of their school report. A school report was not generated for any school that tested fewer than ten students at a particular grade; results for students in these schools are included in district- and/or state-level results.

# Making Comparisons Among Students, Schools, and Districts

The Departments of Education in NH, RI and VT do not encourage or promote comparisons among schools and districts. NECAP was designed so that each individual school or district can evaluate its performance against a set of *Grade Level* or *Grade Span Expectations* and achievement standards.

Scaled scores are the most suitable statistic to use when comparing NECAP results among students, schools, and districts. When interpreting the meaning of these comparisons, however, it is important that decision-makers—teachers, administrators, and policy-makers—fully recognize that any single test is a limited measure of student performance. Since some apparent differences in scaled scores may not be statistically or educationally significant, some guidelines for comparing results are explained on the following page.

# COMPARISONS OF SCHOOL- AND DISTRICT-LEVEL SCORES

The statistical significance of these comparisons is based on variability of the scores and on the number of students tested. The tables on the following pages can be used to assist in the following ways:

- comparing sub-populations of students within a school or district,
- comparing the scores of two or more schools or districts,
- comparing the scores of a school to the district and/or state, and
- comparing the scores of a district to the state.

These tables provide figures that can be used to make approximate comparisons between scores. Similar to the score band provided in the *NECAP Student Report*, the figures in the tables are estimates of one standard error around the score or difference between scores. For those interested in making more exact comparisons or learning more about the statistical methods used to make comparisons, a list of references is provided in Appendix D *Reference Materials* on page 63 of this guide.

Caution should be used when making any of the comparisons listed above because even if scores are different they may not be statistically significantly different. It is very unlikely that any two groups will have exactly the same score. To avoid misinterpretation or over-interpretation of small differences between scores, statistical tests can be conducted to determine the likelihood that the observed difference in scores occurred by chance and that the two groups might actually have the same score.

# SCALED SCORES

NECAP scaled scores for grades 3 through 8 are represented by a 3 digit number, with the first digit representing the grade level tested; the remaining digits range from 00–80. NECAP scaled scores for grade 11 are represented by a 4 digit number, with the first two digits representing the grade; the remaining digits also range from 00-80. Although this same scale is used for reading and mathematics, one cannot accurately compare a school's or district's scaled scores across two content areas since the scaled scores in each content area were determined by separate standard-setting processes.

The table on the following page shows the smallest differences in scaled scores that represent a statistically significant difference in performance based on the number of students tested in the school and/or district. When comparing the scores of two groups of different sizes, one should use a difference that is approximately the average of the minimally statistically significant difference of each group. For example, when comparing the average grade 3 reading scaled scores of a school with 25 students and a school with 100 students one should use three points as the minimally statistically significant difference. Three points is the average of the values in the table for a school of 25 students (4 points) and a school of 100 students (2 points). If the difference in scaled scores between the two groups is at least three points, then the difference is statistically significant. If the difference in scaled scores between the two groups is fewer than three points, the difference is not statistically significant.

S	statistically Sign	nificant Diff	erence for A	verage Gro	up Results*	:
Grade	Subject	Number of	f Students T	ested in Gro	oup (Class, S	School etc.)
Graue	Subject	10	25	50	100	200
3	Reading	5	3	2	2	1
3	Mathematics	6	4	2	2	1
4	Reading	5	3	2	2	1
4	Mathematics	6	4	3	2	1
	Reading	5	3	2	2	1
5	Mathematics	5	3	2	2	1
	Writing	7	5	3	2	2
6	Reading	6	4	3	2	1
0	Mathematics	6	4	3	2	1
7	Reading	5	3	2	2	1
/	Mathematics	6	4	3	2	1
	Reading	5	3	2	2	1
8	Mathematics	6	4	3	2	1
	Writing	6	4	3	2	1
11	Reading	5	3	2	2	1
11	Mathematics	5	3	2	2	1

# Number of Scaled Score Points Denoting Minimally Statistically Significant Difference for Average Group Results\*

\*Standard error of the mean difference assuming equal number of students and standard deviation

Comparisons across content areas can also be made by comparing the percentage of students at a particular achievement level. But again, since the classification of students into achievement levels carries a small degree of imprecision, small differences in percentages should not be over-interpreted.

# ACHIEVEMENT LEVELS

Comparisons of group performance can also be made by comparing the percentages of students scoring at or above a particular achievement level. But again, small differences in percentages should not be over-interpreted. Because, unlike scaled scores, achievement level results are reported as percentages, a slightly different procedure is used to make comparisons between the performance of two groups or between a group and a fixed point. To compare percentages, an interval estimation approach similar to a margin of error or the score band reported on the *NECAP Student Report* can be used.

With percentages, the statistical significance of differences is impacted by both the size of the group and the percentage of students in the category of interest (for example, Proficient or above on the Grade 4 Mathematics test). The table on the following page shows the size of the confidence interval that should be drawn around a score for selected percentages and school sizes. For example, if 60% of the students in a school of 50 students are Proficient or above, a confidence interval of  $\pm 7$  percentage points, from 53% to 67%, would be drawn around the score of 60%. If the school's performance were being compared to a fixed percentage of 65% of students Proficient or above, the conclusion would be that the school score was not significantly different because the 53%-67% confidence interval includes 65%.

Denoting Minimally S	tatistically S	Significant D	oifferences f	or Group R	esults*
<b>Percentages of Students</b>	Number of	f Students T	ested in Gro	oup (Class, S	School etc.)
in Achievement Level(s)	10	25	50	100	200
10	9	6	4	3	2
20	13	8	6	4	3
30	14	9	6	5	3
40	15	10	7	5	3
50	16	10	7	5	4
60	15	10	7	5	3
70	14	9	6	5	3
80	13	8	6	4	3
90	9	6	4	3	2

Percentage Difference in Student Achievement Level Classification Denoting Minimally Statistically Significant Differences for Group Results\*

\*Standard error of a percentage

The previous example compared the performance of a relatively small school to a fixed point (for example, a very large group such as the state). When two relatively small groups are compared, a confidence interval should be drawn around each score using the appropriate values from the table based on the size and performance of each group. If the two confidence intervals do not overlap, then the conclusion is that the difference between the two groups is statistically significant. If the two confidence intervals do overlap, then the difference in performance between the two groups is too small to be considered statistically significant. The distance between the two confidence intervals or their degree of overlap also provides a visual indication of the probability that the two scores are significantly different.

# **Comparisons of NECAP Scores Across Years**

The comparison of scores across years requires consideration and caution in addition to those described in the previous section. In general, the evaluation of any score differences should always be interpreted within the larger context of what occurred to impact the performance of the school, district, or other group between the two test administrations being compared.

# SCHOOL- AND DISTRICT-LEVEL SCALED SCORES AND ACHIEVEMENT LEVELS

The comparison of school- and district-level scaled scores and achievement levels across years is essentially the same as the comparison of similar scores within years. The procedures and cautions described in the previous section can be applied to scores from different years. As stated above, however, the interpretation of differences between scores should include consideration of any intervening factors between test administrations.

Also note that when interpreting changes in performance across years, it can be beneficial to consider scaled scores and achievement levels jointly. Interpreting scaled scores or achievement levels alone may lead to misinterpretation or over-interpretation of results. Consider the examples on the following page:

- It is not unusual for large numbers of students to earn the same scaled score particularly in the middle of the distribution near the Partially Proficient/Proficient cut score. Consequently, school results may show a very small change in mean scaled score near the Proficient cut score, but show a shift of 4-6 percentage points in the percentage of students performing at the Proficient level or above.
- Conversely, a significant change in mean scaled score in the middle of an achievement level may not be reflected in improvement in the achievement level results.

# STUDENT-LEVEL SCALED SCORES AND ACHIEVEMENT LEVELS

With NECAP testing at grades 3 through 8, most students will have multiple years of NECAP test scores. A logical question to ask is how the student's performance this year compares to performance in previous years.

The most direct comparison can be made between a student's achievement level from one year to the next within a content area. The NECAP tests are designed specifically to measure the grade level expectations for each grade. Students meeting or exceeding those expectations at their grade level should score at the Proficient or Proficient with Distinction level each year. Of course, scores from a single test such as the NECAP tests should always be interpreted with caution.

The question of whether student performance is Proficient at a particular grade level is critical, but we may also wish to examine progress toward proficiency within an achievement level. Achievement levels and scaled scores can be used together to examine, at a slightly finer level, whether a student is making progress toward proficiency from one year to the next. Scaled scores provide information about student performance within each achievement level. NECAP scores are reported on separate 80-point scales corresponding to each grade level (300-380, 400-480, ..., 1100-1180). Each individual grade-level scale has been developed so that at every grade a score of 40 represents Proficient performance at that grade level.

Although the tests and scales are different at each grade level, in general, for students performing below the Proficient level, progress toward proficiency can be shown by earning a score that is closer to the Proficient score of 40. For students scoring at the Substantially Below Proficient level, progress can be shown be earning a scaled score the next year that is closer to or within the Partially Proficient level. Similarly, students scoring above Proficient can progress toward the Proficient with Distinction level.

Of course, small differences in scores of 2-4 points on the 80-point scale should not be overinterpreted. As indicated by the score band on the *NECAP Student Report*, an individual score should be interpreted as a probable range of scores within which student performance might fall. For example, if a student earns a score of 438 in the fourth grade and 541 in the fifth grade, it is likely that the score bands for both grades will cross the Proficient scores of 440 and 540, respectively. Therefore, the scores of 438 and 541 should not be considered significantly different from each other in relation to the Proficient standard for these two grade levels. It is important to remember, however, that maintaining Proficiency from one grade level to the next demonstrates a year of growth in that content area.

# **CONTENT AREA SUBSCORES**

Content area subscores cannot be directly compared from one year to the next even within a grade level. Unlike achievement levels and scaled scores, these scores are reported as raw scores and have not been linked across years and placed on the same scale. Differences in subscores from one year to the next in the total number of points earned by a student or in the percent of total possible points earned by a school or district may simply reflect either a small difference in the number of possible points in the reporting category or a slight difference in the difficulty of items within a particular reporting category. The process of equating that accounts for these differences to produce scaled scores and achievement levels for the total content area is not applied to individual reporting categories. There is not a sufficient number of points within each reporting category to equate these subscores from one year to the next.

There are, however, comparisons that can be made with content area subscores to assist schools in the evaluation of their curricula and instructional programs. For each content area subscore, normative information is provided describing performance in comparison to the school, district, state, and at the student level, students scoring at the Proficient threshold. Across years, this information can be used to determine whether progress has been made relative to one of the comparison groups. Even more than with scaled scores and achievement levels, it is important not to over-interpret small changes from one year to the next.

It is also possible to pool content area subscores across years to compute a cumulative total. Consistent with the cumulative achievement level and scaled score information reported for the total content area, results based on a larger pool of students and/or test items can provide a more stable picture of school or district performance over longer periods of time. Of course, intervening factors such as program or curricular changes may impact local decisions on the appropriateness of pooling data across years.

# ACHIEVEMENT LEVEL CUT SCORES

The table on the following page shows the scaled scores (and raw scores for grade 11 writing) that identify the cut point between the four achievement levels - Proficient with Distinction, Proficient, Partially Proficient, and Substantially Below Proficient. The achievement level cut scores for grades 3 through 8 were the result of the standard setting process that was completed in January 2005 and will remain consistent year to year. The achievement level cut scores for grade 11 were the result of the standard setting process that was completed in January 2005 and will remain consistent year to year.

	Achie	vement Level Cut	Scores	
Grade	Subject	SP/PP*	PP/P*	P/PD*
3	Reading	330 / 331	339 / 340	356 / 357
5	Mathematics	331 / 332	339 / 340	352 / 353
4	Reading	430 / 431	439 / 440	455 / 456
4	Mathematics	430 / 431	439 / 440	454 / 455
	Reading	529 / 530	539 / 540	555 / 556
5	Mathematics	532 / 533	539 / 540	553 / 554
	Writing	527 / 528	539 / 540	554 / 555
6	Reading	628 / 629	639 / 640	658 / 659
0	Mathematics	632 / 633	639 / 640	652 / 653
7	Reading	728 / 729	739 / 740	759 / 760
1	Mathematics	733 / 734	739 / 740	751 / 752
	Reading	827 / 828	839 / 840	858 / 859
8	Mathematics	833 / 834	839 / 840	851 / 852
	Writing	828 / 829	839 / 840	856 / 857
	Reading	1129 / 1130	1139 / 1140	1153 / 1154
11	Mathematics	1133 / 1134	1139 / 1140	1151 / 1152
	Writing	3/4	6 / 7	9 / 10

# Achievement Level Cut Scores

\*SP = Substantially Below Proficient, PP = Partially Proficient, P = Proficient, PD = Proficient with Distinction

# **TEACHING YEAR VS TESTING YEAR**

The data used for the *NECAP School Results Report* are the results of the fall 2007 administration of the NECAP tests. The NECAP grades 3 through 8 tests are based on the *Grade Level Expectations* (GLE) from the prior year. The NECAP grade 11 tests are based on the *Grade Span Expectations* (GSE) from the previous two years. For example, the Grade 7 NECAP test, administered in the fall of seventh grade, is based on the grade 6 GLEs. Therefore, many students receive the instruction they need for this fall test at a different school from where they are currently enrolled. The state Departments of Education determined that it would be valuable for both the school where the student tested and the school where the student received instruction to have access to information that can help improve curriculum. To achieve this goal, separate *NECAP School Results Reports* have been created for the "testing" school and the "teaching" school report, and most students will also be represented in a "teaching" school report. In some instances, such as when the student has recently moved into the state, it is not possible to provide information about a student in the "teaching" school report.

Now that schools and districts will have access to three years of school and district results reports (2005-06, 2006-07, and 2007-08) as well as "teaching year" and "testing year" school and district results reports for each year, it is extremely important to be able to differentiate and identify each of the various reports. The top three lines in the title of the report (see example on page 26) designate the year and grade level of the test that was administered. Those three lines do not change whether one is looking at a "testing year" or "teaching year" report. The fourth line in the title differentiates between the "teaching year" and the "testing year". For the "Fall 2007 NECAP Tests", the label "Grade X Students in 2006-2007" in the fourth line indicates that it is a "teaching year" report and a

label of "Grade X Students in 2007-2008" in the fourth line would indicate that it is a "testing" year report. The fifth line in the title is the name of the report.

The following page contains a sample cover of a *NECAP School Results Report* for both "teaching year" and "testing year".

# About The New England Common Assessment Program

This report highlights results from the Fall 2007 Beginning of Grade New England Common Assessment Program (NECAP) tests. The NECAP tests are administered to students in New Hampshire, Rhode Island, and Vermont as part of each state's statewide assessment program. NECAP test results are used primarily for school improvement and accountability. Achievement level results are used in the state accountability system required under No Child Left Behind (NCLB). More detailed school and district results are used by school sto

and time resums to be of sectors to help improve curriculum and instruction. Individual student results are used to support information gathered through classroom instruction and assessments. NECAP tests in reading and mathematics are administered to students in grades 3 through 8 and writing tests are administered to students in grades 5 and 8. The NECAP tests are designed to measure student performance on grade level expectations (GLE) developed and adopted by the three states. Specifically, the tests are designed to measure the content and skills that students are expected to have as they begin the school year in their current grade – in other words, the content and skills which students have learned through the end of the previous grade.

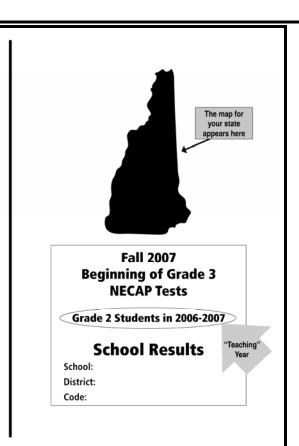
Each test contains a mix of multiplechoice and constructed-response questions. Constructed-response questions require students to develop their own answers to questions. On the mathematics test,

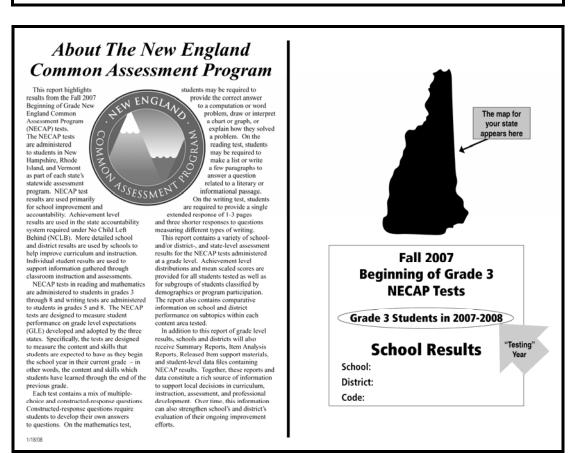
1/18/08

students may be required to revolve the correct answer to a computation or word problem, draw or interpret a chart or graph, or a problem. On the reading test, students may be required to may be required to a chart or graph, or a problem. On the reading test, students may be required to a short or graph, or a chart or grap

and/or district, and state-level assessment and/or district, and state-level assessment at a grade level. Achievement level distributions and mean scaled scores are provided for all students tested as well as for subgroups of students classified by demographics or program participation. The report also contains comparative information on school and district performance on subtopics within each content are tested.

In addition to this report of grade level results, schools and districts will also receive Summary Reports, Item Analysis Reports, Released Item support materials, and student-level data files containing NECAP results. Together, these reports and data constitute a rich source of information to support local decisions in curriculum, instruction, assessment, and professional development. Over time, this information can also strengthen school's and district's evaluation of their ongoing improvement efforts.





# **Grade Level Summary Report**

(Second page of the NECAP School Results Report)

The second page, titled "Grade Level Summary Report", provides a summary of participation in NECAP and a summary of NECAP results. This page shows the number and percentage of students who were enrolled, tested, and not tested as part of the NECAP tests in fall 2007. Students enrolled in a school on or after October 1, 2007 were expected to complete the NECAP tests at that school.

# STUDENTS ENROLLED ON OR AFTER OCTOBER 1

The first table in the "Grade Level Summary Report" shows the number of students enrolled in the tested grade. The total number of students reported as enrolled is defined as the number of students tested added to the numbers of students who were not tested.

# STUDENTS NOT TESTED IN NECAP

Since students who were not tested did not participate in the NECAP tests, average school scores are not affected by not tested students. These students are included in the calculation of the percent that participated, but are not included in the calculation of scores.

For students who participated in some but not all parts of the NECAP tests, their actual score was reported for each content area in which they participated. These reporting decisions were made to support the requirement that all students must participate in the NECAP testing program.

Data is provided for the following groups of students who may not have completed the entire battery of NECAP tests.

- Alternate Assessment—Students in this category completed an alternate assessment for the 2006-2007 school year.
- First Year LEP—Students in this category are defined as being new to the US after October 1, 2006 and were not required to take the NECAP tests in reading and writing. Students in this category were expected to take the mathematics portion of the NECAP.
- Withdrew After October 1—Students withdrawing from a school after October 1, 2007 may have taken some sessions of the NECAP tests prior to their withdrawal from the school.
- Enrolled After October 1— Students enrolling in a school after October 1, 2007 may not have had adequate time to fully participate in all sessions of the NECAP tests.
- Special Consideration—Schools received state approval for special consideration for an exemption for all or part of the NECAP tests for any student whose circumstances are not described by the previous categories, but for whom the school determined that taking the NECAP tests would not be possible.
- Other Occasionally students will not have completed the NECAP tests for reasons other than those listed above. These "other" categories are considered "not state approved".

# **NECAP** Results

The results portion of the page indicates the number and percentage of students performing at each achievement level in each of the three content areas tested by NECAP. In addition, a mean scaled score is provided for reading and mathematics in grades 3 through 8 and 11 at the school, district, and state levels. For writing, a mean scaled score is provided for grades 5 and 8 and a mean raw score is provided for grade 11 at the school, district, and state levels.

The following two pages contain a sample of a grade 5 and grade 11 "Grade Level Summary Report" from a *NECAP School Results Report*.

ENGLAN	SSMENT PPROGRAM
TEW EN	Соммон Р

# Fall 2007 - Beginning of Grade 5 NECAP Tests Grade 5 Students in 2007-2008 Grade Level Summary Report

School: District: State: Code:

Schools and districts administered all NECAP tests to every enrolled student with the following exceptions: students who participated in the alternate assessment for the 2006-07 school year, first year LEP students, students who withdrew from the school after October 1, 2007, students who enrolled

in the school after October 1, 2007, students for whom a special consideration was granted through the state Department of Education, and other students for reasons not approved. On this page, and throughout this report, results are only reported for groups of students that are larger than nine (9).

				2	Number								Pe	Percentage	ه			
		School			District			State			School			District			State	
Students enrolled on or after October 1		95			173			11,589			100			100			100	
	Reading	Math	Writing	Reading	Math	Writing	Reading	Math	Writing	Reading	Math	Writing	Reading	Math	Writing	Reading	Math	Writing
Students tested	95	95	95	173	173	173	11,404	11,476	11,371	100	100	100	100	100	100	98	66	86
<b>Students not tested in NECAP</b> State Approved Alternate Assessment First Year LEP Withdrew After October 1 Enrolled After October 1 Special Consideration Other			000000			0000000	176 53 84 20 15 4 9	96 53 31 8 8 17	192 53 84 40 10 26			0000000		0000000	0000000	0 0 0 0 - 0 0 0	-000000	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

# NECAP RESULTS

						School										District	ict					State	te		
Enro	Enrolled	NT Approved	NT Other	Tested	Lev	Level 4	Level 3	13	Level 2	12	Level 1	11	Mean Scaled	Tested	Level 4	Level 3	Level 2	1 1	Mean Scaled	Tested	Level 4	Level 3	Level 2	Level 1	Mean Scaled
	z	z	z	z	z	%	z	%	z	%	z	%	Score	z	%	%	%	%	Score	z	%	%	%	%	Score
DNIDA39	95	0	0	95	12	13	52	55	24	25	7	7	544	173	10	52	27	12	543	11,404	13	47	25	16	543
HTAM 92	95	0	0	95	13	14	46	48	24	25	12	13	543	173	10	45	31	14	542	11,476	:	41	22	25	540
б б	95	0	0	95	=	12	8	40	34	36	12	13	540	173	σ	45	35	=	540	11,371	12	43	30	15	539

Page 2 of 8

Level 4 = Proficient with Distinction; Level 3 = Proficient; Level 2 = Partially Proficient; Level 1 = Substantially Below Proficient Note: Throughout this report, percentages may not total 100 since each percentage is rounded to the nearest whole number.

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Z. COMMON

# Fall 2007 - Beginning of Grade 11 NECAP Tests Grade 11 Students in 2007-2008 Grade Level Summary Report

School: District:

State: Code:

Schools and districts administered all NECAP tests to every enrolled student with the following in the school aft

exceptions: students who participated in the alternate assessment for the 2006-07 school year, first year

LEP students, students who withdrew from the school after October 1, 2007, students who enrolled

in the school after October 1, 2007, students for whom a special consideration was granted through the state Department of Education, and other students for reasons not approved. On this page, and throughout this report, results are only reported for groups of students that are larger than nine (9).

DA DTICIDATION : NIFCAD					Number								Pe	Percentage	و			
PARIICIPATION IN NECAP		School			District			State			School			District			State	
Students enrolled on or after October 1		549			1,013			16,467			100			100			100	
	Reading	Math	Writing	Reading	Math	Writing	Reading	Math	Writing	Reading	Math	Writing	Reading	Math	Writing	Reading	Math	Writing
Students tested	520	523	518	974	577	973	15,611	15,546	15,557	95	95	94	96	96	96	95	94	94
Students not tested in NECAP																		
State Approved	10	7	5	Ξ	∞	9	192	195	71	2	-	-	-	-	-	-	-	0
Alternate Assessment	2	2	0	2	5	0	116	116	0	-	-	0	0	0	0	-	-	0
First Year LEP	m	0	m	m	0	m	4	0	m	-	0	-	0	0	0	0	0	0
Withdrew After October 1	-	-	-	2	2	2	52	28	47	0	0	0	0	0	0	0	0	0
Enrolled After October 1	0	0	0	0	0	0	m	 m	4	0	0	0	0	0	0	0	0	0
Special Consideration	-	-	-	-	-	-	17	18	17	0	0	0	0	0	0	0	0	0
Other	19	19	26	28	28	34	664	726	839	m	m	5	m	m	e	4	4	5

# **NECAP RESULTS**

	Mean		1144	1134	5.5
	Level 1	%	12	45	18
State	Level 2	%	22	28	49
Sta	Level 3	%	50	26	30
	Level 4	%	17	2	3
	Tested	z	15611	15546	15557
	Mean	2000	1141	1133	5.1
	Level 1	%	14	49	23
rict	Level 2	%	29	26	50
District	Level 3	%	45	23	25
	Level 4	%	12	2	2
	Tested	z	974	776	973
	Mean	2006	1141	1133	5
	el 1	%	13	48	24
	Leve 1	z	68	250	124
	Level 2	%	33	27	50
	Lev	z	172	143	261
	Level 3	%	43	23	24
	Lev	z	221	121	124
School	Level 4	%	11	2	2
	Lev	z	59	6	6
	Tested	z	520	523	518
	NT Other	z	19	19	26
	NT Approved	z	10	7	5
	Enrolled	z	549	549	549
			DNIDAJA	HTAM	WRITING

Level 4 = Proficient with Distinction; Level 3 = Proficient; Level 2 = Partially Proficient; Level 1 = Substantially Below Proficient

Note: Throughout this report, percentages may not total 100 since each percentage is rounded to the nearest whole number.

Page 2 of 8

# **Content Area Results**

(Pages 3, 5, and 7 of the NECAP School Results Report)

The purpose of these sections is to help schools determine the extent to which their curricula are effective in helping students achieve the particular standards and benchmarks contained in the *Grade Level and Grade Span Expectations*. The content area results pages of the report provide cumulative data across three years, as well as information on performance in specific subtopics of the tested content areas (for example, geometry and measurement within mathematics). Content area results are provided on the following pages of the report:

- page 3—reading,
- page 5—mathematics, and
- page 7—writing.

Information about each content area (reading, mathematics and writing) for school, district and state includes:

- the total number of students Enrolled, NT Approved (not tested for a state-approved reason), NT Other (not tested for other reasons), and Tested;
- the total number and percent of students at each achievement level (based on the number in the Tested column); and
- the Mean Scaled Score (mean raw score for Grade 11 writing).

The information listed above is provided in bold for the current testing year (2007-08) for all grade levels. In addition, information is also provided for grades 3 through 8 for the previous two testing years (2005-06 and 2006-2007). This information is only included for each year where the number of students tested at a grade level was at least 10.

For schools and districts that have at least 10 tested students in the current year and two previous years, three-year cumulative totals are provided. Enrolled, Not Tested Approved, Not Tested Other, and Tested counts for each year are summed into a "Cumulative Total" row when the tested number in each year is at least 10. For the achievement levels, the three years of counts in the "N" columns are summed, while the percentages of students are calculated by dividing the cumulative total of the number of students in the achievement level by the cumulative total of the number of students tested. The Mean Scaled Score is calculated by summing the product of the mean scaled score and tested N for each year where the number of students is at least 10, and dividing the sum by the tested N from the cumulative total row (weighted average).

Information about each content area subtopic for reading, mathematics and writing includes:

- The **Total Possible Points** for that category. In order to provide as much information as possible for each category, the total number of points includes both the common items used to calculate scores as well as additional items in each category used for equating the test from year to year.
- A graphic display of the **Percent of Total Possible Points** for the school, district, and state. In this graphic display, there are symbols representing school, district and

state performance. In addition, there is a line representing the standard error of measurement. This statistic indicates how much a student's score could vary if the student was examined repeatedly with the same test (assuming that no learning occurs between test administrations).

• For grade 11 writing only, a column showing the number of prompts for each subtopic (strand) is provided, as well as the **Distribution of Score Points Across Prompts** within each strand in terms of percentages for the school, district, and state.

The following two pages contain a sample grade 5 "Reading Results" page and a grade 11 "Writing Results" page from a *NECAP School Results Report*.



# Fall 2007 - Beginning of Grade 5 NECAP Tests Grade 5 Students in 2007-2008 **Reading Results**

Mean Scaled Score

% Level 1 z

% Level 2 z

% Level 3 z

% Level 4 z

Tested

NT Other z

NT Approved z

Enrolled

z

z

# Proficient with Distinction (Level 4)

knowledge to read and comprehend a wide variety and informational text. Student offers insightful vocabulary strategies and breadth of vocabulary to read and comprehend grade-appropriate text. by references to the text. Student uses range of Student is able to analyze and interpret literary observations/assertions that are well supported Student's performance demonstrates an ability of texts.

# Proficient (Level 3)

Student is able to analyze and interpret literary and relevant assertions by referencing text. Student use vocabulary strategies and breadth of vocabulary informational text. Student makes and supports to read and comprehend grade-appropriate text. Student's performance demonstrates an ability knowledge to read and comprehend text.

# Partially Proficient (Level 2)

Student's performance demonstrates an inconsiste ability to read and comprehend grade-appropriate of strategies may be limited and may impact the make and/or support assertions by referencing text. Student attempts to analyze and interpret text. Student's vocabulary knowledge and use literary and informational text. Student may ability to read and comprehend text.

# Substantially Below Proficient (Level 1)

appropriate text. Student may be able to recognize story elements and text features. Student's limited impacts the ability to read and comprehend text. ability to derive/construct meaning from grade-Student's performance demonstrates minimal vocabulary knowledge and use of strategies

																1
	SCHOOL															
	2005-06	66	0	0		66	12	12	51	52	28	28	6	6	542	
	2006-07	98	0	0		98	=	=	20	51	29	30	∞	~~~~	541	
	2007-08	95	0	0		95	12	13	52	55	24	25	2	7	544	
	Cumulative		¢	¢			L C	;	ţ	1	2	00	2	c		
	lotal	767	n	0	7	767	33	71	501	76	8	87	74	ø	74C	_
Ŀ	DISTRICT															_
	2005-06	180	0	0		180	16	6	6	20	20	28	24	13	540	
	2006-07	175	0	0		175	16	6	89	51	48	27	22	13	539	
	2007-08	173	0	0	-	173	17	10	6	52	46	27	20	12	543	
	Cumulative															
	Total	528	0	0		528	49	6	269	51	144	27	99	13	541	
pu	STATE															
	2005-06	11,600	190	10	=	,481	1,493	13	5,282	46	2,875	25	1,831	16	540	
ses	2006-07	11,570	180	9	=	,384	1,470	10	5,250	46	2,880	25	1,784	16	540	
	2007-08	11,589	176	6	Ξ	11,404	1,494	13	5,309	47	2,831	25	1,770	16	543	
	Cumulative															
	Total	34,759	546	25	34	34,269	4,457	13	15,841	46	8,586	25	5,385	16	541	
ent					Total			Percent o	Percent of Total Possible Points	ossible P	oints					
9		Subt	Subtopic		Possible Points	0 —	10	Q	40 50	09	70 80	6	100			
	Word ID/Vocabulary	ibulary			24					<b>•†</b>						
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	8							
Percent of Total Possible Points	J0							
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nt of T	40							
Perce	<u>ө</u>							
	50							
	ę							
	0 —							
Total	Possible Points	24		57	49		47	59
	Subtopic	Word ID/Vocabulary	Type of Text	Literary	Informational	Level of Comprehension	Initial Understanding	Analysis & Interpretation

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# Fall 2007 - Beginning of Grade 11 NECAP Tests Grade 11 Students in 2007-2008 Writing Results

District: School: State: Code:

Enrolled         NT Approved         NT Other         Tested         Level 4         Level 3         Level 2         Level 1         Level 2         Level 1         Level 1         Level 1         Level 1         Level 1         Level 2         Level 1         Level 2         Level 1         %         N         %         M         %         M         %         M         %         M         %         M         %         M         %         M         %         M         %         M         %         M         %         M         %         M         %         M         %         M         %         M         %         M         %         M         %	Mean	Score	Ŋ	5.1	5.5
Enrolled         NT Approved         NT Other         Tested         Level 4         Level 3         Level 2         N         %         N	el 1	%	24	23	18
Enrolled         NT Approved         NT Other         Tested         Level 4         Level 3         Level 3         Level 4         N         Solution         Solutio	Lev	z	124	224	2830
Enrolled         NT Approved         NT Other         Tested         Level 4         Level 3         N         S         24         24         25         48         1013         6         33         30         75         116467         30         75         116467         30         755	el 2	%	50	20	49
Enrolled         NT Approved         NT Other         Tested         Level 4         N         N         N         N         N         N         N         N         N         N         Level 4         Level 4         Level 4         Level 4         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         Solution 10.01         Solution 10	Lev	z	261	485	7590
Enrolled         NT Approved         NT Other         Tested         Level 4         N           N         N         N         N         N         N         %         N           549         5         26         518         9         2         12           549         5         26         518         9         2         12           1013         6         34         973         23         2         24           1013         6         34         973         23         2         24           16457         71         839         15557         470         3         46	el 3	%	24	25	30
Enrolled         NT Approved         NT Other         Tested         Level           N         N         N         N         N         N         N           549         5         26         518         9         9           549         5         26         518         9         9           1013         6         34         973         23         13           16467         71         839         15557         470	Lev	z	124	241	4667
Enrolled         NT Approved         NT Other         Tested         N         S         9         9         9         10         10         10         10         10         10         10         3         10         3         2         2         2         3         3         3         3         3         3         3         3         2         2         10         10         10         10         10         10         3         10         3         2         10         10         10         10         10         10         10         10         10         10         10         10         10         10         10	el 4	%	7	2	m
Enrolled         NT Approved         NT Other           N         N         N         N           549         5         26           549         5         26           1013         6         34           1013         6         34           16467         71         839	Lev	z	6	23	470
Enrolled NT Approved N N N N S49 5 549 5 1013 6 16467 71	Tested	z	518	973	15557
Enrolled N 549 1013 16467	NT Other	z	26	34	839
	NT Approved	z	ß	ى	۲
007-08 5TRICT 007-08 007-08	Enrolled	z	549	1013	16467
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			SCHOOL 2007-08	DISTRICT 2007-08	STATE 2007-08

Partially Proficient (Level 2)

conventions; errors may occur but do not interfere

with meaning.

use are varied. Response demonstrates control of

inconsistent with limited use of transitions. Details structures and language use are unsophisticated but not maintained. Organizational structure is respond to prompt/task. Focus may be present and may be repetitive. Response demonstrates Student's writing demonstrates an attempt to may be listed and lack elaboration. Sentence inconsistent control of conventions.

Student's writing demonstrates a minimal response to prompt/task. Focus is unclear or lacking. Little and language use are minimal or absent. Frequent errors in conventions may interfere with meaning. or no organizational structure is evident. Details are minimal and/or random. Sentence structures Substantially Below Proficient (Level 1)

	Total			Perc	ent of	Total	Possib	Percent of Total Possible Points	ß			Number		Distri	Distribution of Score Points Across Prompts	on of oss Pr	oution of Score Across Prompts	e Poir	ts	
Strand	Possible	0	10 20	0 30	0 40		50 60	70	80	6	100	Dromnts		•	-	1 2	m	4	5	9
											_			%	%	%	%	%	%	%
Writing in Response to Text • Reconce to Informational Text	1				•							~	School	2	18	31	30	16 17	~ ~ ~	00
Response to Literary Text	<u>.</u>				•	•							State	2	15	28	31	20	n un	0
Informational Writing						۲							School	m	20	22	31	23	2	0
Procedure	18					◀						m	District		19	23		22	m L	<del>.</del> .
<ul> <li>Persuasive Essay</li> </ul>						٠							State	7	5		32	17	Δ	0
					•								School	2	26	39	26	- 00	0	0
<ul> <li>Reflective Essay</li> </ul>	9				<b>I</b>							-	District State	5	26 21	36 31	27 28	9 12	1	00
			-		•	•														
	School	loou			Ĕ		state			— Standard Error Bar	d Errol	r Bar								

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Focus is well developed and maintained throughout

respond to prompt/task with clarity and insight.

Student's writing demonstrates an ability to

**Proficient with Distinction (Level 4)** 

organizational structures. A variety of elaboration

response. Response demonstrates use of strong

language choices are varied and used effectively.

strategies is evident. Sentence structures and

Response demonstrates control of conventions;

minor errors may occur. Proficient (Level 3)

Student's writing demonstrates an ability to respond

with a beginning, middle and end with appropriate

throughout the response. Response is organized transitions. Details are sufficiently elaborated to support focus. Sentence structures and language

to prompt/task. Focus is clear and maintained

# **Disaggregated Content Area Results**

(Pages 4, 6, and 8 of the NECAP School Results Report)

- page 4—reading,
- page 6—mathematics, and
- page 8—writing.

Students can be grouped according to many characteristics—gender, ethnicity, school programs, etc. The scores provide information on achievement for different groups in a school, males and females for example.

The performance of subgroups is included on the disaggregated content area results pages of the *NECAP School Results Report* for reading, mathematics, and writing. These sections present the relationship between the variables reported and performance in each content area at the school, district, and state levels. The tables show the number of students categorized as Enrolled, NT Approved (not tested for a state-approved reason), NT Other (not tested for other reasons), and Tested. The tables also provide the number and percentage of students within the subgroup at each of the four achievement levels, as well as the Mean Scaled Score. The data for achievement levels and mean scaled score is based on the number shown in the Tested column. The data for the reporting categories was provided by information coded on the students' answer booklets by teachers and/or data linked to the student label. Because performance is being reported by categories that can contain relatively low numbers of students, school personnel are advised, under FERPA guidelines, to treat these pages confidentially.

The following page contains a sample "Disaggregated Mathematics Results" page from a *NECAP School Results Report.* Please note that for NH and VT no data appears for 504 Plan in any of the content areas. In addition, for VT, no data appears for Title I in any of the content areas.

Fall 2007 - Beginning of Grade 5 NECAP Tests Grade 5 Students in 2007-2008 Disaggregated Mathematics Results

School: District: State: Code:

					Š	SCHOOL	2								DIS	DISTRICI					STF	STATE		
REPORTING CATEGORIES	Enrolled	NT Approved	NT Other	Tested	Level 4	4	Level 3	m	Level 2		Level 1	Mean Scaled Score	ed Tested re	d Level	el Level 3	I Level 2	Level 1	Mean Scaled Score	Tested	Level 4	Level 3	Level 2	Level 1	Mean Scaled Score
	z	N	z	z	z	%	z	%	z	%	z	N %	Z	%	%	%	%	z	z	%	%	%	%	z
All Students	95	0	0	95	13	14	46	48	24	25 1	12 1	13 543	3 173	10	45	31	14	542	11,476	=	41	22	25	540
Gender Male Female Not Reported	49 46 0	000	000	49 46 0	6	12	30 16	61 35	7	37		12 544 13 542	4 88 2 83 2 2	11	39	35	13	542 541	5,836 5,533 107	11 3	41 42 21	21 23 25	26 24 50	540 540 530
Primary Race/Ethnicity American Indian or Alaskan Mative Asian Black or African American Hispanic or Latino Native Hawaiian or Pacific Islander White (non-Hispanic)	0 7 0 1 0 0 2 0 2 0 1 0	000000	000000	0 1 0 2 0 1 0 0 2 0 2 0 1 0	12	13	46	20	33	25 1	-	12 543	3 167 3		46	31	14	542	69 361 953 1,988 0 8,092	15 3 3 15	22 48 27 28 46	39 18 24 25 25 21	35 19 47 44 18	535 542 533 534 534 534
No rimidy hater umury reported LEP Status Currently receiving LEP services Former LEP student - monitoring year 1 Former LEP students All Other Students	90000	0000	0000	0000 0 95	£	14	46	48	24	25 1	1	13 543		10	45	m	14	542	624 624 201 128 10,523	1 12 12	10 33 30 44			527 536 538 541
IEP Students with an IEP All Other Students	13 82	0 0	0 0	13 82	0 £	0 16	80 80	62 46	3 1	28 8	4 8 	31 537 10 544	7 31 4 142	12 3	35	31	32 11	536 543	2,248 9,228	3	22 46	53	52 19	532 542
SES Economically Disadvantaged Students All Other Students	18 77	0 0	0 0	18 77	0	0	36 36	56 47	r 6	28	 м б	17 539	9 39 4 134	5 m	46	<u>۲</u> ۳	21 13	538 543	4,440 7,036	4 16	30 48	26 19	39 16	535 543
Migrant Migrant Students All Other Students	0	0 0	0 0	0 95	5	14	46	48	24	25 1	12	13 543	3 173	10	45	31	14	542	0 11,476	1	41	22	25	540
Title I Students Receiving Title I Services All Other Students	4	0 0	0 0	4 91	13	14	46	51	21	23 1	-	12 543	22 3 151	12	18	55 27	27 13	535 543	3,419 8,057	4	28 47	26 20	41	535 543
<b>504 Plan</b> Students with a 504 Plan All Other Students	0 95	0 0	0 0	0 95	13	14	46	48	24	25 1	12	13 543	3 173	10	45		14	542	26 11,450	4 11	38 41	31 22	27 25	540 540

Level 4 = Proficient with Distinction; Level 3 = Proficient; Level 2 = Partially Proficient; Level 1 = Substantially Below Proficient

Page 6 of 8

NOTE: Some numbers may have been left blank because fewer than ten (10) students were tested.

# **Understanding the School and District Summary Reports**

# Overview

The *NECAP School Summary Report* and the *NECAP District Summary Report* provide NECAP results for schools and districts based on the testing of local students in grades 3 through 8. Grade 11 is not included in the summary reports for 2007 because of the different reporting schedule for grade 11. However, in 2008 and beyond, grade 11 will be included on the summary reports.

Although text in this section refers only to the NECAP School Summary Report, educators and others who are reviewing the NECAP District Summary Report should also refer to this section for applicable information because the data reported, report format, and guidelines for using the reported data are identical for both the school and district reports. The only real difference between the reports is that the NECAP District Summary Report includes no individual school data.

The *NECAP School Summary Report* provides details, broken down by content area, about student performance for all grade levels of NECAP that were tested in the school.

The purpose of this summary is to help schools determine the extent to which their students achieve the particular standards and benchmarks contained in the *Grade Level* or *Grade Span Expectations*.

Information about each content area and grade level for school, district, and state includes:

- the total number of students Enrolled, NT Approved (not tested for a state-approved reason), NT Other (not tested for other reasons), and Tested;
- the total number and percent of students at each achievement level (based on the number in the Tested column); and
- the Mean Scaled Score (mean raw score for Grade 11 writing).

Now that schools and districts will have access to three years of summary reports (2005-06, 2006-07, and 2007-08) as well as "teaching year" and "testing year" summary reports for each year, it is extremely important to be able to differentiate and identify each of the six reports. The top line in the title of the report (see example on the following page) designates the year the test was administered. That line does not change whether one is looking at a "testing year" or "teaching year" report. The second line in the title is the name of the report. The third line in the title differentiates between the "teaching year" and the "testing year". For the "Fall 2007 NECAP Tests", the label "2007-2008 Students" in the third line indicates that it is a "teaching" year report. The name of the tests within the report (for example, "Beginning of Grade 3") also does not change whether one is looking at a "teaching" at a "teaching whether one is looking at a "teaching" year report.

The following page contains a sample NECAP School Summary Report.



# Fall 2007 NECAP Tests School Summary 2007-2008 Students

School: District:

State:

Code:

	Enrolled	NT Approved	NT Other	Tested				Ach	ieveme	ent Leve	el		
Reading	N	N	N	N	Lev	el 4	Lev	el 3	Lev	el 2	Lev	el 1	Mean
	IN	N	N	N	Ν	%	Ν	%	Ν	%	Ν	%	Scaled Score
	39	0	1	38	0	0	6	16	9	24	23	61	
Beginning of Grade 3	3	0	0	3									
Beginning of Grade 4	6	0	1	5									
Beginning of Grade 5	8	0	0	8									
Beginning of Grade 6	7	0	0	7									
Beginning of Grade 7	5	0	0	5									
Beginning of Grade 8	10	0	0	10	0	0	0	0	6	60	4	40	825

	Enrolled	NT Approved	NT Other	Tested				Ach	ieveme	ent Leve	el		
Mathematics	N	N	N	N	Lev	el 4	Lev	el 3	Lev	el 2	Lev	el 1	Mean
	N	N	N	N	Ν	%	Ν	%	Ν	%	Ν	%	Scaled Score
	39	0	4	35	0	0	3	9	2	6	30	86	
Beginning of Grade 3	3	0	0	3									
Beginning of Grade 4	6	0	1	5									
Beginning of Grade 5	8	0	0	8									
Beginning of Grade 6	7	0	2	5									
Beginning of Grade 7	5	0	0	5									
Beginning of Grade 8	10	0	1	9									

	Enrolled	NT Approved	NT Other	Tested				Ach	ieveme	ent Leve	el		
Writing			N		Lev	el 4	Lev	el 3	Lev	el 2	Lev	el 1	Mean
	N	N	N	N	N	%	N	%	N	%	N	%	Scaled Score
	18	0	3	15	0	0	0	0	0	0	15	100	
Beginning of Grade 5	8	0	1	7									
Beginning of Grade 8	10	0	2	8									

Level 4 = Proficient with Distinction; Level 3 = Proficient; Level 2 = Partially Proficient; Level 1 = Substantially Below Proficient

### **District Student-Level Data Files**

In addition to all of the reports, districts are also able to access and download student-level data files from the NECAP reporting website for each grade of students tested within their district. Student-level data files will be available for both "teaching year" and "testing year".

The student-level data files list students alphabetically within each school and contain all of the demographic information that was provided by the state for each student. Student records contain the scaled score, achievement level, and subscores earned by the student for each content area tested. In addition, the student records contain each student's actual performance on each of the released items for each content area tested as well as the student's responses to the student questionnaire.

The data collected from the optional reports field, which was coded by schools on page two of the student answer booklets, are also available for each student in the student-level data file. The optional reports field was provided to allow schools the option of grouping individual students into additional categories (for example, by class or by previous year's teacher). This allows schools to make comparisons between subgroups that are not already listed on the disaggregated results pages of the school and district results reports.

The file layout of the student-level data files that lists all of the field names, variable information, and valid values for each field is also available to districts on the NECAP reporting website. Schools must contact their district office to obtain copies of their student-level data files and the file layout.

# Appendix A

Overview of Assessment Instruments and Procedures NECAP Tests of 2007

### Local Educator Involvement in Test Development

Local educators in all three NECAP states were actively involved in each aspect of the NECAP test development from the beginning of the collaboration among the three states. Educators have been involved in development of *Grade Level* and *Grade Span Expectations*, review of all passages and items for bias and sensitivity issues, review of all items for purposes of alignment, Depth of Knowledge, age appropriateness, and accuracy of content. Local educators were also involved in standard setting and the Technical Advisory Committee.

# Grade Level and Grade Span Expectation Development

The NH, RI and VT Departments of Education have developed a common set of grade level and grade span expectations, known as the *New England Common Assessment Program Grade Level Expectations* (GLE) and *Grade Span Expectations* (GSE), and test specifications in mathematics, reading, and writing. These expectations were developed in response to the requirements of the federally mandated No Child Left Behind Act of 2001 to test all students, beginning in the 2005-2006 academic year, in each of grades 3 through 8 in mathematics and reading/language arts and in the 2007-08 academic year in grade 11 in mathematics and reading/language arts. Although these sets of GLE and GSE were developed for this purpose, the partner states were committed to building coherent sets of expectations that would focus, not narrow, the curricula; would support good instruction; and would be aligned with each state's standards. Throughout the development process, each of the NECAP partners has relied upon the expertise of educators in their states. These educators have helped guide the development of these documents and have made numerous insightful contributions in an effort to help support meaningful instruction in mathematics and reading/language arts.

### **Item Review Committee**

During the item review process, a committee of local educators is convened to review all of the items developed for NECAP. Committee member comments are solicited for each item. Each item is evaluated on the following four criteria:

- alignment with the GLE or GSE being measured;
- accurate Depth of Knowledge coding;
- appropriateness for grade-level; and
- content accuracy.

# **Bias and Sensitivity Committee**

A committee of local educators also meets to review all reading passages and individual test items. Committee members determine if the passages and items are likely to place a particular group of students at an advantage or disadvantage for non-educational reasons; and if so, whether the passage or item should be revised or removed.

# **Technical Advisory Committee**

A committee of nationally recognized test and measurement experts and local educators has been established and meets regularly to ensure the technical integrity of NECAP tests.

# **Test Design**

### TYPES OF ITEMS ON NECAP

In order to provide a valid assessment of students' attainment of the *Grade Level* and *Grade Span Expectations*, a variety of item types needed to be used. Therefore, multiple-choice items, short-answer items, constructed-response items, and extended-response writing prompts were used as follows.

#### Multiple choice (one point)

Multiple-choice items are efficient for testing a broad array of content in a relatively short time span.

#### Short answer (one point and two point)

These open-ended items ask students to generate a short response to a question.

### **Constructed response (four points)**

This is a more complex item type that requires students to give a longer response to items related to a reading passage or solve multi-step mathematics problems.

#### **Extended-response writing prompts (twelve points)**

These are topics or questions designed to prompt students to respond in writing. Students compose a response to the writing prompt.

#### COMMON AND MATRIX-SAMPLED ITEMS

There are multiple versions, or forms, of the NECAP tests; for grades 3 through 8, nine forms were created for each grade level tested in reading and mathematics. Eight forms of the test were created for grade 11. The majority of the items in each of the NECAP test forms were the same in every form, or were "common" to all forms of the test. All individual student results (achievement levels, scaled scores, content area subscores) and school results are based on only common items. The other half of the items in each form were matrix sampled. Matrix sampling means distributing a large number of items among the different forms of the test. This approach allows for field testing of new items for subsequent years' tests and also allows some items to be administered in successive years for purposes of equating the tests from year to year.

All students at grades 5 & 8 take the same common writing test for their grade level. The writing test for grade 11 is made up of one common writing prompt that appears in all eight forms and one matrix writing prompt that is different in each form.

A portion of common items is publicly released following each year's test administration to inform local curriculum and instruction. Released common items are replaced each year with some of the items from the previous year's matrix-sampled section.

# **Content Knowledge and Skills Tested on NECAP**

All items appearing on the NECAP tests were designed to measure a specific GLE or GSE. The documents for each content area can be found at each state Department of Education website (see page 1 for DOE web addresses).

#### **READING OVERVIEW**

The NECAP reading tests at grades 3 through 8 and 11 consist of 28 multiple-choice items and 6 constructed-response items that are common for a total of 52 possible raw score points.

The reading passages on the NECAP tests are broken down into the following categories:

- Literary passages representing a variety of forms—modern narratives; diary entries; drama; poetry; biographies; essays; excerpts from novels; short stories; and traditional narratives such as fables, tall tales, myths, and folktales.
- Informational passages, which are factual texts and often deal with the areas of science and social studies. These passages are taken from sources such as newspapers, magazines, and excerpts from books. Informational text also includes directions, manuals, or recipes.

The passages are authentic texts—selected from grade-level appropriate reading sources— that students would be likely to experience in both classroom and independent reading. None of the passages are written specifically for the assessment, but instead are collected from published works.

The items on the NECAP tests are categorized by both the type of passage associated with the item and also whether the item measured lower or higher level comprehension. The level of comprehension is designated as either "Initial Understanding" or "Analysis and Interpretation".

Word identification and vocabulary skills are tested, primarily through multiple-choice items, at each grade level.

				1			
	2 (3)	3(4)	4(5)	5(6)	6(7)	7(8)	9-10(11)
Word Identification Skills and Strategies	20%	15%	10%	0%	0%	0%	0%
Vocabulary Strategies/Breadth of Vocabulary	20%	20%	20%	20%	25%	25 %	25 %
Initial Understanding of Literary Text	20%	20%	20%	20%	15%	15%	15%
Initial Understanding of Informational Text	20%	20%	20%	20%	20%	20%	20%
Analysis and Interpretation of Literary Text	10%	15%	15%	20%	20%	20%	20%
Analysis and Interpretation of Informational Text	10%	10%	15%	20%	20%	20%	20%
	100%	100%	100%	100%	100%	100%	100%

### **Reading Distribution of Emphasis**

#### MATHEMATICS OVERVIEW

The NECAP mathematics tests at grades 3 and 4 consist of 35 multiple-choice items, 10 one-point short-answer items, and 10 two-point short-answer items that are common for a total of 65 possible raw score points.

The NECAP mathematics tests at grades 5 through 8 consist of 32 multiple-choice items, 6 onepoint short-answer items, 6 two-point short-answer items, and 4 constructed-response items that are common for a total of 66 possible raw score points.

The NECAP mathematics test at grade 11 consists of 24 multiple-choice, 12 one-point short-answer items, 6 two-point short answer items, and 4 constructed-response items that are common for a total of 64 possible raw score points.

The content standards in mathematics identify four major strands.

- Numbers and Operations
- Geometry and Measurement
- Functions and Algebra
- Data, Statistics, and Probability

In addition, problem solving, reasoning, connections and communication are embedded throughout the GLE and GSE.

Matrix	matics			і спірпа	313		
	2(3)	3(4)	4(5)	5(6)	6(7)	7(8)	9-10(11)
Number and Operations	55%	50%	50%	45%	30%	20%	15%
Geometry and Measurement	15%	20%	20%	25%	25%	25%	30%
Algebra and Functions	15%	15%	15%	15%	30%	40%	40%
Data, Statistics, and Probability	15%	15%	15%	15%	15%	15%	15%
	100%	100%	100%	100%	100%	100%	100%

### **Mathematics Distribution of Emphasis**

#### WRITING OVERVIEW

The NECAP writing test at grades 5 and 8 consists of 10 multiple-choice items, 3 constructed-response items, 3 one-point short-answer items, and one extended-response writing prompt.

NECAP assesses students' writing skills directly through the use of writing prompts, or topics, to which students respond. In the grades 5 and 8 2007 tests, all students were administered one extended writing prompt. Students also completed constructed-response items. Each of the constructed-response items and the writing prompt addressed a different genre of writing.

The content standards in grades 5 and 8 writing identify four major genres.

- Writing in Response to Literary Text
- Writing in Response to Informational Text
- Narratives
- Informational Writing (Report/Procedure at grade 5 and Persuasive at grade 8)

Each year, all four genres of writing are assessed in the writing portion of the grades 5 and 8 NECAP tests. In addition, structures and conventions of language are assessed through multiple-choice items and throughout the student's writing.

		2(4)					0/10/11)
	2 (3)	3(4)	4(5)	5(6)	6(7)	7(8)	9/10(11)
Structures			Less emphasis			Less emphasis	
Response to Text			Greater emphasis			Greater emphasis	
Narrative			Greater emphasis			Less emphasis	See description
Informational Writing			Greater emphasis (Reports)			Greater emphasis (Reports or Persuasive)	below of grade 11 writing test
Conventions			Less emphasis			Less emphasis	
			100%			100%	

# Writing Distribution of Emphasis

The NECAP writing test at grade 11 consists of two extended-response writing prompts. A common prompt, used to produce individual student scores, is administered to all students and is double scored using a six trait holistic scoring rubric for a total of 12 possible raw score points. In addition, each student is administered a second prompt which is matrix sampled across forms. Each year, the three major genre listed below are assessed.

- Writing in Response to Text (Literary and Informational)
- Informational Writing (Report, Procedure, Persuasive Essay)
- Expressive Writing (Reflective Essay)

This second prompt is single scored and the results are aggregated across all students in the school/district to provide information on page 7 of the school/district results reports.

# Administration Procedures for NECAP

Guidelines for test scheduling, student participation, and test security, as well as detailed administration manuals, were provided to districts and schools prior to the October 2007 testing period. Training on test administration procedures was provided through five or more Test Administration Workshops held in each of the three states three weeks prior to testing.

#### **Student Participation**

All students were to participate in the assessment in one of the following three ways:

- the general assessment without accommodations,
- the general assessment with accommodations, or
- state-specific alternate assessment.

The decision about how a student with disabilities would participate using accommodations was made at the local level. Guidance in making these decisions was available through each state's Department of Education and through use of the *NECAP Accommodations, Guidelines, and Procedures: Administrator's Training Guide,* available on the DOE website for each state.

#### **Test Scheduling**

The NECAP Reading and Mathematics tests for grades 3 through 8 were designed to be administered in six separate sessions. For students in grades 5 and 8, two additional writing sessions were administered. The guidelines for scheduling test sessions were based on an estimate that each session would require approximately forty-five minutes and all students were allowed up to ninety minutes per session.

The NECAP Writing, Reading, and Mathematics tests for grade 11 were designed to be administered in six separate sessions. The guidelines for scheduling test sessions were based on an estimate that each session would require approximately sixty minutes and all students were allowed up to ninety minutes per session.

Administrators were instructed to allow extra time for any students who required test accommodations that could not be made during the regular test sessions. For scheduling purposes, each session was treated as an intact unit. That is, once students started a session of the test they had to finish it within the time allotted; also, under no circumstances were they allowed to go back to an earlier session once they had moved on to another session.

# Scoring

In November 2007, more than 30 million NECAP student responses were processed and scored at Measured Progress. The scoring activities that were used to produce the results for the NECAP reports are described below.

Scoring was separated into the following four major tasks:

- scoring of responses to multiple-choice items,
- scoring of responses to short-answer items,
- scoring of responses to constructed-response items, and
- scoring of extended-response writing prompts.

#### SCORING OF MULTIPLE-CHOICE ITEMS

Multiple-choice items were machine-scored using digital scanning equipment. Correct responses were assigned a score of one point each; incorrect or blank responses were assigned a score of zero points each.

#### SCORING OF SHORT-ANSWER AND CONSTRUCTED-RESPONSE ITEMS

Short-answer and constructed-response items were scored by scorers employed by Measured Progress, the testing contractor. Short-answer items were given a score from zero to one or zero to two. Constructed-response items were given a score from zero to four. Zeros are employed when a student produces some work, but the work is totally wrong or irrelevant or if he or she leaves the item blank. For purposes of aggregating item results, blanks and zeros both count as zero points towards a student's score.

The work in preparation for scoring student responses included:

- development of scoring guides (rubrics) by content specialists from the NH, RI and VT Departments of Education and Measured Progress's test developers, and
- selection of "benchmark" responses—examples of student work at different score points for each item—that were used in training and continuous monitoring of scorer accuracy.

Scorer training consisted of:

- review of each item and its related content and performance standard,
- review and discussion of the scoring guide and multiple sets of benchmark responses for each score point, and
- qualifying rounds of scoring in which scorers needed to demonstrate a prescribed level of accuracy.

#### SCORING OF EXTENDED RESPONSES

Extended-response writing prompts were given a score from zero to six. Zeros are employed when a student produces some work, but the work is totally wrong or irrelevant or if he or she leaves the item blank. For purposes of aggregating item results, blanks and zeros both count as zero points towards a student's score. All NECAP extended-response writing prompts are 100% double-blind scored. Double-blind scoring refers to the method of scoring whereby two scorers score the same response and neither scorer has any indication as to what score the other person has given. If there is a difference in scores that is greater than 1 score point, then the response goes into an arbitration queue. Senior scoring staff members score all arbitration responses without knowing the scores given by the two previous scorers. The state Departments of Education defined how resolution should be reached if discrepant scores arise.

Preparation for scoring extended-response writing prompts included the selection of benchmark responses that mirrored the work described on page 46 for scoring short-answer and constructed-response items. Scorers were trained by grade level in large sessions by senior scoring staff for that grade.

# Setting Standards for Performance on the NECAP Tests

Standard setting is the process of determining the minimum or "threshold" score for each achievement level, grade, and content area for which results are reported. The multi-step process of setting standards for the NECAP tests began with creation of achievement level descriptions.

In January 2005, the state Departments of Education in NH, RI and VT convened panels of educators to participate in the standard-setting process for NECAP grades 3 through 8. For more detailed information on standard setting see the *NECAP Standard Setting Report* located on the Department of Education website of each state.

In January 2008, the state Departments of Education in NH, RI, and VT convened panels of educators to participate in the standard setting process for NECAP grade 11. A *NECAP Standard Setting Report – Grade 11* will be available on the Department of Education website of each state in February 2008.

# Reporting

The NECAP tests were designed to measure student performance against the learning goals described in the *Grade Level* and *Grade Span Expectations*. Consistent with this purpose, primary results on the NECAP tests are reported in terms of achievement levels that describe student performance in relation to these established state standards. There are four achievement levels: Proficient with Distinction, Proficient, Partially Proficient, and Substantially Below Proficient. Students receive a separate achievement-level classification (based on total scaled score) in each content area in which they complete a test. Each of the four achievement levels encompasses a range of student performance. A student whose test performance is just above Substantially Below Proficient and a student whose level of performance is slightly below Proficient are both classified as Partially Proficient. There is no overall classification of student performance across content areas. School- and district-level results are reported as the number and percentage of students attaining each achievement level at each grade level tested.

In addition to achievement levels, NECAP results for grades 3 through 8 and 11 in reading and mathematics and for grades 5 and 8 writing are also reported as scaled scores. The grade 11 writing score is reported as the total points earned on the NECAP scoring rubric for writing. This rubric describes the most important features expected in student writing.

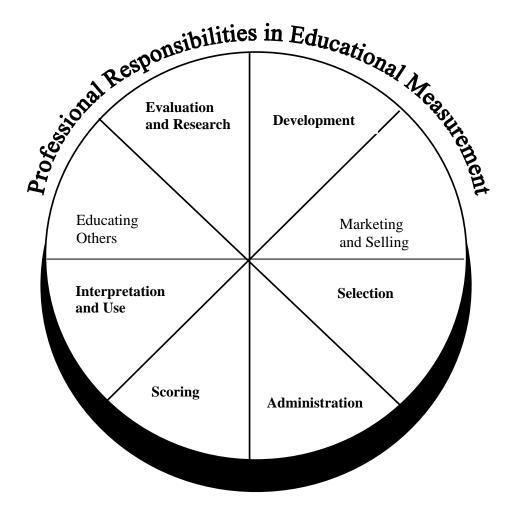
#### TRANSLATING RAW SCORES TO SCALED SCORES AND ACHIEVEMENT LEVELS

NECAP scores in each content area are reported on a scale that ranges from 00 to 80. Scaled scores supplement the NECAP achievement-level results by providing information about the position of a student's results within an achievement level. School- and district-level scaled scores are calculated by computing the average of student-level scaled scores. Students' raw scores, or total number of points, on the NECAP tests are translated to scaled scores using a data analysis process called scaling. Scaling simply converts raw points from one scale to another. In the same way that the same temperature can be expressed on either the Fahrenheit or Celsius scales and the same distance can be expressed either in miles or kilometers, student scores on the NECAP tests could be expressed as raw scores (i.e., number right) or scaled scores.

It is important to note that converting from raw scores to scaled scores does not change the students' achievement-level classifications. Given the relative simplicity of raw scores, it is fair to question why scaled scores are used in NECAP reports instead of raw scores. Foremost, scaled scores offer the advantage of simplifying the reporting of results across content areas, grade levels, and subsequent years. Because the standard-setting process typically results in different cut scores across content areas on a raw score basis, it is useful to transform these raw cut scores to a scale that is more easily interpretable and consistent. For NECAP, a score of 40 is the cut score between the Partially Proficient and Proficient achievement levels. This is true regardless of the content area, grade, or year with which one may be concerned. If one were to use raw scores, the raw cut score between Substantially Below Proficient and Partially Proficient might, for example, be 35 in mathematics at grade 3, but 33 in mathematics at grade 7, or 36 in writing at grade 8. Using scaled scores greatly simplifies the task of understanding how a student performed.

# Appendix B

# CODE OF PROFESSIONAL RESPONSIBILITIES IN EDUCATIONAL MEASUREMENT



Prepared by the NCME Ad Hoc Committee on the Development of a Code of Ethics: Cynthia B. Schmeiser, ACT – Chair Kurt F. Geisinger, State University of New York Sharon Johnson-Lewis, Detroit Public Schools Edward D. Roeber, Council of Chief State School Officers William D. Schafer, University of Maryland

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# CODE OF PROFESSIONAL RESPONSIBILITIES IN EDUCATIONAL MEASUREMENT

### PREAMBLE AND GENERAL RESPONSIBILITIES

As an organization dedicated to the improvement of measurement and evaluation practice in education, the National Council on Measurement in Education (NCME) has adopted this Code to promote professionally responsible practice in conduct that arises from either the professional standards of the field, general ethical principles, or both.

The purpose of the Code of Professional Responsibilities in Educational Measurement, hereinafter referred to as the Code, is to guide the conduct of NCME members who are involved in any type of assessment activity in education. NCME is also providing this Code as a public service for all individuals who are engaged in educational assessment activities in the hope that these activities will be conducted in a professionally responsible manner. Persons who engage in these activities include local educators such as classroom teachers, principals, and superintendents; professionals such as school psychologists and counselors; state and national technical, legislative, and policy staff in education; staff of research, evaluation, and testing organizations; providers of test preparation services; college and university faculty and administrators; and professionals in business and industry who design and implement educational and training programs.

This Code applies to any type of assessment that occurs as part of the educational process, including formal and informal, traditional and alternative techniques for gathering information used in making educational decisions at all levels. These techniques include, but are not limited to, large-scale assessments at the school, district, state, national, and international levels; standardized tests; observational measures; teacherconducted assessments; assessment support materials; and other achievement, aptitude, interest, and personality measures used in and for education.

Although NCME is promulgating this Code for its members, it strongly encourages other organizations and individuals who engage in educational assessment activities to endorse and abide by the responsibilities relevant to their professions. Because the Code pertains only to uses of assessment in education, it is recognized that uses of assessments outside of educational contexts, such as for employment, certification, or licensure, may involve additional professional responsibilities beyond those detailed in this Code.

The Code enumerates professional responsibilities in eight major areas of assessment activity. Specifically, the Code presents the professional responsibilities of those who:

- 1) Develop Assessments
- 2) Market and Sell Assessments
- 3) Select Assessments
- 4) Administer Assessments
- 5) Score Assessments
- 6) Interpret Use, and Communicate Assessment Results
- 7) Educate About Assessment
- 8) Evaluate Programs and Conduct Research on Assessments.

Although the organization of the Code is based on the differentiation of these activities, they are viewed as highly interrelated, and those who use this Code are urged to consider the Code in its entirety. The index following this Code provides a listing of some of the critical interest topics within educational measurement that focus on one or more of the assessment activities.

The professional responsibilities promulgated in this Code in eight major areas of assessment activity are based on expectations that NCME members involved in educational assessment will:

- 1) protect the health and safety of all examinees;
- 2) be knowledgeable about, and behave in compliance with, state and federal laws relevant to the conduct of professional activities;
- 3) maintain and improve their professional competence in educational assessment;
- provide assessment services only in areas of their competence and experience, affording full disclosure of their professional qualifications;
- 5) promote the understanding of sound assessment practices in education;
- adhere to the highest standards of conduct and promote professionally responsible conduct within educational institutions and agencies that provide educational services; and
- 7) perform all professional responsibilities with honesty, integrity, due care, and fairness.

Responsible professional practice includes being informed about and acting in accordance with the Code of Fair Testing Practices in Education (joint Committee on Testing Practices, 1988), the Standards for Educational and Psychological Testing (American Educational Research Association, American Psychological Association, NCME, 1985), or subsequent revisions as well as all applicable state and federal laws that may govern the development, administration, and use of assessment. Both the Standards for Educational and Psychological Testing and the Code of Fair Testing Practices in Education are intended to establish criteria for judging the technical adequacy of tests and the appropriate uses of tests and test results. The purpose of this Code is to describe the professional responsibilities of those individuals who are engaged in assessment activities. As would be expected, there is a strong relationship between professionally responsible practice and sound educational assessments, and this Code is intended to be consistent with the relevant parts of both of these documents.

It is not the intention of NCME to enforce the professional responsibilities stated in the Code or to investigate allegations of violations to the Code. Since the Code provides a frame of reference for the evaluation of the appropriateness of behavior, NCME recognizes that the Code may be used in legal or other similar proceedings

### **Responsibilities of Those Who Develop** Assessment Products and Services

**SECTION 1** 

Those who develop assessment products and services, such as classroom teachers and other assessment specialists, have a professional responsibility to strive to produce assessments that are of the highest quality. Persons who develop assessments have a professional responsibility to:

- 1.1 ensure that assessment products and services are developed to meet applicable professional, technical, and legal standards.
- 1.2 develop assessment products and services that are as free as possible from bias due to characteristics irrelevant to the construct being measured, such as gender, ethnicity, race, socioeconomic status, disability, religion, age, or national origin.
- 1.3 plan accommodations for groups of test takers with disabilities and other special needs when developing assessments.
- 1.4 disclose to appropriate parties any actual or potential conflicts of interest that might influence the developers' judgment or performance.
- 1.5 use copyrighted materials in assessment products and services in accordance with state and federal law.
- 1.6 make information available to appropriate persons about the steps taken to develop and score the

assessment, including up-to-date information used to support the reliability, validity, scoring and reporting processes, and other relevant characteristics of the assessment.

- 1.7 protect the rights to privacy of those who are assessed as part of the assessment development process.
- 1.8 caution users, in clear and prominent language, against the most likely misinterpretations and misuses of data that arise out of the assessment development process.
- 1.9 avoid false or unsubstantiated claims in test preparation and program support materials and services about an assessment or its use and interpretation.
- 1.10 correct any substantive inaccuracies in assessments or their support materials as soon as feasible.
- 1.11 develop score reports and support materials that promote the understanding of assessment results.

#### **Responsibilities of Those Who Market and Sell Assessment Products and Services**

The marketing of assessment products and services, such as tests and other instruments, scoring services test preparation services, consulting, and test interpretive services, should be based on information that is accurate, complete, and relevant to those considering their use. Persons who market and see assessment products and services have a professional responsibility to:

- 2.1 provide accurate information to potential purchasers about assessment products and services and their recommended uses and limitations.
- 2.2 not knowingly withhold relevant information about assessment products and services that might affect an appropriate selection decision.
- 2.3 base all claims about assessment products and services on valid interpretations of publicly available information.
- 2.4 allow qualified users equal opportunity to purchase assessment products and services.
- 2.5 establish reasonable fees for assessment products and services.
- 2.6 communicate to potential users, in advance of any purchase or use, all applicable fees associated with assessment products and services.
- 2.7 strive to ensure that no individuals are denied access to opportunities because of their inability to pay the fees for assessment products and services.

- 2.8 establish criteria for the sale of assessment products and services, such as limiting the sale of assessment products and services to those individuals who are qualified for recommended uses and from whom proper uses and interpretations are anticipated.
- 2.9 inform potential users of known inappropriate uses of assessment products and services and provide recommendations about how to avoid such misuses.
- 2.10 maintain a current understanding about assessment products and services and their appropriate uses in education.
- 2.11 release information implying endorsement by users of assessment products and services only with the users' permission.
- 2.12 avoid making claims that assessment products and services have been endorsed by another organization unless an official endorsement has been obtained.
- 2.13 avoid marketing test preparation products and services that may cause individuals to receive scores that misrepresent their actual levels of attainment.

#### **SECTION 3**

#### **Responsibilities of Those Who Select** Assessment Products and Services

Those who select assessment products and services for use in educational settings, or help others do so, have important professional responsibilities to make sure that the assessments are appropriate for their intended use. Persons who select assessment products and services have a professional responsibility to:

- 3.1 conduct a thorough review and evaluation of available assessment strategies and instruments that might be valid for the intended uses.
- 3.2 recommend and/or select assessments based on publicly available documented evidence of their technical quality and utility rather than on unsubstantiated claims or statements.
- 3.3 disclose any associations or affiliations that they have with the authors, test publishers or others involved with the assessments under consideration for purchase and refrain from participation if such associations might affect the objectivity of the selection process.
- 3.4 inform decision makers and prospective users of the appropriateness of the assessment for the intended uses, likely consequences of use, protection of examinee rights, relative costs, materials, and services needed to conduct or use the assessment, and known limitations of the

assessment, including potential misuses and misinterpretations of assessment information.

- 3.5 recommend against the use of any prospective assessment that is likely to be administered, scored, and used in an invalid manner for members of various groups in our society for reasons of race, ethnicity, gender, age, disability, language background, socioeconomic status, religion, or national origin.
- 3.6 comply with all security precautions that may accompany assessments being reviewed.
- 3.7 immediately disclose any attempts by others to exert undue influence on the assessment selection process.
- 3.8 avoid recommending, purchasing, or using test preparation products and services that may cause individuals to receive scores that misrepresent their actual levels of attainment.

#### Responsibilities of Those Who Administer Assessments

Those who prepare individuals to take assessments and those who are directly or indirectly involved in the administration of assessments as part of the educational process, including teachers, administrators, and assessment personnel, have an important role in making sure that the assessments are administered in a fair and accurate manner. Persons who prepare others for and those who administer, assessments have a professional responsibility to:

- 4.1 inform the examinees about the assessment prior to its administration, including its purposes, uses; and consequences; how the assessment information will be judged or scored; how the results will be kept on file; who will have access to the results; how the results will be distributed; and examinees rights before, during, and after the assessment.
- 4.2 administer only those assessments for which they are qualified by education, training, licensure, or certification.
- 4.3 take appropriate security precautions before, during, and after the administration of the assessment.
- 4.4 understand the procedures needed to administer the assessment prior to administration.
- 4.5 administer standardized assessments according to prescribed procedures and conditions and notify appropriate persons if any nonstandard or delimiting conditions occur.

- 4.6 not exclude any eligible student from the assessment.
- 4.7 avoid any conditions in the conduct of the assessment that might invalidate the results.
- 4.8 provide for and document all reasonable and allowable accommodations for the administration of the assessment to persons with disabilities or special needs.
- 4.9 provide reasonable opportunities for individuals to ask questions about the assessment procedures or directions prior to and at prescribed times during the administration of the assessment.
- 4.10 protect the rights to privacy and due process of those who are assessed.
- 4.11 avoid actions or conditions that would permit or encourage individuals or groups to receive scores that misrepresent their actual levels of attainment.

#### Responsibilities of Those Who Score Assessments

**SECTION 5** 

The scoring of educational assessments should be conducted properly and efficiently so that the results are reported accurately and in a timely manner. Persons who score and prepare reports of assessments have a professional responsibility to:

- 5.1 provide complete and accurate information to users about how the assessment is scored, such as the reporting schedule, scoring process to be used, rationale for the scoring approach, technical characteristics, quality control procedures, reporting formats, and the fees, if any, for these services.
- 5.2 ensure the accuracy of the assessment results by conducting reasonable quality control procedures before, during, and after scoring.
- 5.3 minimize the effect on scoring of factors irrelevant to the purposes of the assessment.
- 5.4 inform users promptly of any deviation in the planned scoring and reporting service or schedule and negotiate a solution with users.

- 5.5 provide corrected score results to the examinee or the client as quickly as practicable should errors be found that may affect the inferences made on the basis of the scores.
- 5.6 protect the confidentiality of information that identifies individuals as prescribed by state and federal law.
- 5.7 release summary results of the assessment only to those persons entitled to such information by state or federal law or those who are designated by the party contracting for the scoring services.
- 5.8 establish, where feasible, a fair and reasonable process for appeal and rescoring the assessment.

**SECTION 6** 

#### Responsibilities of Those Who Interpret, Use, and Communicate Assessment Results

The interpretation, use, and communication of assessment results should promote valid inferences and minimize invalid ones. Persons who interpret, use, and communicate assessment results have a professional responsibility to:

- 6.1 conduct these activities in an informed objective, and fair manner within the context of the assessment's limitations and with an understanding of the potential consequences of use.
- 6.2 provide to those who receive assessment results information about the assessment, its purposes, its limitations, and its uses necessary for the proper interpretation of the results.
- 6.3 provide to those who receive score reports an understandable written description of all reported scores, including proper interpretations and likely misinterpretations.
- 6.4 communicate to appropriate audiences the results of the assessment in an understandable and timely manner, including proper interpretations and likely misinterpretations.
- 6.5 evaluate and communicate the adequacy and appropriateness of any norms or standards used in the interpretation of assessment results.

- 6.6 inform parties involved in the assessment process how assessment results may affect them.
- 6.7 use multiple sources and types of relevant information about persons or programs whenever possible in making educational decisions.
- 6.8 avoid making, and actively discourage others from making, inaccurate reports, unsubstantiated claims, inappropriate interpretations, or otherwise false and misleading statements about assessment results.
- 6.9 disclose to examinees and others whether and how long the results of the assessment will be kept on file, procedures for appeal and rescoring, rights examinees and others have to the assessment information, and how those rights may be exercised.
- 6.10 report any apparent misuses of assessment information to those responsible for the assessment process.
- 6.11 protect the rights to privacy of individuals and institutions involved in the assessment process.

#### **SECTION 7**

#### Responsibilities of Those Who Educate Others about Assessment

The process of educating others about educational assessment, whether as part of higher education, professional development, public policy discussions, or job training, should prepare individuals to understand and engage in sound measurement practice and to become discerning users of tests and test results. Persons who educate or inform others about assessment have a professional responsibility to:

- 7.1 remain competent and current in the areas in which they teach and reflect that in their instruction.
- 7.2 provide fair and balanced perspectives when teaching about assessment.
- 7.3 differentiate clearly between expressions of opinion and substantiated knowledge when educating others about any specific assessment method, product, or service.
- 7.4 disclose any financial interests that might be perceived to influence the evaluation of a particular assessment product or service that is the subject of instruction.
- 7.5 avoid administering any assessment that is not part of the evaluation of student performance in a course if the

administration of that assessment is likely to harm any student.

- 7.6 avoid using or reporting the results of any assessment that is not part of the evaluation of student performance in a course if the use or reporting of results is likely to harm any student.
- 7.7 protect all secure assessments and materials used in the instructional process.
- 7.8 model responsible assessment practice and help those receiving instruction to learn about their professional responsibilities in educational measurement.
- 7.9 provide fair and balanced perspectives on assessment issues being discussed by policymakers, parents and other citizens.

#### **Responsibilities of Those Who Evaluate Educational Programs & Conduct Research on Assessments**

Conducting research on or about assessments or educational programs is a key activity in helping to improve the understanding and use of assessments and educational programs. Persons who engage in the evaluation of educational programs or conduct research on assessments have a professional responsibility to:

- 8.1 conduct evaluation and research activities in an informed, objective, and fair manner.
- 8.2 disclose any associations that they have with authors, test publishers, or others involved with the assessment and refrain from participation if such associations might affect the objectivity of the research or evaluation.
- 8.3 preserve the security of all assessments throughout the research process as appropriate.
- 8.4 take appropriate steps to minimize potential sources of invalidity in the research and disclose known factors that may bias the results of the study.
- 8.5 present the results of research, both intended and

unintended, in a fair, complete, and objective manner.

- 8.6 attribute completely and appropriately the work and ideas of others.
- 8.7 qualify the conclusions of the research within the limitations of the study.
- 8.8 use multiple sources of relevant information in conducting evaluation and research activities whenever possible.
- 8.9 comply with applicable standards for protecting the rights of participants in an evaluation or research study, including the rights to privacy and informed consent.

#### Afterword

As stated at the outset, the purpose of the *Code of Professional Responsibilities in Educational Measurement* is to serve as a guide to the conduct of NCME members who are engaged in any type of assessment activity in education. Given the broad scope of the field of educational assessment as well as the variety of activities in which professionals may engage, it is unlikely that any code will cover the professional responsibilities involved in every situation or activity in which assessment is used in education. Ultimately, it is hoped that this Code will serve as the basis for ongoing discussions about what constitutes professionally responsible practice. Moreover, these discussions will undoubtedly identify areas of practice that need further analysis and clarification in subsequent editions of the Code. To the extent that these discussions occur, the Code will have served its purpose.

To assist in the ongoing refinement of the Code, comments on this document are most welcome. Please send your comments and inquiries to:

> Dr. William J. Russell Executive Officer National Council on Measurement in Education 1230 Seventeenth Street, NW Washington, DC 20036-3078

The following list of resources is provided for those who want to seek additional information about codes of professional responsibility that have been developed and adopted by organizations having an interest in various aspects of educational assessment.

American Association for Counseling and Development (now American Counseling Association). (1988). Ethical *standards of the American Counseling Association*. Alexandria, VA: Author.

American Association for Counseling and Development (now American Counseling Association) & Association for Measurement and Evaluation in Counseling and Development (now Association for Assessment in Counseling). (1989) *Responsibilities of users of standardized tests;* RUST *statement revised.* Alexandria, VA: Author.

American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. (1985). *Standards for educational and psychological testing*. Washington, DC: Author.

American Educational Research Association. (1992). Ethical standards of the American Educational Research association. *Educational Researcher*, 21 (7), 23-26.

American Federation of Teachers, National Council on Measurement in Education, & National Education association. (1990). Standards *for teacher competence in educational assessment of students*. Washington, DC: Author. American Psychological Association. (1992). *Ethical principles of psychologists and code of conduct*. Washington, DC: Author.

American Psychological Association President's Task Force on Psychology in Education. (In press). *Learner-centered psychological principles: Guidelines for school redesign and reform.* Washington, DC: Author.

Joint Advisory Committee. (1993). *Principles for fair* assessment practices for education in Canada. Edmonton, Alberta: Author.

Joint Committee on Testing Practices. (1988). Code of fair testing practices in education. Washington, DC: Author.

Joint Committee on Standards for Educational Evaluation. (1988). The *personnel evaluation standards: How to assess systems for evaluating educators*. Newbury Park, CA: Sage.

Joint Committee on Standards for Educational Evaluation. (1 The program evaluation standards: How to assess evaluation educational programs. Thousand Oaks, CA: Sage.

National Association of College Admission Counselors. (1988). Statement *of principles of good practice*. Alexandria, VA: Author.

#### Index to the Code of Professional Responsibilities in Educational Measurement

This index provides a list of major topics and issues addressed by the responsibilities in each of the eight sections of the Code. Although this list is not intended to be exhaustive, it is intended to serve as a reference source for those who use this Code.

Торіс	Responsibility
Advertising	
Bias	
Cheating	4.5, 4.6, 4.11
Coaching and Test Preparatio	on 2.13, 3.8, 4.11
Competence	
Conflict of Interest	
Consequences of Test Use	
Copyrighted Materials, Use o	f 1.5, 8.6
Disabled Examinees, Rights of	of1.3, 4.8
Disclosure1.6,	2.1, 2.2, 2.6, 3.3, 3.7, 4.1, 5.1, 5.4, 6.2, 6.3, 6.4, 6.6, 6.9, 8.2, 8.4, 8.5

Торіс	Responsibility
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Fees	
Inappropriate Test Use1.8,	2.8, 2.9, 3.4, 6.8, 6.10
Objectivity 3.1, 3.2	2, 3.3, 6.1, 6.5, 7.2, 7.3 7.9, 8.1, 8.2, 8.5, 8.7
Rights to Privacy1.7, 3.4,	4.10, 5.6, 5.7, 6.11, 8.9
Security	
Truthfulness	1.10, 2.1, 2.2, 2.3, 2.11, 2.12, 3.2, 4.6, 7.3
Undue Influence	
Unsubstantiated Claims	1.9, 3.2, 6.8

**Appendix C** NECAP Achievement Level Descriptions

General	Achievement Level Descriptions (Grades 3 through 8)
Proficient with Distinction (Level 4) Proficient (Level 3)	Students performing at this level demonstrate the prerequisite knowledge and skills needed to participate and excel in instructional activities aligned with the GLE at the current grade level. Errors made by these students are few and minor and do not reflect gaps in prerequisite knowledge and skills. Students performing at this level demonstrate minor gaps in the prerequisite knowledge and skills needed to participate and perform successfully in instructional activities aligned with the GLE at the current grade level. It is likely that any gaps in prerequisite knowledge and skills demonstrated by these students can be addressed during the course of typical classroom
Partially	instruction. Students performing at this level demonstrate gaps in prerequisite knowledge
Proficient (Level 2)	and skills needed to participate and perform successfully in instructional activities aligned with the GLE at the current grade level. Additional instructional support may be necessary for these students to meet grade level expectations.
Substantially Below Proficient (Level 1)	Students performing at this level demonstrate extensive and significant gaps in prerequisite knowledge and skills needed to participate and perform successfully in instructional activities aligned with the GLE at the current grade level. Additional instructional support is necessary for these students to meet grade level expectations.

	neral Achievement Level Descriptions (Grade 11)
Proficient with	Students performing at this level demonstrate the prerequisite knowledge and
Distinction	skills needed to participate and excel in instructional activities aligned with
(Level 4)	the grade 9-10 GSE. Errors made by these students are few and minor and do
	not reflect gaps in prerequisite knowledge and skills.
	These students are prepared to perform successfully in classroom instruction
	aligned with grade 11-12 expectations.
Proficient	Students performing at this level demonstrate minor gaps in the knowledge
(Level 3)	and skills needed to participate and perform successfully in instructional
. ,	activities aligned with the grade 9-10 GSE.
	It is likely that any gaps in prerequisite knowledge and skills demonstrated by
	these students can be addressed by the classroom teacher during the course of
	classroom instruction aligned with the grade 11-12 expectations.
Partially	Students performing at this level demonstrate gaps in knowledge and skills
Proficient	needed to participate and perform successfully in instructional activities
(Level 2)	aligned with the grade 9-10 GSE.
	Additional instructional support may be necessary for these students to
	perform successfully in courses aligned with grade 11-12 expectations.
Substantially	Students performing at this level demonstrate extensive and significant gaps
Below	in the prerequisite knowledge and skills needed to participate and perform
Proficient	successfully in instructional activities aligned with the grade 9-10 GSE.
(Level 1)	Additional instructional support is passage for these students to meet the
	Additional instructional support is necessary for these students to meet the
	grade 9-10 GSE.

	Reading Achievement Level Descriptions
Proficient with Distinction	Student's performance demonstrates an ability to read and comprehend grade-appropriate text. Student is able to analyze and interpret literary and informational text. Student offers insightful observations/assertions that are well supported by references to the text. Student uses range of vocabulary strategies and breadth of vocabulary knowledge to read and comprehend a wide variety of texts.
Proficient	Student's performance demonstrates an ability to read and comprehend grade-appropriate text. Student is able to analyze and interpret literary and informational text. Student makes and supports relevant assertions by referencing text. Student uses vocabulary strategies and breadth of vocabulary knowledge to read and comprehend text.
Partially Proficient	Student's performance demonstrates an inconsistent ability to read and comprehend grade-appropriate text. Student attempts to analyze and interpret literary and informational text. Student may make and/or support assertions by referencing text. Student's vocabulary knowledge and use of strategies may be limited and may impact the ability to read and comprehend text.
Substantially Below Proficient	Student's performance demonstrates minimal ability to derive/construct meaning from grade-appropriate text. Student may be able to recognize story elements and text features. Student's limited vocabulary knowledge and use of strategies impacts the ability to read and comprehend text.

Mathematics Achievement Level Descriptions	
Proficient with	Student's problem solving demonstrates logical reasoning with strong
Distinction	explanations that include both words and proper mathematical notation.
	Student's work exhibits a high level of accuracy, effective use of a variety
	of strategies, and an understanding of mathematical concepts within and
	across grade level expectations. Student demonstrates the ability to move
	from concrete to abstract representations.
Proficient	Student's problem solving demonstrates logical reasoning with appropriate
	explanations that include both words and proper mathematical notation.
	Student uses a variety of strategies that are often systematic. Computational
	errors do not interfere with communicating understanding. Student
	demonstrates conceptual understanding of most aspects of the grade level
	expectations.
Partially	Student's problem solving demonstrates logical reasoning and conceptual
Proficient	understanding in some, but not all, aspects of the grade level expectations.
	Many problems are started correctly, but computational errors may get in
	the way of completing some aspects of the problem. Student uses some
	effective strategies. Student's work demonstrates that he or she is generally
	stronger with concrete than abstract situations.
Substantially	Student's problem solving is often incomplete, lacks logical reasoning and
Below	accuracy, and shows little conceptual understanding in most aspects of the
Proficient	grade level expectations. Student is able to start some problems but
	computational errors and lack of conceptual understanding interfere with
	solving problems successfully.

Writing Achievement Level Descriptions	
Proficient with	Student's writing demonstrates an ability to respond to prompt/task with
Distinction	clarity and insight. Focus is well developed and maintained throughout
	response. Response demonstrates use of strong organizational structures. A
	variety of elaboration strategies is evident. Sentence structures and
	language choices are varied and used effectively. Response demonstrates
	control of conventions; minor errors may occur.
Proficient	Student's writing demonstrates an ability to respond to prompt/task. Focus
	is clear and maintained throughout the response. Response is organized
	with a beginning, middle and end with appropriate transitions. Details are
	sufficiently elaborated to support focus. Sentence structures and language
	use are varied. Response demonstrates control of conventions; errors may
	occur but do not interfere with meaning.
Partially	Student's writing demonstrates an attempt to respond to prompt/task. Focus
Proficient	may be present but not maintained. Organizational structure is inconsistent
	with limited use of transitions. Details may be listed and lack elaboration.
	Sentence structures and language use are unsophisticated and may be
	repetitive. Response demonstrates inconsistent control of conventions.
Substantially	Student's writing demonstrates a minimal response to prompt/task. Focus
Below	is unclear or lacking. Little or no organizational structure is evident. Details
Proficient	are minimal and/or random. Sentence structures and language use are
	minimal or absent. Frequent errors in conventions may interfere with
	meaning.

# Appendix D

Reference Materials

Coladarci, T, Cobb, C.D., Minimum, E.W., & Clarke, R.C. (2004). *Fundamentals of statistical reasoning in education*. Hoboken, NJ: John Wiley & Sons, Inc. (ISBN: 0471069728)

Glass, G.V. & Hopkins, K.D. (1996). *Statistical methods in education and psychology* (3<sup>rd</sup> edition). Boston: Allyn & Bacon. (ISBN: 0205142125)

Shavelson, R.J. (1996). *Statistical reasoning for the behavioral sciences* (3<sup>rd</sup> edition). Boston: Allyn & Bacon. (ISBN: 020518460X)