New York State Alternate Assessment Technical Report 2010–2011

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Chapter 1. OVERVIEW

This technical report provides an overview of the New York State Alternate Assessment (NYSAA), including a description of the purpose of the NYSAA, the processes utilized to develop and implement the NYSAA program, and stakeholder involvement in those processes. By comparing the intent of the NYSAA with its process and design, the assessment's validity can be evaluated. The Alternate Grade Level Indicators (AGLIs) development process, the alignment of the AGLIs to the New York State learning standards Grade Level Indicators (GLIs) for English Language Arts (ELA), mathematics, science, and social studies, which occurred in 2006–07 and 2007–08, are presented in detail. Stakeholder input in the development of the overall NYSAA process itself is described, from the AGLI design through blueprint/test design, content alignment, assessment task development, teacher trainings, administration, scoring, and standard setting.

1.1 Purpose of this Report

The purpose of this report is to document the technical aspects of the 2010–11 NYSAA. During the 2010–11 school year, approximately 19,595 students in Grades 3 through 8 and in high school participated in the administration of the NYSAA. ELA and mathematics were assessed at the Grades 3 through 8 and high school levels; science was assessed at the Grades 4, 8, and high school levels; and social studies was assessed at the high school level.

Several technical aspects of the NYSAA are described, in an effort to contribute to evidence supporting the validity of NYSAA score interpretations. Because the *interpretations* of the test scores are evaluated for validity, not the test itself, this report presents documentation to substantiate intended interpretations (AERA, APA, & NCME, 1999). Each chapter in this section contributes important information to the validity argument by addressing one or more of the following aspects of the NYSAA: AGLI and assessment task development, alignment, administration, scoring, reliability, standard setting, and achievement levels.

The Standards for Educational and Psychological Testing (AERA, APA, & NCME,1999) provides a framework for describing sources of evidence that should be considered when constructing an argument for assessment validity. These evidence sources include those in five general areas: test content, response processes, internal structure, relationship to other variables, and consequences of testing. Although each of these sources may speak to a different aspect of validity, they are not distinct types of validity. Instead, each contributes to a body of evidence about the comprehensive validity of score interpretations.

1.2 Organization of this Report

This report is organized based on the conceptual flow of the NYSAA as a year-long process, which includes blueprint design/development (completed in 2006–07), AGLI development (completed in 2006–07 and 2007–08), assessment task development, administration, scoring, standard setting (completed in 2006–07 and 2007–08), technical characteristics, and validity. The appendices contain supporting documentation.

1.3 Current Year Updates

The assessment of social studies at the Grades 5 and 8 levels was discontinued for all the statewide assessment programs in 2010–11. It was maintained at the high school level. No changes were made to the assessment requirements, Test Blueprint, or AGLIs for the high school social studies content area. The assessment structure and guidelines remained consistent with previous administrations.

Chapter 2. THE STATE ASSESSMENT SYSTEM

In New York State, both the general large-scale assessment and the alternate assessment test students on English Language Arts (ELA) and mathematics curriculum content taught during Grades 3 through 8 and during high school; on science content taught during Grades 4, 8, and during high school; and on social studies content taught during high school. All students participate in the statewide assessment program through: the general assessments with or without accommodations, the alternate assessment with or without accommodations, or a combination of the general and alternate assessments.

2.1 Introduction

The New York State Alternate Assessment (NYSAA) is designed to provide a snapshot in time of an individual student's performance. A broader picture will emerge as the student results on the NYSAA are reviewed, along with results on other classroom and district assessments.

The NYSAA is a datafolio-style assessment that measures how well students with severe cognitive disabilities meet the New York State learning standards at alternate achievement levels. All students, including those with severe cognitive disabilities, are required by federal law to have access to the general education curriculum. The New York State Education Department (the Department) has aligned Alternate Grade Level Indicators (AGLIs) with the core curriculum in ELA, mathematics, science, and social studies for the administration of the NYSAA. The content area subject matter assessed by the NYSAA is clearly related to the grade-level content. While the content is reduced in scope and complexity, students with severe cognitive disabilities are held to high expectations in order to achieve the New York State learning standards. AGLIs afford students a richer learning experience.

School districts across the United States are required to assess all students according to federal statute and State regulations. Assessment results tell educators how students are progressing and signal where changes may need to be made in curriculum and/or instruction at the district, school, and classroom levels. Teachers should assess students in all areas (academic, social, etc.) on an ongoing basis, as part of the instruction cycle.

The No Child Left Behind (NCLB) Act of 2001 and the NYSAA are, in part, designed to raise expectations for students' academic achievement. Students with severe cognitive disabilities, when given the appropriate instruction and access to the general education curriculum, have demonstrated progress in their knowledge, skills, and understanding in academic content areas that were not initially anticipated by school personnel or parents. Higher expectations require that students with severe cognitive disabilities have access to the general education curriculum and be provided with specialized instruction, as well as participate in national, state, and local assessment programs.

The administration period for the 2010–11 NYSAA was October 4, 2010 through February 11, 2011. The scoring period for the 2010–11 NYSAA was March 14, 2011 to May 5, 2011. The general sequence of events for administering the NYSAA is highlighted below.

Summary of NYSAA Events

1. Each student's Committee on Special Education (CSE) determines how a student participates in the New York State Testing Program. The CSE uses the Department's guidelines regarding eligibility and participation criteria to guide their decision-making.
2. For each content area assessed, the student's instructional team, headed by the Lead Special Education Teacher (teacher) provides academic instruction, so that the student can achieve proficiency on two different AGLIs in each content area assessed. Two AGLIs are required for each content area assessed (ELA, mathematics, science, and social studies).
3. Parents meet with the teacher to discuss how the NYSAA is administered and which specific AGLIs will be used to assess their child.
4. For each AGLI, the student is required to perform one assessment task connected to the AGLI, on three different dates.
5. Members of the student's instructional team conduct assessment tasks and document and rate student performance. This process includes collecting evidence for any two of the three dates of student performance.
6. The teacher assembles a datafolio containing the evidence of student performance and the ratings of the student's Level of Accuracy and Level of Independence. The completed datafolio is submitted to the building administrator on or before the last day in the administration period for shipping to the regional Scoring Institute.
7. The NYSAA datafolios are scored at regional NYSAA Scoring Institutes during the scoring period defined by the Department.
8. Student reports are created and are made available to school districts, teachers, and parents.

2.2 Alternate Assessment Based Upon Alternate Achievement Standards

Up to one percent of New York State students in the grades tested may show academic proficiency through administration of an alternate assessment based on alternate achievement standards. The NYSAA is designed for those students with such severe cognitive disabilities that they are unable, even with the best instruction and appropriate accommodations, to participate in a general New York State assessments. The NYSAA is designed under the guiding philosophy that alternate

achievement standards are built upon measurable, targeted skills linked to the New York State grade-level indicators in ELA, mathematics, science, and social studies. However, the alternate achievement standards represent student performance at lower levels of breadth, depth, and complexity than those found in the general assessments.

2.3 The Alternate Assessment System

The Individuals with Disabilities Education Act of 1997 (IDEA of 1997) requires that students with disabilities be included in each state's system of accountability and have access to the general curriculum. The federal reauthorization of the Elementary and Secondary Education Act, known as the No Child Left Behind (NCLB) Act of 2001, also speaks to the inclusion of all children in a state's accountability system by requiring states to report achievement for all students, as well as for groups of students on a disaggregated basis. These federal laws reflect an ongoing concern about equity: All students need to be academically challenged and taught to high standards. It is also necessary that all students be involved in the educational accountability system. Alternate achievement standards are reduced in breadth, depth, and complexity while maintaining linkage to the same general curriculum standards taught to all students.

The IDEA of 1997 and the NCLB Act of 2001 clearly outline that all students, regardless of disability, participate in a statewide assessment system and be held accountable to the state standards. The NYSAA was developed to meet the requirements of these federal mandates; to provide a technically sound method to observe and record student achievement; to represent the breadth and depth of statewide content; to promote access to the general curriculum; to provide critical information to the CSE for use in the development of Individualized Education Programs (IEPs); and to meet criteria for alignment, access, burden, bias, sensitivity, and age appropriateness for students with severe cognitive disabilities. In response to a 2005–06 review of the New York State Testing Program by the United States Education Department, the NYSAA was restructured in 2006–07. The 2010–11 administration was the fourth full year of implementation under the redesigned assessment program.

2.4 Purpose of the Alternate Assessment System

The NYSAA measures the achievement of students with severe cognitive disabilities relative to the New York State learning standards using alternate achievement levels based on a datafolio approach (as described in the next section). To ensure that this student population has access to the general education curriculum, the Department aligned the AGLIs (discussed in the following section) with the core curriculum's grade-level expectations in ELA, mathematics, science, and social studies for the NYSAA administration.

The NYSAA is, in part, designed to raise expectations for students' academic achievement. Experience has shown that students with severe cognitive disabilities, when given appropriate

instruction and access to the general education curriculum, demonstrate unanticipated progress in their knowledge, skills, and understanding in academic content areas. Previously, access to the general education curriculum was not necessarily part of instructional programs for students with severe cognitive disabilities. In a recent survey of teachers who administered the NYSAA in 2010–11, 72% agreed that the AGLIs assessed in the NYSAA made the grade-level core curricula more accessible, and said the AGLIs are used in planning daily instruction.

The process for assessing the academic achievements of students who have severe cognitive disabilities and who are eligible for the NYSAA is outlined through structured guidelines and steps in the 2010–11 NYSAA Administration Manual (accessible at http://www.p12.nysed.gov/apda/nysaa/archive-10.html). The process for datafolio development (see Chapter 7) maintains the procedural validity for assessing students with severe cognitive disabilities, while being flexible enough to meet each individual student's learning needs and modalities.

2.5 Test Use and Decisions Based on Alternate Assessment

New York State conducts a statewide assessment program on an annual basis for all students in Grades 3 through 8 and in high school. The NYSAA ensures that students with severe cognitive disabilities are included in the State Testing Program and that their results are included in all Adequate Yearly Progress (AYP) determinations.

Assessment based on AGLIs is accomplished via datafolios. A datafolio is a collection of evidence of a student's academic performance that is compiled by the student's instructional team and scored by qualified Scorers. By gathering performance data, the instructional team can provide parents/families/guardians and the CSE with an understanding of the student's knowledge, skills, and understanding as they relate to the New York State learning standards. The CSE can use the datafolio to understand the student's achievement relative to the New York State learning standards and to contribute to the development of the student's IEP. Datafolios are scored during a standardized scoring period each spring. The NYSAA student reports are generally available in the fall following administration.

Performance levels, based on alternate academic achievement standards, were developed through a rigorous standard-setting process in summer 2008. Alternate Performance Level Descriptors (APLDs) that outline the knowledge, skills, and understanding that a student may demonstrate within each grade and content area were edited and refined by panelists during the standard-setting process. APLDs, along with datafolios, provide information to parents/families/guardians, the CSE, and the instructional team regarding potential modifications or adjustments to the student's instructional program.

2.6 Background and General Format

A datafolio is a collection of evidence of a student's academic performance compiled by the student's instructional team and scored by qualified Scorers. Instructional team members document student performance by rating the student's Level of Accuracy and Level of Independence as they perform an assessment task on three different dates within the administration period. To verify this documentation, each datafolio must include student work products, Data Collection Sheets, photographs, or videotape and/or audiotape recordings. Teachers complete the required forms and submit all documentation and evidence in a binder or fastened folder for regional scoring.

Teachers are provided with a NYSAA Administration Manual that outlines all of the assessment requirements, steps for compiling a datafolio, forms, and the NYSAA Frameworks as an appendix. The NYSAA Frameworks includes an introduction and the NYSAA Test Blueprints outline the curriculum content of the alternate assessment for each grade. The Test Blueprints illustrate for each content area (i.e., ELA, mathematics, science, and social studies) the two major areas of curriculum focus that teachers must assess at each grade. These two Required Components are further divided into specific curriculum topics called Choice Components. Teachers begin constructing a student's datafolio by selecting two of the four Choice Components within each content area's Required Components.

Teachers must identify one AGLI based on the student's assessed grade level for each of the two selected Choice Components at the student's assessed grade level. Thus, teachers must assess a student on two AGLIs for each content area. For each AGLI, the teacher must collect and document student performance data from an assessment task administered on three separate dates. One piece of verifying evidence must be submitted for any two of the three dates of student performance.

2.7 Testing Accommodations

The CSE determines whether a student will participate in the alternate assessment with or without accommodations. Guidelines regarding accommodations are provided in the NYSAA Administration Manual. The CSE determines which testing accommodations are required, based on the student's documented needs. Testing accommodations:

- are consistent with the student's IEP;
- are designed to allow the student to demonstrate his or her knowledge, skills, and understanding with greater independence;
- do not change the level of the assessment, the construct of the assessment, or the criteria of the assessment task; and
- are provided to the student during instruction and not just for assessment.

For more information on testing accommodations, refer to *Test Access and Accommodations for Students with Disabilities: Policy and Tools to Guide Decision-Making and Implementation* (May 2006) at http://www.p12.nysed.gov/specialed/publications/policy/testaccess/policyguide.htm.

Frequently asked questions about testing accommodations and the NYSAA can be found at http://www.p12.nysed.gov/apda/nysaa/home.html.

Chapter 3. THE STUDENTS

New York State conducts a statewide testing program on an annual basis for all students in Grades 3 through 8 and in high school. The New York State Alternate Assessment (NYSAA) is a part of this statewide testing program. Designed for students with severe cognitive disabilities, the NYSAA measures student progress toward meeting the learning standards established for all students in the academic content areas of English language arts (ELA), mathematics, science, and social studies. The NYSAA ensures that students with severe cognitive disabilities are included in the State Assessment Program and that their results are accounted for as required by the No Child Left Behind (NCLB) Act of 2001 and the Individuals with Disabilities Education Act (IDEA) of 1997.

3.1 Target Population

The target population for the NYSAA is extremely specific, and participation is limited to students with severe cognitive disabilities. The eligibility and participation criteria provide a definition of a student with a severe disability following section 100.1 of the Regulations of the Commissioner of Education. This information is provided in the NYSAA Administration Manual and on the Department's Web site for reference.

"Students with severe disabilities" refers to students who have limited cognitive abilities, combined with behavioral and/or physical limitations, and who require highly specialized education and/or social, psychological, and medical services in order to maximize their full potential for useful and meaningful participation in society and for self-fulfillment. Students with severe disabilities may experience severe speech, language, and/or perceptual-cognitive impairments and challenging behaviors that interfere with learning and socialization opportunities. These students may also have extremely fragile physiological conditions and may require personal care, physical/verbal supports, and assistive technology devices.

The process of determining eligibility begins with the Committee on Special Education (CSE). The CSE determines, on an individual basis, whether the student will participate in:

- the State's general assessment with or without accommodations;
- the State's alternate assessment with or without accommodations; or
- a combination of the State's general assessment for some content areas and the State's alternate assessment for other content areas.

The CSE ensures that decisions regarding participation in the State Testing Program are *not* based on:

- category of disability;
- language differences;
- excessive or extended absences; or
- cultural or environmental factors.

The CSE also ensures that each student has a personalized system of communication that addresses his or her needs regarding disability, culture, and native language so that the student can demonstrate his or her present level of performance. Tests and other assessment procedures are conducted according to the requirements of section 200.4(b)(6) of the Regulations of the Commissioner of Education and section 300.320(a)(6) of the Code of Federal Regulations.

Only students with severe cognitive disabilities are eligible for the NYSAA. The CSE determines whether or not a student with a severe cognitive disability is eligible to take the NYSAA based on the following criteria:

- the student has a severe cognitive disability and significant deficits in communication/language and significant deficits in adaptive behavior; and
- the student requires a highly specialized educational program that facilitates the acquisition, application, and transfer of skills across natural environments (home, school, community, and/or workplace); and
- the student requires educational support systems, such as assistive technology, personal care services, health/medical services, or behavioral intervention.

While the State Testing Program provides full access to all students, 1% of students with severe cognitive disabilities in grades 3-8 and in high school are alternately assessed and are counted as proficient for purposes of accountability.

In accordance with 34 CFR 200.13 Adequate Yearly Progress in General, there is a 1% cap on the number of proficient and advanced scores on the alternate assessment that may be included in Adequate Yearly Progress (AYP) calculations at both the state and district levels.

3.2 Summary of Participation Rates

Tables 3-1 through 3-4 show a summary of participation in the 2010–11 NYSAA by demographic category for each content area.

Table 3-1. 2010–11 NYSAA: Summary of Participation—English Language Arts

Demographic Group	*Number Tested*	*Percent Participation*
All Students	19,456	100.00
Male	13,205	67.87
Female	6,251	32.13
American Indian/Alaskan Native	124	0.64
Black	5,177	26.61
Asian	979	5.03
Hispanic	4,942	25.40
White	8,090	41.58
Native Hawaiian/Other Pacific Islander	51	0.26
Multi	93	0.48

Table 3-2. 2010–11 NYSAA: Summary of Participation—Mathematics

Demographic Group	*Number Tested*	*Percent Participation*
All Students	19,459	100.00
Male	13,194	67.80
Female	6,265	32.20
American Indian/Alaskan Native	125	0.64
Black	5,176	26.60
Asian	978	5.03
Hispanic	4,949	25.43
White	8,088	41.56
Native Hawaiian/Other Pacific Islander	50	0.26
Multi	93	0.48

Table 3-3. 2010–11 NYSAA: Summary of Participation – Science

Demographic Group	*Number Tested*	*Percent Participation*
All Students	8,455	100.00
Male	5,618	66.45
Female	2,837	33.55
American Indian/Alaskan Native	55	0.65
Black	2,270	26.85
Asian	423	5.00
Hispanic	2,123	25.11
White	3,522	41.66
Native Hawaiian/Other Pacific Islander	18	0.21
Multi	44	0.52

Table 3-4. 2010–11 NYSAA: Summary of Participation—Social Studies

Demographic Group	*Number Tested*	*Percent Participation*
All Students	3,000	100.00
Male	1,915	63.83
Female	1,085	36.17
American Indian/Alaskan Native	21	0.70
Black	828	27.60
Asian	137	4.57
Hispanic	716	23.87
White	1,280	42.67
Native Hawaiian/Other Pacific Islander	6	0.20
Multi	12	0.40

Chapter 4. TEST DEVELOPMENT

4.1 Framework of the Testing Program

The New York State learning standards provide the framework for the New York State Testing Program. The grade level core curricula expand the priorities of the New York State learning standards into grade-level expectations. Each statewide assessment program has a Test Blueprint that outlines the priorities to be assessed based on the grade-level core curricula. The redesign carried out in response to the United States Education Department's 2005–2006 Review of the New York State Testing Program (discussed in Chapter 2) required that the New York State Alternate Assessment (NYSAA) be aligned to grade level core curricula. The general education assessment Blueprints were used as the basis for the development of the alternate assessment Test Blueprints, which in turn drove the alternate assessment content. There is one alternate assessment Blueprint for each of the four content areas assessed (see Appendix A).

In fall 2006, the New York State Education Department (the Department) assembled stakeholders to review the core curriculum and general education assessment Blueprints for English language arts (ELA), mathematics, science, and social studies. This group's goal was to determine academic content priorities for the NYSAA based on the core curriculum, general education assessment Blueprints, and, most importantly, applicability for students with severe cognitive disabilities. The process was designed to ensure alignment with general education grade-level content and to promote higher expectations for students taking the NYSAA.

The stakeholders' discussions focused on the actual depth and breadth of the alternate assessment requirements. Throughout the review, psychometricians from the Department and Measured Progress provided direction for maintaining a valid and reliable assessment. The resulting work by the stakeholders expanded the core curriculum grade-level expectations to Alternate Grade Level Indicators (AGLIs) for students with severe cognitive disabilities. The AGLIs now provide an entry point to the grade-level content of the core curriculum so that a student's level can be gauged in terms of the core curriculum established for all students by the New York State Board of Regents.

The Test Blueprints, grade-level expectations, essences, AGLIs, and Sample Assessment Tasks (SATs) for each grade can be found in the 2010–11 NYSAA Administration Manual: Appendix H—NYSAA Frameworks.

4.2 AGLIs Mapped to NYS Learning Standards and Core Curriculum by Grade

The AGLIs are aligned to the New York State learning standards and reflect high expectations for students with severe cognitive disabilities. This alignment is graphically illustrated in Figure 4-1.

Stakeholder meetings were held during the summer and early fall of 2006 in order to gather input on aligning the NYSAA requirements with grade level expectations and on developing AGLIs. Additionally, stakeholder meetings were held in spring 2007 and 2008 to further refine the AGLIs and to develop additional SATs for teachers to use in the alternate assessment.

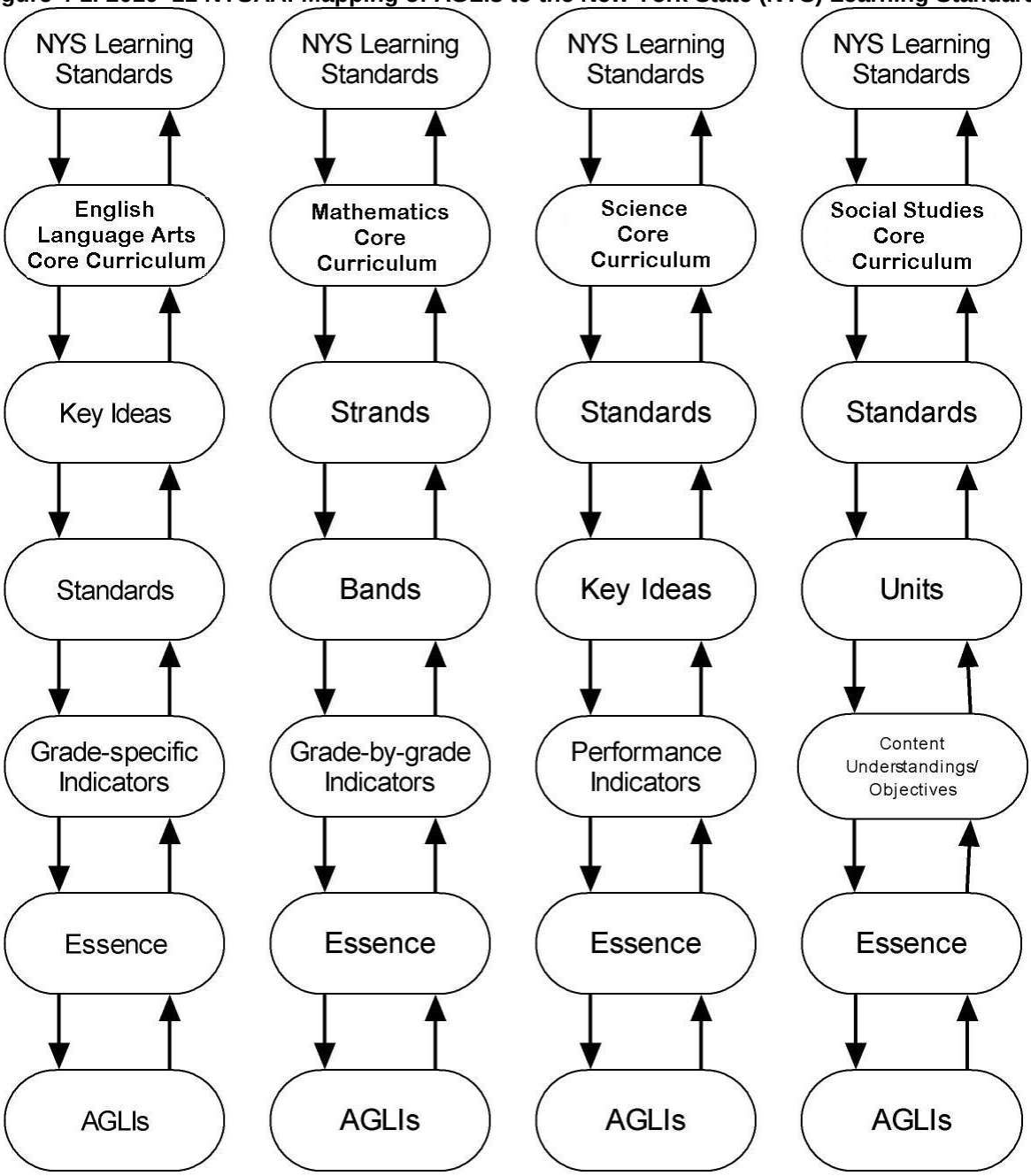
The Board of Regents approved a set of learning standards to guide instruction and assessment. The learning standards serve as the basis of the core curricula in ELA, mathematics, science, and social studies. The curriculum of each content area is divided into the following components:

- English language arts: key ideas and standards
- Mathematics: strands and bands
- Science: standards and key ideas
- Social studies: standards and units

Each component in a content area lists grade-level expectations for student performance. These expectations are called grade-level performance indicators or content understandings.

Grade-level expectations are further distilled into essences. Essences are the “big ideas” of the grade-level expectations for a grade. Assessment is based on the essences for each component of each content area. AGLIs are aligned to the essences in terms of three different levels of complexity.

Figure 4-1. 2010–11 NYSAA: Mapping of AGLIs to the New York State (NYS) Learning Standards



4.3 AGLI Selection Criteria and Process

The stakeholder groups who met in 2006, 2007, and 2008 were named the NYSAA Revision Workgroup (NRWG). The participants who were chosen for the initial group remained throughout all of the NRWG meetings, which ensured consistency in the overall process and content interpretation.

The NRWG did not meet in spring 2010. There were no edits made to the Test Blueprints, grade-level expectations, essences, and intent of the AGLIs that were finalized and used in the 2007–08 administration. The 2010–11 NYSAA Frameworks had some updates to SATs and content

glossaries in order to provide clarification and additional information to teachers. However, as was the case with the 2009–10 version of the NYSAA Frameworks, the intent of the AGLIs was not changed in any way.

The spring 2008 NRWG process was consistent across each of the four content areas. The NRWG was not allowed to edit or change the Test Blueprints, grade-level expectations, essences, and intent of the AGLIs. As outlined below, for each content area, three steps were followed by the participants, and the fourth step was completed afterward by the content developers.

Step 1: Present the expected outcomes for the workgroup.

The group was welcomed and thanked for participating in the revision of the NYSAA Frameworks. The participants introduced themselves and indicated where they were from and in which content area they were participating. The presentation then consisted of directing the groups through the materials they would be working with and explaining the specific tasks for the content area workgroups, as well as other logistical information. The group was given time for questions and then released into their content area workgroups, where they remained for the rest of the day and the following day.

Step 2: Review the Frameworks and other materials.

In order to complete the tasks required in the time allotted, each content area facilitator divided participants into groups by grade level and distributed the materials for review. The groups were divided as indicated in Table 4-1.

Table 4-1. 2010–11 NYSAA: NRWG Participant Groups

Subject	*Group*	*Grades*
English Language Arts	1	3, 4, 5
	2	6, 7
	3	8, High School
Mathematics	1	3, 4, 5, 6
	2	7, 8, High School
Science	1	4
	2	8
	3	High School
Social Studies	1	5
	2	8, High School

Step 3: Complete the work process.

In all the content area groups, the participants reviewed and edited existing SATs and then worked to add new SATs. The process for adding new SATs was as follows: The groups first focused on AGLIs that did not have an SAT. Then they developed additional SATs for AGLIs that already had at least one SAT. Throughout the editing and developing of SATs, each group worked to ensure alignment

to the AGLIs. During the editing process, the groups also identified words they felt should be added to the glossary for each content area. The work tasks within each content area focused on each of the identified outcomes for the revision of the NYSAA Frameworks.

Step 4: Review the group work as a further check on core curriculum alignment.

Each facilitator gathered each group's work and reviewed all edits and suggestions, as another check on content alignment. The edited NYSAA Frameworks then went to the Department for an additional content-alignment check and for finalization of each content area for the 2008–09 administration of the NYSAA.

4.4 Task Development

As part of the redesign process, assessment tasks for the AGLIs were developed, edited, and refined. An assessment task describes an observable student action related to the specific knowledge, skills, and understanding aligned to the AGLI and, in turn, to the core curriculum. Regional Lead Trainers (RLTs), who were part of the NRWG, provided input on SATs aligned to the AGLIs. Teachers had the opportunity to submit assessment tasks for possible inclusion in the NYSAA Frameworks through the annual online teacher survey. Information collected during the 2009–10 administration and scoring periods also influenced edits to the SATs. Edited SATs were reviewed and approved by the Department for the 2010–11 NYSAA Frameworks. See the following section for more information on task development and refer to the NYSAA Administration Manual for information provided to teachers regarding assessment task requirements.

4.5 AGLI and Task Review Process

The RLTs and Measured Progress reviewed and updated SATs from the 2009–10 NYSAA Frameworks. Revisions were made to existing tasks to clarify their alignments to the AGLIs. New tasks were developed to provide additional samples from which teachers could choose. The Department provided a final content review and approval of the SATs. The AGLIs from the 2009–10 NYSAA Frameworks were not modified in any way. The final AGLIs and SATs can be found in the NYSAA Administration Manual: Appendix H—NYSAA Frameworks.

Chapter 5. TEST CONTENT

The New York State Alternate Assessment (NYSAA) is intended to provide students with severe cognitive disabilities the opportunity to participate in a statewide assessment that is both meaningful and academically challenging. Given the wide diversity of this student population, great emphasis is placed on ensuring that grade-level expectations within the New York State learning standards are accessible to all students. The assessment design allows students to demonstrate their knowledge, skills, and understanding of the New York State learning standards through the Alternate Grade Level Indicators (AGLIs). The AGLIs are organized into three levels of complexity in order to provide an appropriate entry point for students into the core curricula and maintain the connection with the academic focus of the alternate assessment. Student performance data—Level of Accuracy and Level of Independence—is collected by the teacher for each AGLI the student is assessed against.

5.1 Alternate Performance Level Descriptors (APLDs)

The Alternate Performance Level Descriptors (APLDs), previously developed during standard setting, were used for the 2010–11 administration and reporting. Standard setting was conducted in June 2008 to establish cut scores for each alternate performance level in English language arts (ELA) and mathematics, Grades 3–8 and high school; in science, Grades 4, 8, and high school; and in social studies, Grades 5, 8, and high school.

The June 2007 standard-setting process developed the original APLDs, which were used by the standard-setting groups in June 2008. The APLDs provided panelists with an idea of the knowledge, skills, and understanding related to the core curriculum that a student at each of the four performance levels might demonstrate. A final activity during standard setting was for each group to provide suggestions for edits to the APLDs. The New York State Education Department (the Department) used the input to refine the APLDs for reporting. The APLDs are included in the NYSAA reports for districts, schools, parents/guardians, and educators to better explain each performance level.

5.2 Access to the General Curriculum

The core curricula for ELA and mathematics contain grade-level content for pre-kindergarten through high school. Additionally, the core curricula for science and social studies contain grade-level content at the elementary, intermediate, and secondary levels. These core curricula are aligned with the New York State learning standards.

The Department, in cooperation with stakeholders from across the State, has expanded the core curriculum grade-level expectations to AGLIs for students with severe cognitive disabilities. AGLIs provide an entry point to the grade-level content of the core curriculum. AGLIs measure a level of

mastery of the knowledge, skills, and understanding aligned with the core curricula established for all students by the New York State Board of Regents.

5.3 Test Format

The NYSAA is a collection of student work in the form of a datafolio. The NYSAA Test Blueprints outline for teachers the content to be assessed at each grade and content area combination. Two components are required for each content area within a grade. Within the Required Components, there are two choices. The Choice Components give the teacher flexibility to assess the student based on specific academic content that was part of the student's instructional program. This flexibility allows individualization while maintaining the content consistency of the alternate assessment. Consistency is further ensured across grade levels and content areas by adherence to strict administration requirements for datafolios.

Tables 5-1 and 5-2 show examples of the Required and Choice Components from the Test Blueprint for ELA contained in the NYSAA Frameworks.

Table 5-1. 2010–11 NYSAA: ELA Required Components (Two per Grade Level)

English Language Arts Key Idea	*Grade 3*	*Grade 4*	*Grade 5*	*Grade 6*	*Grade 7*	*Grade 8*	*High School*
Reading	X	X	X	X	X	X	X
Writing		X		X		X	X
Listening	X		X		X		
Speaking*							

* Speaking is not assessed on the general education state assessments.

Table 5-2. 2010–11 NYSAA: ELA Choice Components (One Standard is Chosen per Each Required Key Idea per Grade Level)

Standard	*Key Idea*	*Grade 3*	*Grade 4*	*Grade 5*	*Grade 6*	*Grade 7*	*Grade 8*	*High School*
1	Reading			X	X	X	X	X
2	Reading	X	X	X	X	X		
3	Reading						X	X
4	Reading	X	X					
1	Writing		X		X		X	X
2	Writing		X		X			
3	Writing						X	X
4	Writing							
1	Listening			X		X		
2	Listening	X		X		X		
3	Listening							
4	Listening	X						

A datafolio is the resulting body of evidence across Required and Choice Components of a student's academic performance of selected AGLIs, as compiled by the student's instructional team and scored by qualified Scorers. The teacher is required to select one AGLI from each Required Component by which to assess the student. Teachers are not allowed to modify AGLIs. Student performance is

rated by the student's instructional team according to the student's Levels of Accuracy and Independence in performing each assessment task. This is done on three separate dates within the administration period. Teachers have three options in determining the assessment tasks: (1) use a Sample Assessment Task (SAT) from the NYSAA Frameworks, (2) modify an SAT from the NYSAA Frameworks to make it more applicable to the student's specific needs, abilities, and/or mode of communication, or (3) create an original assessment task. The assessment task is the student action and is aligned to the AGLI the student is being assessed against. To verify this documentation, each datafolio must include the following: student work products, Data Collection Sheets, photographs, and/or video- or audiotape recordings for two of the three dates of documented performance. Teachers complete the required forms and submit all documentation and evidence in a binder or fastened folder for regional scoring. Detailed information about the content of and procedures for developing the datafolio are presented in the NYSAA Administration Manual.

5.4 Assessment Dimensions

NYSAA datafolios are scored using two dimensions:

- Connection to Grade-Level Content

  The connection to grade-level content dimension is met when
  - the assessment task is clearly aligned with the AGLI; and
  - the verifying evidence submitted is aligned with the assessment task.

Both of the connections must be clearly evident for the AGLI to be scored.

- Performance
  - Level of Accuracy
  - Level of Independence

Both the Level of Accuracy and Level of Independence are components of the performance dimension and are calculated as a percentage (0%–100%) and then rated on a scale of 1, 2, 3, or 4.

Table 5-3. 2010–11 NYSAA: Scoring Rubric

Level	Rating
100%–80%	4
79%–60%	3
59%–30%	2
29%–0%	1

Chapter 6. ALIGNMENT

6.1 Description of Linkages to Different Content Across Grades

The independent alignment study conducted in April 2007 of the New York State Alternate Assessment (NYSAA) for the New York State Education Department (the Department) provided information about the alignment of the New York State learning standards found in the core curricula, the Alternate Grade Level Indicators (AGLIs), and the Sample Assessment Tasks (SATs). The alignment study found that AGLI content is academic and addresses the major domains and strands of the core curricula as compared to state and national standards in English Language Arts (ELA), mathematics, and science. It was also found that the distribution of AGLIs across ELA, mathematics, and science content is consistent at each grade level to the NYSAA Test Blueprints. The alignment study used a modification of the alignment system proposed by Flowers, Browder, Wakeman, and Karvonen (2006) to form the basis of the study. Webb's depth-of-knowledge (DOK) classification system (2002) and the refinements to this system suggested by Tindal (2005) to address the unique features of an alternate assessment, as incorporated into the Flowers et al. design, was a focus point of the alignment study. The DOK levels for AGLIs and SATs reflected the DOK levels in the core curriculum. Lastly, the alignment study found that in the scored datafolios reviewed there was a strong relationship between the AGLIs and the assessment tasks, as well as overall compliance with the NYSAA administration guidelines.

6.2 Promoting Alignment through Achievement Level Descriptors

The Alternate Performance Level Descriptors (APLDs) for the NYSAA are uniquely defined for each grade and content area with unifying adverbs. The APLDs provide a structure for understanding the knowledge, skills, and understanding that a student may have demonstrated in the NYSAA datafolio at a performance level. They are meant to be a guide or a framework to give a picture of student performance. Due to the varying abilities of students with severe cognitive disabilities, the APLDs were developed to be a flexible definition of student performance on the NYSAA. The student performance documentation that is recorded and evidenced within the datafolio is a more prescribed and quantified system of documentation.

The process for the development of the APLDs occurred in 2007 and 2008 as part of the redesign. It began with reviewing and utilizing text from the general education performance level descriptors. The general education performance level descriptors used terms such as limited, basic, proficiency, and consistently. The initial draft of the APLDs used similar terms and was brought to the NYSAA Advisory Committee members for further refinement based on their in-depth understanding and experience with students with severe cognitive disabilities and the knowledge, skills, and understanding the students demonstrate in the datafolios. The edits that the Advisory Committee proposed utilized

definitions that provided a picture of a student's accuracy performance and independence performance as related to the AGLIs as a whole within a content area. The recommended terms for the performance level of Not Meeting Learning Standards were limited and rarely. The recommended terms for the performance level of Partially Meeting Learning Standards were basic and inconsistent. The recommended terms for the performance level of Meeting Learning Standards were often and basic. The recommended terms for the performance level of Meeting Learning Standards with Distinction were consistently and frequently. These terms were used to develop the final drafts of the APLDs that were utilized during standard-setting by each of the groups. The groups were asked to further refine the APLDs, keeping in mind the variations that students with severe cognitive disabilities may demonstrate in their work as evidenced in a datafolio. The groups used the draft APLDs, in coordination with student datafolio samples, to come to consensus on the words and information that were to be included in the final APLDs. Each of the groups recommended that consistent wording be included throughout each of the APLDs at each grade and content area. The terms rarely, inconsistently, often, and consistently were the final recommendations from the standard-setting panelists. Rigid definitions of these terms are not particularly useful in understanding each of the performance levels, especially for this population. It is important to understand the terms and to review them within the context of the APLDs.

The standard-setting panelists were able to come to a consensus with a generalized understanding of the terms described above due to their extensive knowledge of the NYSAA student population combined with understandings of the New York State core curricula. The APLDs provide information related to specific content assessed within a grade and content area and how that content skill may be performed by a student through his or her accuracy and independence levels. Many students who take the NYSAA have splinter skills, require various supports to perform, and can vary from day to day in their demonstration of the knowledge, skills, and understanding that they are working on within the datafolio. As such, the terms used within the APLDs provide some parameters and flexibility to allow for a basic picture of student performance without being specifically quantified. A set quantification would not allow for a representative understanding of a student with severe cognitive disabilities who took the NYSAA.

The APLDs provided standard-setting panelists the official description of the knowledge, skills, and understandings students are expected to be able to display to be classified into each performance level. Panelists were given an opportunity at the end of the standard-setting process to recommend additions and refinements to the APLDs.

The APLDs were finalized and approved by the Department following the standard setting that took place in June 2008. The APLDs have remained unchanged since then.

Chapter 7. ADMINISTRATION AND TRAINING

New York State utilizes a train-the-trainer model to provide training related to the New York State Alternate Assessment (NYSAA). Each Board of Cooperative Educational Services (BOCES) and Big Five City School District designates at least one person as an Alternate Assessment Training Network (AATN) Specialist and at least one person as a Score Site Coordinator (SSC). (The Big Five City school districts are Buffalo, New York City, Rochester, Syracuse, and Yonkers.) AATN Specialists and SSCs participate in the regional Administration Training conducted in September. The AATN Specialist is responsible for conducting the NYSAA Administration Training with teachers. SSCs are responsible for the coordination of the regional Scoring Institutes; therefore, they need to also have an understanding of the NYSAA administration guidelines.

7.1 Steps for Administration

The teacher, in coordination with the instructional team, is responsible for the administration of the NYSAA with a student. The NYSAA Administration Manual provides detailed guidelines on how to administer the NYSAA. The NYSAA has a specific administration period in which the assessment can be conducted. Assessment data cannot be collected before or after the administration period. The administration period for 2010–11 was October 4, 2010 to February 11, 2011. The first step is to review the Individualized Education Program (IEP) for a student who has been designated to take the NYSAA and determine the grade the student will be assessed at using the student's date of birth and the NYSAA Age Range Chart. Next, the teacher determines the Alternate Grade Level Indicator (AGLI) for each Required Component that the student will be assessed against. There are two Required Components within each content area. Then the teacher determines an assessment task that will demonstrate the AGLI. The assessment task describes the student action being assessed. Once the AGLIs and assessment tasks have been determined, the teacher conducts the assessment task with the student on at least three different dates. The last three dates of performance of the AGLI and assessment task are recorded and documented. Student performance includes the student's Level of Accuracy and Level of Independence. Verifying evidence showing the student demonstrating the knowledge, skills, and understanding of the AGLI through the completion of the assessment task must be included for any two of the three dates of student performance documented. There are four types of verifying evidence that can be included, each with specific guidelines on what must be included for it to be considered a valid piece of evidence at scoring. The four types are student work products, a sequence of captioned and dated photographs, video-/audiotape clips, and Data Collection Sheets. Each datafolio is required to have at least one Collegial Review. Collegial Review requires a colleague or administrator who is familiar with the NYSAA, but is not the student's teacher who prepared the datafolio, to review the student's datafolio contents.

7.2 Steps in Constructing the Datafolio

The NYSAA Administration Manual provides specific information on the construction and organization of the datafolio. For each AGLI, there must be a Data Summary Sheet. The Data Summary Sheet is the summarizing information regarding the AGLI. It includes student demographic information, the AGLI assessed, the assessment task, and student performance data. The three dates of performance data include both the percentages and corresponding scoring rubric rating for both the Level of Accuracy and the Level of Independence. In addition to the individual requirements of each type of verifying evidence, the verifying evidence must include seven required elements—student name, date of student performance, content area, AGLI text, assessment task, Level of Accuracy, and Level of Independence. The teacher is responsible for ensuring that the verifying evidence connects to the assessment task and that it meets the requirements outlined in the NYSAA Administration Manual in order to include it in the datafolio. On or before the end of the administration period, the teacher assembles the datafolio in a binder or fastened folder. The datafolio includes a NYSAA Student Page, which provides demographic information regarding the student, as well as the grade assessed, supports required per the IEP, testing accommodations provided during testing, and the month a Collegial Review was conducted. A datafolio also includes a table of contents, which provides information to Scorers on where information is located in the datafolio. The English language arts assessment documents come first, followed by mathematics, then science and social studies, if applicable. The AGLI documentation is organized by Required Components. It is the same for each content area.

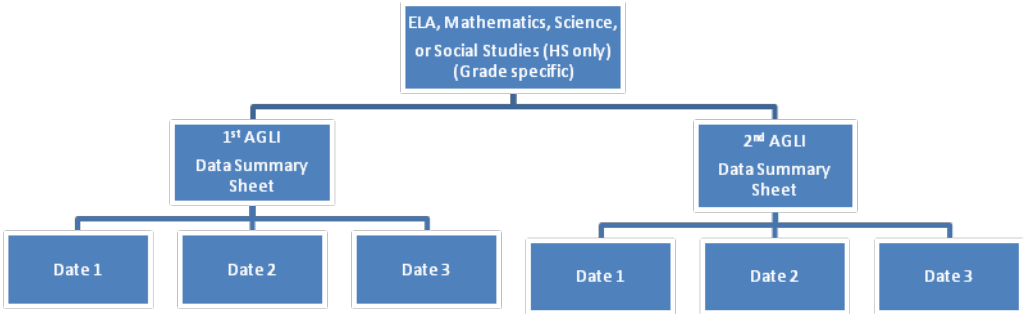
First Required Component—AGLI 1:

- Data Summary Sheet for this AGLI; and
- Two pieces of verifying evidence
  - If either piece of verifying evidence is a Data Collection Sheet, supporting evidence is placed directly behind the Data Collection Sheet.

Second Required Component—AGLI 2:

- Data Summary Sheet for this AGLI; and
- Two pieces of verifying evidence
  - If either piece of verifying evidence is a Data Collection Sheet, supporting evidence is placed directly behind the Data Collection Sheet.

Figure 7-1. 2010–11 NYSAA: Datafolio Elements



7.3 Administration Training and Collegial Review

In September 2010, the New York State Education Department (the Department), in collaboration with Measured Progress, trained AATN Specialists and SSCs from across the state on how to conduct the NYSAA Administration Training with teachers in their regions. The one-day trainings were conducted regionally across the state over a two-week period. There were three main activities conducted. First, information regarding updates to the NYSAA and the materials were provided. Then, portions of the NYSAA Administration Training DVD were shown, as well as completion and review of the guided practices. Last, the participants were asked to work in groups to discuss best practice tips and strategies on administering the NYSAA.

A total of five NYSAA Administration Updates Trainings occurred at four geographically diverse sites: the Albany region, which included Long Island and the regions surrounding New York City; the Syracuse region; the Buffalo and Rochester region; and the New York City region, which included the Non-District 75 trainers on one day and the District 75 trainers on another day. Table 7-1 outlines the number of participants at each training session.

Table 7-1. 2010–11 NYSAA: Administration Updates Training—Participant Count

	Albany region	*Syracuse region*	*Buffalo-Rochester region*	*New York City region (2 trainings)*	*Total*
NYSAA Administration Updates Training	53	19	49	120	241

Administration Training to teachers is provided through a combination of guided practices and a training DVD. AATN Specialists are required to use all parts of the DVD and guided practices as specified by the Department. The NYSAA Administration Training DVD is organized into segments.

There is an opening segment, a new teacher segment, a segment devoted to updates and a review for all teachers, and a closing segment. The opening segment provides general information about what is going to be covered during the training session. The new teacher segment is a detailed review of each of the steps for administering the NYSAA. The updates and review for all teachers segment provides updates regarding the assessment, provides a scored datafolio review, information on how to maintain the Connection to Grade-Level Content during administration, information on Data Collection Sheets, and reminders regarding the NYSAA. The closing segment outlines information regarding next steps for teachers and provides information regarding Collegial Reviews. The DVD is set up to allow AATN Specialists to provide a training session for new teachers only, for experienced teachers only, or for a combination of new and experienced teachers. At specific points throughout the segments, there are stop points built in, and a guided practice must be conducted at each of these points. The guided practices reinforce the information that was contained in the segment. There are a total of four guided practices. The first guided practice focuses on understanding how to determine the correct grade a student should be assessed at based on his or her date of birth and how to use the NYSAA Administration Manual Appendix G: NYSAA Frameworks in order to understand how to navigate through the NYSAA Frameworks in order to select the AGLIs. The second guided practice provides teachers an opportunity to complete Data Summary Sheets and see how a content area entry would be organized in a datafolio. It also includes a general NYSAA requirements review worksheet. The third guided practice focuses on determining and documenting student performance data. The fourth guided practice provides teachers with practice in understanding the Connection to Grade-Level Content. It mainly provides examples of verifying evidence that align to the assessment task and examples of verifying evidence that do not align to the assessment task. Teachers who are new complete all four guided practices. Teachers who are experienced complete guided practices three and four, only. At or before the locally conducted NYSAA Administration Trainings, teachers are provided with the NYSAA Administration Manual, which includes the NYSAA Frameworks as Appendix G.

Collegial Review is required for each student datafolio. Collegial Review is meant to be an independent review of a datafolio. The Department provides guidance that reviewers should be:

- familiar with the current alternate assessment;
- have attended training in the fall of 2010; and/or
- be experienced and qualified as a Scorer in spring 2010 (the 2009–10 NYSAA scoring).

The Department guidelines recommend that Collegial Reviews take place during the planning phase, at a midpoint during administration, and prior to the end of administration. The teacher is given feedback about whether the appropriate connections have been made between the AGLIs and the assessment tasks and between the assessment tasks and the verifying evidence. Also, Collegial Reviews confirm that all documents included in the datafolio at that point meet all procedural

requirements. The Department cautions that a Collegial Review helps ensure, but does not guarantee, that a datafolio meets the procedural requirements in order to be scorable.

Chapter 8. SCORING

Alternate Assessment Training Network (AATN) Specialists and Score Site Coordinators (SSCs) participate in the regional Scoring Training conducted each year. SSCs are responsible for the coordination of the regional Scoring Institutes and must pass the qualification samples in order to make content decisions during the Scoring Institute. The AATN Specialist acts as a Floor Manager at a Scoring Institute and must also pass the qualification samples in order to make content decisions during the Scoring Institute.

In February and March 2011, the New York State Education Department (the Department), in collaboration with Measured Progress, trained AATN Specialists and SSCs from across the state on how to score New York State Alternate Assessment (NYSAA) datafolios and how to conduct the NYSAA Scoring Training with Scorers at the Scoring Institute in their region. The one-day trainings were conducted regionally across the state over a two-week period. There were three main activities conducted. First, information regarding updates to the NYSAA and the materials were provided. Then, the NYSAA Scoring Training DVD was shown, as well as completion and review of the practice samples. Last, the participants were asked to complete the qualification samples. Retraining and qualification was provided as needed.

A total of five NYSAA Scoring Trainings occurred at four geographically diverse sites: the Albany region, which includes the Long Island and surrounding New York City regions; the Syracuse region; the Buffalo and Rochester region; and the New York City region, which includes the Non-District 75 trainers on one day and the District 75 trainers on another day. Table 8-1 outlines the number of participants at each training session.

Table 8-1. 2010–11 NYSAA: Scoring Training—Participant Count

	Albany region	*Syracuse region*	*Buffalo-Rochester region*	*New York City region (2 trainings)*	*Totals*
NYSAA Scoring Training	52	23	43	103	251

8.2 Scoring of Operational Tests

The scoring of NYSAA datafolios occurs during the spring following the close of the administration period. Scoring is a decentralized process carried out at regional Scoring Institutes. The Department provides a scoring window within which the institutes conduct their scoring sessions. The purpose of the Scoring Institute is to provide a forum in which educators individually score the NYSAA student datafolios. Each Scoring Institute is overseen by an SSC and an AATN Specialist. These individuals are thoroughly trained and participate in a qualifying process conducted by the Department and Measured Progress. They are each given a duplicate set of training materials that are to be used

during turn-key training at their own Scoring Institutes. They are required to follow the model of the training process demonstrated by the Department and Measured Progress.

There are a variety of processes involved in the Scoring Institute. The basic outline for the review of student datafolios consists of three major steps. Scorers review student datafolios, confirm that the Connection to Grade-Level Content is satisfied, and verify the percentages and ratings for Accuracy and Independence documented by the teacher for each Alternate Grade Level Indicator (AGLI) assessed. Any questions that arise during scoring are directed to a Table Leader. Scorers use the document entitled Steps for Scoring 2010–11 NYSAA Datafolios as the main reference for scoring each datafolio. Table Leaders use the Decision Rules for Scoring 2010–11 NYSAA Datafolios as a reference document for any questions that are not addressed in the Steps for Scoring 2010–11 NYSAA Datafolios. Both documents are included in this report, as Appendices B (Scoring Procedures) and C (Scoring Decision Rules).

On a worksheet, a Scorer records the AGLI code, connection to grade-level content questions, ratings for the Levels of Accuracy and Independence, and Scorer comments. Part of this worksheet is returned to the school district along with the datafolio for review by the instructional team and administrators.

Once a datafolio has been reviewed completely, the last step is for the Scorer to transcribe the AGLI codes, Connection to Grade-Level Content questions, ratings, and other information onto a Scannable Score Document. The score document is scanned by the Regional Information Center (RIC) or the Big Five City Scan Center (the Big Five City school districts are Buffalo, New York City, Rochester, Syracuse, and Yonkers, each having their own City Scan Center).

8.3 Scoring Rubric

The Scoring Rubric is the initial guide that drives the model used to score NYSAA datafolios. The Scoring Rubric is provided in the 2010–11 NYSAA Administration Manual, along with guidance on the process that teachers must follow in order to meet the scoring requirements. The rubric is broken into two parts. The first part outlines the content and grade-level required components. The second part is the rating summary. The rating is based on the Connection to Grade-Level Content and student performance. The Connection to Grade-Level Content is explained on the Scoring Rubric as follows: “AGLIs are the expansion of the academic content for students with severe cognitive disabilities. The assessment task must connect to the AGLI and the verifying evidence must demonstrate the task. If these connections are not clear, the AGLI will not be scored.” For each assessment task documented, the ratings for Level of Accuracy and Level of Independence (relative to the student’s demonstration of skills, in relation to the AGLI) combine to give the performance dimension. The Scoring Rubric is presented in Table 8-2.

Table 8-2. 2009–10 NYSAA: Scoring Rubric

For each content area at each grade, two AGLIs must be assessed on three dates within the administration period.
Charted below are the two Required Components for each grade and content area.

Content	*Grade 3*	*Grade 4*	*Grade 5*	*Grade 6*	*Grade 7*	*Grade 8*	*High School*
English Language Arts	• Key Idea Reading • Key Idea Listening	• Key Idea Reading • Key Idea Writing	• Key Idea Reading • Key Idea Listening	• Key Idea Reading • Key Idea Writing	• Key Idea Reading • Key Idea Listening	• Key Idea Reading • Key Idea Writing	• Key Idea Reading • Key Idea Writing
Mathematics	• Strand Number Sense and Operations • Strand Measurement	• Strand Number Sense and Operations • Strand Measurement	• Strand Number Sense and Operations • Strand Geometry	• Strand Number Sense and Operations • Strand Algebra	• Strand Number Sense and Operations • Strand Statistics and Probability	• Strand Geometry • Strand Algebra	• Strand Algebra • Strand Statistics and Probability
Science		• Standard 1 Scientific Inquiry • Standard 4 Living Environment or Physical Setting/Earth Science				• Standard 1 Scientific Inquiry • Standard 4 Living Environment or Physical Setting/Earth Science	• Standard 4 Living Environment • Standard 4 Physical Setting/Earth Science
Social Studies							• Standard 1 U.S. History • Standard 2 Global History

CONNECTION TO GRADE-LEVEL CONTENT + PERFORMANCE = RATING

Connection to Grade-Level Content - AGLIs are the expansion of the academic content for students with severe cognitive disabilities.
The assessment task must connect to the AGLI and the verifying evidence must demonstrate the task. If these connections are not clear, the AGLI will not be scored.

Performance = Level of Accuracy + Level of Independence

RATING	*4*	*3*	*2*	*1*	*No Score (NS)*
Level of Accuracy	The student demonstrates skills based on AGLIs with an average of 80–100% Accuracy.	The student demonstrates skills based on AGLIs with an average of 60–79% Accuracy.	The student demonstrates skills based on AGLIs with an average of 30–59% Accuracy.	The student demonstrates skills based on AGLIs with an average of 0–29% Accuracy.	Required evidence of student performance was not submitted. OR Scorer was unable to determine a score based on the submitted evidence.
Level of Independence	The student seldom requires cues or prompts when demonstrating skills based on the documented AGLIs. (80–100% Independence)	The student requires limited cues or prompts to demonstrate skills based on the documented AGLIs. (60–79% Independence)	The student requires extensive cues or prompts to demonstrate skills based on the documented AGLIs. (30–59% Independence)	The student requires constant cues or prompts to demonstrate skills based on the documented AGLIs. (0–29% Independence)	Required evidence of student performance was not submitted. OR Scorer was unable to determine a score based on the submitted evidence.

8.4 Scoring Process and Reliability Monitoring Review

8.4.1 Scoring Process

Scorers, who are all New York State teachers or other licensed and/or certified professionals, are directed to objectively review and document the ratings for student performance data contained in the datafolio. During the Scoring Training, it is explained that the data provides an opportunity for students to demonstrate their knowledge, skills, and understanding of the grade-level content. Scoring processes are consistent from one grade level to the next. The same procedures and rules apply to all grade levels and content areas, which is critical to the procedural validity of the assessment.

Scoring Training includes a DVD presentation, a series of practice samples, and Scorer qualification. (These are described in further detail in the next section.)

The actual scoring process involves reviewing the datafolio compiled by the teacher. The review is meant to ensure that all requirements are met. The Scorer records the rubric rating for each AGLI assessed. If the Connection to Grade-Level Content is satisfied, the performance percentages can be confirmed and each performance percentage for each date is given a rating of 4, 3, 2, or 1. If the Connection to Grade-Level Content is not met, a rating of No Score (NS) is recorded. After the Scoring Institute, the Scorer ratings are converted to the alternate assessment performance levels, which appear on the NYSAA reports.

In order for Scorers to complete their review of the datafolios, a set of standardized tools is provided to each Scoring Institute. These tools include the NYSAA Administration Manual, Scoring Procedures, and Scoring Decision Rules. Student performance ratings are documented on a Scorer Worksheet with a Menu of Comments and a Scannable Score Document. The Menu of Comments, located on the back of each page of the Scorer Worksheet, includes information that a Scorer records when an AGLI has a No Score rating. It also allows the Scorer to provide additional constructive feedback to a teacher about the datafolio.

There are 15 steps involved in the scoring process. The step-by-step procedures outlined in the Steps for Scoring 2010–11 NYSAA Datafolios are implemented statewide and ensure scoring reliability across all Scoring Institutes. Table 8-3 presents a quick review of the steps.

Table 8-3. 2010–11 NYSAA: Scoring Steps Quick Reference

Step	
1	Student demographics, Scorer ID, Scoring Institute code
2	Confirm student's date of birth and grade assessed
3	Testing accommodations, Collegial Review, and table of contents
4a and b	Review sequence of documentation for a content area
5a and b	Demographic and Choice Component information complete on DSS
6a and b	AGLI from grade level (Connection to Grade-Level Content)
7a and b	Task connects to AGLI (Connection to Grade-Level Content)

continued

Step	
8a, b, and c	Verifying evidence connects to task (Connection to Grade-Level Content)
9a, b, and c	Dates on DSS: Three separate dates, in chronological order, correspond to dates on verifying evidence
10a	Valid verifying evidence and supporting evidence: Required elements clearly documented (7)
10b	Valid verifying evidence and supporting evidence: Student Work Product: Original
10c	Valid verifying evidence and supporting evidence: Photographs: Minimum of three sequential, captioned, and dated photographs
10d	Valid verifying evidence and supporting evidence: Video-/audiotape: Maximum 90 seconds and recorded markers
10e	Valid verifying evidence and supporting evidence: Data Collection Sheet (DCS): Minimum of three dates, supporting evidence, and staff initials
10f	If verifying evidence is DCS, supporting evidence is present and valid
11	Confirm ratings for Levels of Accuracy and Independence
12	Record Procedural Error Comments and additional Scorer Comments
13	Score the second AGLI (Steps 5–12)
14	Score mathematics, science, and social studies (Steps 4–13)
15	Complete the Scannable Score Document

The Scoring Procedures are separated into two major sections: preparing to score and reviewing and scoring a datafolio. Each step asks the Scorer a question or directs the Scorer to confirm a certain requirement. The steps are presented in a yes/no format to assist the Scorer in moving from one step to another. If a Scorer encounters a “no” or an issue outside the directions provided in the Scoring Procedures, he or she must consult with the Table Leader. The Table Leader refers to the Decision Rules for Scoring 2010–11 NYSAA Datafolios if the information on how to proceed in scoring the datafolio is not already provided in the Scoring Procedures.

The Scoring Decision Rules have their own segment in the Table Leader segment of the training video. There is also a brief overview of the Decision Rules within the Scoring Procedures segment of the training video. The Decision Rules serve as guidance for Table Leaders when a Scorer encounters an issue that is outside the direction provided in the Scoring Procedures document. The rules are organized by topic, beginning with “Old Forms Were Used to Complete Datafolio (forms prior to 2006–07),” “Assessment Tasks,” “Verifying Evidence,” and “Dates.” Twenty-one Decision Rules were developed based on actual datafolio issues found during a benchmarking review of datafolios in progress. In the training DVD, Scoring Decision Rules are presented by number as found in the Decision Rules chart. If possible, an example is provided, highlighting the point of the Decision Rule, and a description is provided regarding how the rules are to be consistently applied statewide at each Scoring Institute.

8.4.2 Reliability Monitoring Review

The purpose of the Reliability Monitoring Review (RMR) is to ensure scoring consistency and reliability across Scoring Institutes.

At the end of the Scoring Institute, 20% of the scored datafolios from each scoring site are randomly collected by the SSC for the RMR. Measured Progress conducts a Scoring Institute in which the random datafolios are scored by highly experienced and qualified Scorers. RMR Scorers complete the same NYSAA training and qualification process that is used statewide.

RMR scores are compared with the original scores from the regional Scoring Institutes. The original score remains the score of record; the RMR score does not change or affect the original score in any way. The 2010–11 RMR results are presented in Chapter 10.

8.5 Scorer Qualification and Training

A standardized statewide process for Scorer Training and qualification is observed. Each BOCES and Big Five City School District conducts at least one two-day Scoring Institute during the scoring period. For 2010–11, the scoring period was March 14–May 5, 2011. The same training and scoring process, Scoring Procedures, and Decision Rules were applied and implemented statewide.

The DVD presentation portion of the training includes a welcome and introduction, which briefly outlines the DVD segments and documents used during training. The DVD then outlines the scoring tools, the step-by-step process for reviewing the datafolios and documenting student scores, and the practice scoring that is done while following along with the DVD segment.

After the first two DVD segments, Scorers practice scoring—first as a group, then in pairs, and then individually. Each practice is reviewed to ensure that Scorers are following the Scoring Procedures accurately. The final DVD segment details the subsequent steps in Scorer Training and explains how student scores are reported.

After the DVD, Scorers participate in an activity that reinforces what they have learned about the Scoring Procedures. Then they are given an opportunity for final questions. Training ends with Scorers completing three calibrated qualifiers. The qualifiers are actual student datafolios in a content area. The qualifiers were identified by a group of stakeholders during a benchmarking process. Each Scorer must earn a score of 80% or higher to become qualified. Scorers who do not qualify on the first qualifier receive additional training and must complete an additional qualification sample. After the initial set, Scorers have three opportunities to receive retraining and to qualify. If a Scorer does not qualify after additional attempts, he or she is reassigned to another role in the Scoring Institute.

8.6 Scoring Quality Control

The quality control process at each Scoring Institute is handled by the SSC, AATN Specialists, and Table Leaders. The SSC is responsible for planning and managing the regional Scoring Institute. Each BOCES or Big Five City School District designates at least one individual to assume the role of SSC.

SSC responsibilities include:

- ensuring that the Scoring Procedures, Decision Rules, and other scoring-related guidelines are implemented consistently per the Department's prescribed model;
- ensuring the security of all datafolios during transit, storage, and scoring;
- gathering the NYSAA student registration information from the RIC or Big Five City Scan Center to assist in planning the Scoring Institute;
- planning, coordinating, and conducting the Scoring Institute for each BOCES or Big Five City School District;
- coordinating the selection of sample datafolios as requested by the Department for RMR;
- ensuring that scoring documentation is completed and provided to the RIC or Big Five City Scan Center; and
- returning datafolios following scoring.

AATN Specialists are designated by each BOCES or Big Five City School District to conduct information sessions and NYSAA training and to assist with scoring.

For NYSAA scoring, AATN Specialists:

- assist SSCs in the planning of the Scoring Institute as needed;
- conduct training sessions and facilitate qualification sessions for Table Leaders and Scorers;
- act as Floor Managers during the scoring process;
- resolve Table Leader questions using scoring guidelines and resources;
- participate in the Read Behind process; and
- provide feedback to SSCs and the Department about the scoring processes, procedures, and documentation.

Table Leaders are integral to making sure that the processes and procedures outlined by the Department in the Scoring Training are followed at each scoring station during each Scoring Institute. There is one Table Leader for every five Scorers.

For NYSAA Scoring, Table Leaders must:

- be experienced Scorers familiar with the 2010–11 NYSAA;
- complete Scoring Training, including the qualification process, prior to the start of the Scoring Institute;
- manage scoring at their assigned scoring stations;
- resolve Scorer questions using scoring guidelines and resources;
- review all corrections and all NS ratings documented by Scorers;
- conduct quality control checks of scored datafolios;

- manage the Read Behind process;
- separate copies of the Scorer Worksheet as designated by the SSC;
- return scored datafolios to the appropriate box; and
- provide feedback to SSCs and the Department about the scoring processes, procedures, and documentation.

The Table Leaders are responsible for three main quality control checks. Their first responsibility is to resolve Scorer questions and to confirm NS ratings. When a Scorer questions the Connection to Grade-Level Content or has a question about scoring a datafolio that may result in an NS, the datafolio must be reviewed with the Table Leader. If the issue cannot be readily resolved by the Table Leader using the Scoring Procedures and Scoring Decision Rules, it must be brought by the Table Leader to the Floor Manager. If the issue cannot be readily resolved by the Floor Manager, the SSC will make the final decision.

The second responsibility of a Table Leader is to complete a standardized quality control check. A quality control check is conducted by the Table Leader once a datafolio has been scored and returned by a Scorer. The Scorer Worksheet is cross-checked against the Scannable Score Document. Any corrections made to the ratings by the Scorer are double-checked and comments are confirmed as being appropriate. A blue dot is affixed by the Table Leader to confirm that the quality control check was conducted.

The third responsibility of a Table Leader is to manage the Read Behind process. The Read Behind process occurs throughout the Scoring Institute. This process ensures the integrity of scoring across scoring stations. Table Leaders select the first, third, and then every seventh datafolio from each Scorer for Read Behind. The Scannable Score Document is pulled and held by the Table Leader and a red dot is placed on the datafolio. This indicates that it has been selected for Read Behind. The first Scorer scores the datafolio, completes the Scorer Worksheet, and returns the datafolio to the Table Leader. The Table Leader turns the Scorer Worksheet over, places it into the front pocket of the datafolio, and then routes the scored datafolio to be scored at a different scoring station. The second Scorer scores the datafolio, completes a second Scorer Worksheet, and returns the datafolio to the original Table Leader. The Table Leader compares the two worksheets. If no discrepancy exists, the Table Leader at the first scoring station fills in his or her Scorer Identification Number and completes the Scannable Score Document. A quality control check is completed, a blue dot is affixed to the datafolio, and the datafolio is returned to the box. The second Scorer Worksheet is destroyed. If a discrepancy between the scores is found, the Table Leader highlights the discrepant areas and forwards the datafolio to the Floor Manager for resolution. The Floor Manager reviews the discrepant areas, enters his or her Scorer Identification Number, and completes the Scannable Score Document. The Floor Manager returns the datafolio to the Table Leader at the first scoring station. After a datafolio has been

through the Read Behind process, the Table Leader completes a quality control check. The Table Leader then works with the Scorer to review the discrepancy, and provides any support that is needed. If the Scorer continues to have discrepant scores, the Table Leader is then directed to consult the Floor Manager and/or the SSC to discuss additional training or reassignment.

As an additional quality control check to confirm that the Scoring Institutes are following all the processes and guidelines prescribed by the Department, a score site observation visit is conducted on a sample of Scoring Institutes. Each year, the Department designates a set of sites to be monitored during their Scoring Institutes. The observation visits are conducted by the Regional Lead Trainers (RLTs) assigned to the particular region. SSCs are notified if they are selected by the Department for observation. Observers cannot participate or assist in any part of the Scoring Institute. They cannot interact or provide technical assistance during the observation. An Observation Protocol Checklist is completed during the visit and submitted to the Department.

Chapter 9. CLASSICAL ITEM ANALYSIS

As noted in Brown (1983), “A test is only as good as the items it contains.” A complete evaluation of a test’s quality must include an evaluation of each item. Both the Standards for Educational and Psychological Testing (AERA, APA, NCME, 1999) and the Code of Fair Testing Practices in Education (Joint Committee on Testing Practices, 2004) include standards for identifying quality items. While the specific statistical criteria identified in these publications were developed primarily for general—not alternate—assessment, the principles and some of the techniques apply within the alternate assessment framework, as well.

Both qualitative and quantitative analyses were conducted to ensure that NYSAA items met these standards. Qualitative analyses are described in earlier sections of this report; this section focuses on the quantitative evaluations. The statistical evaluations discussed are difficulty indices, discrimination (item-test correlations), item means, structural relationships (correlations among the dimensions), and bias and fairness. The item analyses presented here are based on the statewide administration of the 2010–11 NYSAA.

9.1 Difficulty and Discrimination

For the NYSAA, each student datafolio for a specified content area at a given grade level receives an Accuracy score and an Independence score. Each of these measurements is taken at three points within the administration period, which results in twelve subscores that are summed to yield a student’s total score, referred to here as a test score. These subscores can be considered similar to traditional test items. Using this definition, all items were evaluated in terms of item difficulty according to standard classical test theory practices. “Difficulty” was defined as the average proportion of points achieved on an item and was measured by obtaining the average score on an item and dividing by the maximum score for the item. Students can achieve a score of 1, 2, 3, or 4 for both Accuracy and Independence. By computing the difficulty index as the average proportion of points achieved, the items are placed on a scale that ranges from 0.0 to 1.0. Although the *p*-value is traditionally described as a measure of difficulty (as it is described here), it is properly interpreted as an *easiness* index, because larger values indicate easier items.

An index of 0.0 indicates that all students received no credit for the item, and an index of 1.0 indicates that all students received full credit for the item. Items that have either a very high or very low difficulty index are considered to be potentially problematic, because they are either so difficult that few students get them right or so easy that nearly all students get them right. In either case, such items should be reviewed for appropriateness for inclusion on the assessment. If an assessment were composed entirely of very easy or very hard items, all students would receive nearly the same scores, and the assessment would not be able to differentiate high-ability students from low-ability students.

It is worth mentioning that using a norm-referenced criterion such as *p*-values to evaluate test items is somewhat contradictory to the purpose of a criterion-referenced assessment like the NYSAA. Criterion-referenced assessments are primarily intended to provide evidence on student progress relative to a standard rather than to differentiate among students. Thus, the generally accepted criteria regarding classical item statistics are only cautiously applicable to the NYSAA.

A desirable feature of an item is that the higher-ability students perform better on the item than do lower-ability students. The correlation between student performance on a single item and total test score is a commonly used measure of this characteristic of an item. Within classical test theory, this item-test correlation is referred to as the item's "discrimination," because it indicates the extent to which successful performance on an item discriminates between high and low scores on the test. The discrimination index used to evaluate NYSAA items was the Pearson product-moment correlation. The theoretical range of this statistic is -1.0 to 1.0.

Discrimination indices can be thought of as measures of how closely an item assesses the same knowledge and skills assessed by other items contributing to the criterion total score. That is, the discrimination index can be thought of as a measure of construct consistency. In light of this interpretation, the selection of an appropriate criterion total score is crucial to the interpretation of the discrimination index. For the NYSAA, the total test score, excluding the item being evaluated, was used as the criterion score.

A summary of the item difficulty and item discrimination statistics for each grade/content-area combination is presented in Table 9-1. The mean difficulty values shown in the table indicate that, overall, students performed well on the items on the NYSAA. In contrast to alternate assessments, the difficulty values for assessments designed for the general population tend to be in the 0.4 to 0.7 range for the majority of items. Because the nature of alternate assessments is different from that of general assessments, and because very few guidelines exist as to criteria for interpreting these values for alternate assessments, the values presented in Table 9-1 should not be interpreted to mean that the students performed better on the NYSAA than the students who took general assessments did on those tests.

Also shown in Table 9-1 are the mean discrimination values. Because the majority of students received high scores on the tasks, the discrimination indices are somewhat lower than one might expect. This is an artifact of how discrimination is calculated: if all of the students get an item correct, there is little variability in the criterion scores that can be differentiated. As with the item difficulty values, because the nature and use of the NYSAA are different from those of a general assessment, and because very few guidelines exist as to criteria for interpreting these values for alternate assessments, the statistics presented in Table 9-1 should be interpreted with caution.

Table 9-1. 2010–11 NYSAA: Summary of Item Difficulty and Discrimination Statistics by Subject and Grade

Subject	*Grade*	*Number of Items*	p-*Value*		*Discrimination*	
			Mean	*Standard Deviation*	*Mean*	*Standard Deviation*
English Language Arts	3	12	0.95	0.02	0.51	0.10
	4	12	0.95	0.02	0.48	0.12
	5	12	0.95	0.02	0.48	0.10
	6	12	0.95	0.02	0.49	0.11
	7	12	0.95	0.02	0.49	0.12
	8	12	0.94	0.02	0.51	0.13
	High School	12	0.93	0.02	0.54	0.12
Mathematics	3	12	0.94	0.02	0.55	0.15
	4	12	0.94	0.02	0.55	0.13
	5	12	0.95	0.02	0.54	0.13
	6	12	0.94	0.02	0.57	0.10
	7	12	0.94	0.02	0.52	0.14
	8	12	0.95	0.02	0.52	0.09
	High School	12	0.93	0.02	0.52	0.13
Science	4	12	0.96	0.02	0.46	0.15
	8	12	0.95	0.02	0.45	0.12
	High School	12	0.94	0.02	0.54	0.10
Social Studies	High School	12	0.94	0.02	0.52	0.11

Means and standard deviations of Accuracy and Independence are presented by grade, content area, AGLI, and level of complexity in Tables 9-2 through 9-8. In general, means did not differ substantially across grades or content areas. Means on Accuracy ranged from 10.5 to 11.9, and means on Independence ranged from 10.8 to 11.8. Means tended to be higher on Accuracy than on Independence, but in most cases the differences were fairly slight. Means also tended to be higher at higher levels of complexity for Independence, but the same pattern was not evident for Accuracy.

Table 9-2. 2010–11 NYSAA: Means and Standard Deviations (SD) of Accuracy and Independence by Grade, Content Area, AGLI, and Level of Complexity—Grade 3

Content Area	*AGLI*	*Level of Complexity*	*N*	*Accuracy*		*Independence*	
				Mean	*SD*	*Mean*	*SD*
English Language Arts	Reading	1	1,605	11.37	1.51	11.15	2.03
		2	916	11.55	1.15	11.52	1.36
		3	49	10.94	2.16	11.49	1.47
		All	2,570	11.42	1.41	11.29	1.82
	Listening	1	999	11.22	1.76	10.89	2.34
		2	1,210	11.48	1.34	11.38	1.69
		3	294	11.43	1.30	11.43	1.36
		All	2,503	11.37	1.52	11.19	1.96
Mathematics	Number Sense and Operations	1	1,816	11.34	1.62	10.86	2.50
		2	538	11.61	1.13	11.62	1.27
		3	229	11.72	0.81	11.72	1.14
		All	2,584	11.43	1.48	11.10	2.23
	Measurement	1	2,289	11.30	1.64	10.97	2.33
		2	70	11.29	1.63	11.29	2.09
		3	173	11.63	0.93	11.53	1.31
		All	2,532	11.32	1.60	11.01	2.27

Table 9-3. 2010–11 NYSAA: Means and Standard Deviations (SD) of Accuracy and Independence by Grade, Content Area, AGLI, and Level of Complexity—Grade 4

Content Area	*AGLI*	*Level of Complexity*	*N*	*Accuracy*		*Independence*	
				Mean	*SD*	*Mean*	*SD*
English Language Arts	Reading	1	1,782	11.50	1.35	11.24	1.91
		2	682	11.42	1.36	11.63	1.12
		3	398	11.78	0.80	11.55	1.42
		All	2,862	11.52	1.29	11.38	1.70
	Writing	1	2,290	11.48	1.44	11.09	2.16
		2	370	11.74	0.76	11.40	1.55
		3	140	11.51	1.29	11.44	1.41
		All	2,800	11.52	1.37	11.15	2.06
Mathematics	Number Sense and Operations	1	2,175	11.31	1.65	11.05	2.26
		2	612	11.67	1.00	11.59	1.27
		3	84	11.71	0.91	11.57	1.29
		All	2,871	11.40	1.53	11.18	2.08
	Measurement	1	2,230	11.37	1.55	10.99	2.31
		2	561	11.59	1.14	11.46	1.41
		3	29	11.41	1.94	11.10	2.08
		All	2,820	11.41	1.48	11.09	2.17
Science	Scientific Inquiry	1	1,927	11.61	1.22	11.25	1.99
		2	463	11.66	1.00	11.52	1.37
		3	471	11.65	0.99	11.54	1.38
		All	2,861	11.62	1.15	11.34	1.81
	Living Environment or Physical Setting/Earth Science	1	2,369	11.60	1.18	11.29	1.98
		2	326	11.62	1.24	11.60	1.23
		3	73	11.48	0.99	11.40	1.73
		All	2,768	11.60	1.19	11.33	1.91

Table 9-4. 2010–11 NYSAA: Means and Standard Deviations (SD) of Accuracy and Independence by Grade, Content Area, AGLI, and Level of Complexity—Grade 5

Content Area	*AGLI*	*Level of Complexity*	*N*	*Accuracy*		*Independence*	
				Mean	*SD*	*Mean*	*SD*
English Language Arts	Reading	1	1,613	11.36	1.55	11.11	2.02
		2	1,078	11.66	1.07	11.51	1.51
		3	67	11.57	1.17	11.06	2.24
		All	2,758	11.48	1.38	11.27	1.86
	Listening	1	2,092	11.44	1.35	11.27	1.81
		2	584	11.59	1.23	11.44	1.40
		3	41	11.56	0.98	11.34	1.67
		All	2,717	11.48	1.32	11.31	1.73
Mathematics	Number Sense and Operations	1	2,639	11.49	1.38	11.17	2.12
		2	109	11.57	1.18	11.63	0.97
		3	22	11.68	0.65	11.59	1.10
		All	2,770	11.50	1.37	11.19	2.09
	Geometry	1	2,411	11.53	1.31	11.30	1.91
		2	283	11.47	1.42	11.34	1.54
		3	31	11.77	0.76	10.84	2.62
		All	2,725	11.52	1.32	11.30	1.89

Table 9-5. 2010–11 NYSAA: Means and Standard Deviations (SD) of Accuracy and Independence by Grade, Content Area, AGLI, and Level of Complexity—Grade 6

Content Area	*AGLI*	*Level of Complexity*	*N*	*Accuracy*		*Independence*	
				Mean	*SD*	*Mean*	*SD*
English Language Arts	Reading	1	1,535	11.36	1.55	11.11	2.05
		2	712	11.53	1.21	11.66	1.19
		3	562	11.33	1.45	11.50	1.43
		All	2,809	11.40	1.45	11.33	1.76
	Writing	1	2,295	11.39	1.47	11.05	2.16
		2	249	11.52	1.24	11.52	1.51
		3	209	11.56	1.20	11.56	1.16
		All	2,753	11.42	1.44	11.13	2.06
Mathematics	Number Sense and Operations	1	2,357	11.33	1.63	11.01	2.29
		2	275	11.68	0.92	11.73	0.92
		3	177	11.37	1.58	11.42	1.68
		All	2,809	11.36	1.58	11.11	2.17
	Algebra	1	2,341	11.23	1.72	10.98	2.33
		2	386	11.53	1.26	11.09	2.30
		3	44	11.02	2.03	11.05	2.50
		All	2,771	11.27	1.67	10.99	2.33

Table 9-6. 2010–11 NYSAA: Means and Standard Deviations (SD) of Accuracy and Independence by Grade, Content Area, AGLI, and Level of Complexity—Grade 7

Content Area	*AGLI*	*Level of Complexity*	*N*	*Accuracy*		*Independence*	
				Mean	*SD*	*Mean*	*SD*
English Language Arts	Reading	1	1,794	11.53	1.29	11.15	2.05
		2	904	11.37	1.32	11.46	1.41
		3	78	11.40	1.33	11.26	1.68
		All	2,776	11.48	1.30	11.25	1.86
	Listening	1	2,475	11.45	1.34	11.32	1.75
		2	200	11.41	1.31	11.28	1.60
		3	43	11.53	1.14	11.28	1.47
		All	2,718	11.45	1.33	11.32	1.74
Mathematics	Number Sense and Operations	1	2,468	11.42	1.46	11.11	2.17
		2	159	11.52	1.17	11.42	1.76
		3	161	11.53	1.07	11.57	1.22
		All	2,788	11.43	1.43	11.16	2.10
	Statistics and Probability	1	1,394	11.54	1.30	10.86	2.44
		2	1,190	11.39	1.37	11.37	1.56
		3	162	11.36	1.42	11.22	1.89
		All	2,746	11.46	1.34	11.10	2.09

Table 9-7. 2010–11 NYSAA: Means and Standard Deviations (SD) of Accuracy and Independence by Grade, Content Area, AGLI, and Level of Complexity—Grade 8

Content Area	*AGLI*	*Level of Complexity*	*N*	*Accuracy*		*Independence*	
				Mean	*SD*	*Mean*	*SD*
English Language Arts	Reading	1	1,831	11.33	1.50	10.96	2.26
		2	567	11.35	1.35	11.57	1.26
		3	164	11.40	1.30	11.53	1.40
		All	2,562	11.34	1.46	11.13	2.05
	Writing	1	2,359	11.32	1.49	11.18	1.99
		2	87	11.49	1.27	11.41	1.50
		3	83	11.39	1.38	11.42	1.55
		All	2,529	11.33	1.48	11.20	1.97
Mathematics	Geometry	1	2,384	11.43	1.42	11.26	1.95
		2	86	11.38	1.36	10.97	2.03
		3	90	11.47	1.39	11.54	1.14
		All	2,560	11.43	1.42	11.26	1.94
	Algebra	1	1,898	11.24	1.65	11.20	2.00
		2	423	11.34	1.45	11.37	1.78
		3	201	11.56	1.12	11.65	0.96
		All	2,522	11.28	1.59	11.26	1.91
Science	Scientific Inquiry	1	1,931	11.36	1.50	11.24	1.96
		2	465	11.47	1.30	11.17	1.93
		3	152	11.63	1.13	11.27	1.83
		All	2,548	11.40	1.45	11.23	1.94
	Living Environment or Physical Setting/Earth Science	1	1,667	11.31	1.59	11.26	1.94
		2	711	11.57	1.08	11.47	1.63
		3	83	11.45	1.42	11.46	1.35
		All	2,461	11.39	1.46	11.33	1.84

Table 9-8. 2010–11 NYSAA: Means and Standard Deviations (SD) of Accuracy and Independence by Grade, Content Area, AGLI, and Level of Complexity—High School

Content Area	*AGLI*	*Level of Complexity*	*N*	*Accuracy*		*Independence*	
				Mean	*SD*	*Mean*	*SD*
English Language Arts	Reading	1	2,168	11.23	1.58	10.85	2.33
		2	782	11.35	1.29	11.55	1.28
		3	31	11.90	0.30	11.23	1.20
		All	2,981	11.27	1.50	11.04	2.12
	Writing	1	2,543	11.28	1.54	11.00	2.16
		2	342	11.40	1.46	11.35	1.46
		3	48	11.38	1.02	11.48	1.50
		All	2,933	11.30	1.52	11.05	2.09
Mathematics	Algebra	1	2,420	11.23	1.62	11.07	2.14
		2	416	11.24	1.57	11.28	1.82
		3	124	11.12	1.86	11.48	1.47
		All	2,960	11.23	1.63	11.12	2.08
	Statistics and Probability	1	2,337	11.38	1.48	10.91	2.32
		2	499	11.39	1.39	11.02	2.14
		3	109	11.90	0.47	11.82	0.92
		All	2,945	11.40	1.44	10.96	2.26
Science	Living Environment	1	2,283	11.37	1.50	11.19	1.99
		2	491	11.43	1.34	11.44	1.46
		3	213	11.40	1.44	11.22	1.66
		All	2,987	11.38	1.47	11.24	1.89
	Physical Setting/Earth Science	1	2,336	11.36	1.58	11.15	2.07
		2	528	11.18	1.72	11.41	1.44
		3	88	11.23	1.42	10.86	1.92
		All	2,952	11.32	1.60	11.19	1.97
Social Studies	U.S. History	1	1,931	11.24	1.79	10.96	2.23
		2	1,004	11.47	1.33	11.60	1.30
		3	48	11.52	0.95	11.35	1.19
		All	2,983	11.32	1.64	11.19	1.98
	Global History	1	2,147	11.37	1.54	11.03	2.17
		2	797	11.35	1.63	11.53	1.45
		3	16	10.50	1.90	11.38	0.96
		All	2,960	11.36	1.57	11.17	2.01

9.2 Structural Relationship

Correlations between component scores (i.e., Accuracy and Independence) and composite scores (i.e., the sum of the two component scores) are presented in Tables 9-9 through 9-15. These correlations are similar to discrimination statistics in that one would expect that a student who scores well on one part of an assessment would score well on the whole assessment.

Correlations between composite scores and Accuracy ranged from 0.05 to 0.88, while correlations between composite scores and Independence ranged from 0.36 to 0.96. These values provide evidence that the components discriminated between low and high performers. In interpreting

the correlations, however, it is important to note that the values are inflated due to the inclusion of the component scores in the composite scores. On the other hand, the fact that 90% to 95% of students across grades and content areas earned scores in the top third of the score scale likely depressed the values somewhat due to restriction of range. Finally, in some cases, the correlations are based on very small groups of students. For these reasons, the observed correlations should be interpreted with caution.

Table 9-9. 2010–11 NYSAA: Correlations Between Composite Score and Accuracy and Independence by Grade, Content Area, AGLI, and Level of Complexity—Grade 3

Content Area	*AGLI*	*Level of Complexity*	*N*	*Accuracy*	*Independence*
English Language Arts	Reading	1	1,605	0.56	0.65
		2	916	0.42	0.49
		3	49	0.56	0.60
		All	2,570	0.53	0.62
	Listening	1	999	0.69	0.80
		2	1,210	0.61	0.74
		3	294	0.66	0.75
		All	2,503	0.66	0.78
Mathematics	Number Sense and Operations	1	1,816	0.51	0.71
		2	538	0.68	0.73
		3	229	0.50	0.69
		All	2,584	0.53	0.72
	Measurement	1	2,289	0.58	0.81
		2	70	0.83	0.94
		3	173	0.64	0.77
		All	2,532	0.59	0.82

Table 9-10. 2010–11 NYSAA: Correlations Between Composite Score and Accuracy and Independence by Grade, Content Area, AGLI, and Level of Complexity—Grade 4

Content Area	*AGLI*	*Level of Complexity*	*N*	*Accuracy*	*Independence*
English Language Arts	Reading	1	1,782	0.46	0.59
		2	682	0.51	0.48
		3	398	0.63	0.74
		All	2,862	0.47	0.59
	Writing	1	2,290	0.51	0.72
		2	370	0.56	0.75
		3	140	0.62	0.60
		All	2,800	0.52	0.72
Mathematics	Number Sense and Operations	1	2,175	0.55	0.71
		2	612	0.38	0.47
		3	84	0.67	0.61
		All	2,871	0.54	0.69
	Measurement	1	2,230	0.52	0.80
		2	561	0.61	0.68
		3	29	0.72	0.92
		All	2,820	0.54	0.80
Science	Scientific Inquiry	1	1,927	0.40	0.55
		2	463	0.45	0.56
		3	471	0.36	0.52
		All	2,861	0.40	0.55
	Living Environment or Physical Setting/Earth Science	1	2,369	0.54	0.75
		2	326	0.60	0.69
		3	73	0.67	0.84
		All	2,768	0.54	0.75

Table 9-11. 2010–11 NYSAA: Correlations Between Composite Score and Accuracy and Independence by Grade, Content Area, AGLI, and Level of Complexity—Grade 5

Content Area	*AGLI*	*Level of Complexity*	*N*	*Accuracy*	*Independence*
English Language Arts	Reading	1	1,613	0.56	0.64
		2	1,078	0.44	0.59
		3	67	0.10	0.62
		All	2,758	0.52	0.63
	Listening	1	2,092	0.59	0.72
		2	584	0.62	0.75
		3	41	0.64	0.55
		All	2,717	0.60	0.72
Mathematics	Number Sense and Operations	1	2,639	0.51	0.71
		2	109	0.41	0.36
		3	22	0.73	0.85
		All	2,770	0.51	0.71
	Geometry	1	2,411	0.59	0.79
		2	283	0.74	0.81
		3	31	0.05	0.96
		All	2,725	0.60	0.79

Table 9-12. 2010–11 NYSAA: Correlations Between Composite Score and Accuracy and Independence by Grade, Content Area, AGLI, and Level of Complexity—Grade 6

Content Area	*AGLI*	*Level of Complexity*	*N*	*Accuracy*	*Independence*
English Language Arts	Reading	1	1,535	0.56	0.68
		2	712	0.39	0.47
		3	562	0.50	0.61
		All	2,809	0.51	0.64
	Writing	1	2,295	0.59	0.72
		2	249	0.63	0.79
		3	209	0.77	0.71
		All	2,753	0.60	0.73
Mathematics	Number Sense and Operations	1	2,357	0.57	0.72
		2	275	0.40	0.41
		3	177	0.57	0.65
		All	2,809	0.57	0.72
	Algebra	1	2,341	0.62	0.77
		2	386	0.41	0.72
		3	44	0.65	0.70
		All	2,771	0.60	0.76

Table 9-13. 2010–11 NYSAA: Correlations Between Composite Score and Accuracy and Independence by Grade, Content Area, AGLI, and Level of Complexity—Grade 7

Content Area	*AGLI*	*Level of Complexity*	*N*	*Accuracy*	*Independence*
English Language Arts	Reading	1	1,794	0.43	0.64
		2	904	0.45	0.54
		3	78	0.63	0.77
		All	2,776	0.43	0.62
	Listening	1	2,475	0.58	0.75
		2	200	0.63	0.61
		3	43	0.64	0.71
		All	2,718	0.58	0.74
Mathematics	Number Sense and Operations	1	2,468	0.51	0.68
		2	159	0.26	0.49
		3	161	0.45	0.64
		All	2,788	0.49	0.66
	Statistics and Probability	1	1,394	0.49	0.79
		2	1,190	0.61	0.74
		3	162	0.50	0.73
		All	2,746	0.51	0.78

Table 9-14. 2010–11 NYSAA: Correlations Between Composite Score and Accuracy and Independence by Grade, Content Area, AGLI, and Level of Complexity—Grade 8

Content Area	*AGLI*	*Level of Complexity*	*N*	*Accuracy*	*Independence*
English Language Arts	Reading	1	1,831	0.51	0.69
		2	567	0.67	0.69
		3	164	0.51	0.61
		All	2,562	0.53	0.69
	Writing	1	2,359	0.55	0.75
		2	87	0.88	0.89
		3	83	0.64	0.85
		All	2,529	0.56	0.76
Mathematics	Geometry	1	2,384	0.54	0.66
		2	86	0.41	0.62
		3	90	0.62	0.57
		All	2,560	0.53	0.66
	Algebra	1	1,898	0.60	0.69
		2	423	0.64	0.79
		3	201	0.55	0.57
		All	2,522	0.60	0.70
Science	Scientific Inquiry	1	1,931	0.43	0.56
		2	465	0.35	0.49
		3	152	0.52	0.56
		All	2,548	0.42	0.55
	Living Environment or Physical Setting/Earth Science	1	1,667	0.58	0.72
		2	711	0.45	0.63
		3	83	0.77	0.89
		All	2,461	0.56	0.70

Table 9-15. 2010–11 NYSAA: Correlations Between Composite Score and Accuracy and Independence by Grade, Content Area, AGLI, and Level of Complexity—High School

Content Area	*AGLI*	*Level of Complexity*	*N*	*Accuracy*	*Independence*
English Language Arts	Reading	1	2,168	0.56	0.74
		2	782	0.52	0.54
		3	31	0.82	0.85
		All	2,981	0.55	0.70
	Writing	1	2,543	0.60	0.79
		2	342	0.59	0.68
		3	48	0.70	0.90
		All	2,933	0.60	0.79
Mathematics	Algebra	1	2,420	0.54	0.71
		2	416	0.50	0.75
		3	124	0.46	0.44
		All	2,960	0.53	0.70
	Statistics and Probability	1	2,337	0.52	0.77
		2	499	0.50	0.68
		3	109	0.46	0.59
		All	2,945	0.52	0.76
Science	Living Environment	1	2,283	0.57	0.73
		2	491	0.49	0.47
		3	213	0.64	0.78
		All	2,987	0.56	0.69
	Physical Setting/Earth Science	1	2,336	0.60	0.77
		2	528	0.68	0.73
		3	88	0.64	0.79
		All	2,952	0.61	0.77
Social Studies	U.S. History	1	1,931	0.56	0.77
		2	1,004	0.57	0.58
		3	48	0.66	0.65
		All	2,983	0.57	0.73
	Global History	1	2,147	0.62	0.80
		2	797	0.52	0.47
		3	16	0.75	0.70
		All	2,960	0.59	0.74

9.3 Bias/Fairness

The Code of Fair Testing Practices in Education (Joint Committee on Testing Practices, 2004) explicitly states that subgroup differences in performance should be examined when sample sizes permit, and actions should be taken to make certain that differences in performance are due to construct-relevant, rather than irrelevant, factors. The Standards for Educational and Psychological Testing (AERA, APA, NCME, 1999) includes similar guidelines.

When appropriate, the standardization differential item functioning (DIF) procedure (Dorans & Kulick, 1986) is used to identify items for which subgroups of interest perform differently, beyond the

impact of differences in overall achievement. However, because the NYSAA uses a datafolio that does not include standard items that are taken by all students, it was not possible to conduct DIF analyses.

Although it is not possible to run quantitative analyses of item bias for the NYSAA, fairness is addressed through the assessment blueprints, which are designed to reflect the core curriculum, as described in detail earlier in this report. The development of the assessment blueprints, which reflect recommendations laid out in the Standards for Educational and Psychological Testing, was designed to ensure that the test is free of any insensitive or offensive material, as well as to ensure alignment with general education grade-level content and to promote higher expectations for students taking the NYSAA.

Issues of fairness are also addressed in the NYSAA administration and scoring procedures. Chapter 7 of this report describes in detail the procedures for administering the NYSAA and constructing the datafolio, as well as the training and review steps designed to ensure that the test is administered appropriately and consistently for all students. Chapter 8 describes in detail the scoring rubrics used, selection and training of Scorers, and scoring quality control procedures. These processes ensure that bias due to differences in how individual Scorers award scores is minimized.

Chapter 10. CHARACTERIZING ERRORS ASSOCIATED WITH TEST SCORES

One of the primary uses of the NYSAA scores is for school-, district-, and state-level accountability in the federal No Child Left Behind Act (NCLB) and in state accountability systems. The students are classified as Proficient or Not Proficient and are included in the state's adequate yearly progress (AYP) calculation. In this case, the reliability of individual student scores, while not meaningless, becomes much less important. The scores have been collapsed for each student to a yes/no decision and then aggregated across students.

For purposes of calculating reliability estimates, scores are defined in the same way as described in Chapter 9. Specifically, the twelve subscores that are awarded for each datafolio (three Accuracy scores and three Independence scores) are treated as the item scores.

10.1 Reliability

In the previous chapter, individual item characteristics of the 2010–11 NYSAA were presented. Although individual item performance is an important focus for evaluation, a complete evaluation of an assessment must address the way in which the items (or, in this case, subscore units) that make up the test score function together and complement one another. Any measurement includes some amount of measurement error. No academic assessment can measure student performance with perfect accuracy; some students will receive scores that underestimate their true abilities, and other students will receive scores that overestimate their true abilities. Items that function well together produce assessments that have less measurement error (i.e., the error is small on average). Such assessments are described as reliable.

There are a number of ways to estimate an assessment's reliability. One approach is to split all test items into two groups and then correlate students' scores on the two half-tests. This is known as a split-half estimate of reliability. If the two half-test scores correlate highly, the items on them are likely measuring very similar knowledge or skills. It suggests that measurement error will be minimal.

The split-half method requires psychometricians to select items that contribute to each half-test score. This decision may have an impact on the resulting correlation, since each different possible split of the test halves will result in a different correlation. Another problem with the split-half method of calculating reliability is that it underestimates reliability, because test length is cut in half. All else being equal, a shorter test is less reliable than a longer test. Cronbach (1951) provided a statistic, alpha (α), that avoids the shortcomings of the split-half method by comparing individual item variances to total test variance. Cronbach's α was used to assess the reliability of the 2010–11 NYSAA tests. The formula is as follows:

$$\alpha \equiv \frac{n}{n-1}\left[1-\frac{\sum_{i=1}^{n}\sigma^2_{(Y_i)}}{\sigma^2_x}\right]$$

where

i indexes the item,

n is the number of items,

$\sigma^2_{(Y_i)}$ represents individual item variance, and

σ^2_x represents the total test variance.

If the correlation is high (in practice, toward the high end of the typical Cronbach's *α* range of 0.50 to 0.99), the parts of the test are likely measuring very similar knowledge or skills. Thus, a high Cronbach's *α* coefficient is evidence that the subscore units complement one another and suggests that the assessment is reliable. Table 10-1 presents raw score descriptive statistics (maximum possible score, average, and standard deviation), Cronbach's *α* coefficient, and raw score standard errors of measurements (SEMs) for each content area and grade. Because each subscore ranged from 1 to 4, and there were only twelve subscores summed to obtain the total test score, the estimated reliability coefficients were, as expected, somewhat lower than would be found with the typical general assessment, whose reliability coefficients tend to be near 0.90. Considering that the NYSAA assessments are necessarily shorter than general assessments, the reliability coefficients in Table 10-1 are probably comparable.

Table 10-1. 2010–11 NYSAA: Raw Score Descriptive Statistics, Cronbach's Alpha, and Standard Errors of Measurement (SEM) by Grade and Content Area

Content Area	*Grade*	*Number of Students*	*Raw score*			*Reliability (α)*	*SEM*
			Maximum	*Mean*	*Standard Deviation*		
English Language Arts	03	2,586	48	44.44	6.52	0.86	2.43
	04	2,881	48	44.78	6.11	0.82	2.59
	05	2,778	48	44.92	5.81	0.83	2.41
	06	2,832	48	44.47	6.43	0.84	2.58
	07	2,797	48	44.71	6.12	0.84	2.48
	08	2,577	48	44.48	6.00	0.84	2.43
	High School	3,005	48	44.01	6.57	0.86	2.49
Mathematics	03	2,587	48	44.37	6.45	0.86	2.43
	04	2,880	48	44.59	6.11	0.85	2.33
	05	2,784	48	44.97	6.03	0.86	2.27
	06	2,829	48	44.12	6.77	0.87	2.41
	07	2,799	48	44.64	5.89	0.84	2.33
	08	2,581	48	44.58	6.21	0.84	2.45
	High School	2,999	48	44.09	6.47	0.84	2.57
Science	04	2,876	48	44.94	6.20	0.84	2.46
	08	2,576	48	44.15	6.84	0.83	2.81
	High School	3,003	48	44.69	5.90	0.84	2.33
Social Studies	High School	3,000	48	44.67	5.88	0.84	2.38

10.2 Subgroup Reliability

The reliability coefficients discussed in the previous section were based on the overall population of students who took the 2010–11 NYSAA. Subgroup Cronbach's α's were calculated using the formula defined above using only the members of the subgroup in question in the computations. These statistics are reported in Tables 10-2 through 10-5. Note that statistics are only reported for subgroups with at least 11 students.

Table 10-2. 2010–11 NYSAA: Subgroup Reliabilities—English Language Arts

Grade	*Group*	*Number of Students*	*Raw Score*			*Alpha*	*SEM*
			Maximum	*Mean*	*Standard Deviation*		
3	All Students	2,586	48	44.44	6.52	0.86	2.43
	Male	1,829	48	44.57	6.43	0.85	2.46
	Female	757	48	44.14	6.73	0.87	2.41
	American Indian/Alaskan Native	22	48	46.55	2.34	0.66	1.36
	Black	675	48	44.72	6.43	0.87	2.35
	Asian	123	48	45.13	5.60	0.80	2.48
	Hispanic	649	48	44.59	6.63	0.86	2.51
	White	1,091	48	44.02	6.67	0.86	2.48
	Native Hawaiian/Other Pacific Islander	12	48	45.67	6.87	0.49	4.90
	Multi	14	48	46.57	2.24	0.71	1.21
4	All Students	2,881	48	44.78	6.11	0.82	2.59
	Male	1,987	48	44.83	6.03	0.82	2.56
	Female	894	48	44.69	6.28	0.82	2.66
	American Indian/Alaskan Native	12	48	44.17	7.64	0.81	3.33
	Black	777	48	44.80	6.26	0.80	2.81
	Asian	151	48	44.79	6.49	0.86	2.45
	Hispanic	788	48	45.20	6.21	0.84	2.50
	White	1,128	48	44.48	5.89	0.81	2.55
	Native Hawaiian/Other Pacific Islander	5	48	N/A	N/A	N/A	N/A
	Multi	20	48	45.50	3.87	0.75	1.95
5	All Students	2,778	48	44.92	5.81	0.83	2.41
	Male	1,929	48	45.03	5.61	0.81	2.43
	Female	849	48	44.67	6.24	0.85	2.39
	American Indian/Alaskan Native	18	48	47.00	2.52	0.78	1.17
	Black	755	48	44.92	6.05	0.83	2.52
	Asian	139	48	44.10	8.05	0.89	2.66
	Hispanic	725	48	45.18	5.64	0.85	2.18
	White	1,122	48	44.79	5.48	0.80	2.43
	Native Hawaiian/Other Pacific Islander	5	48	N/A	N/A	N/A	N/A
	Multi	14	48	46.07	3.15	0.72	1.67
6	All Students	2,832	48	44.47	6.43	0.84	2.58
	Male	1,942	48	44.46	6.47	0.84	2.58
	Female	890	48	44.50	6.35	0.83	2.59
	American Indian/Alaskan Native	15	48	45.13	8.16	0.64	4.86
	Black	747	48	44.39	6.98	0.87	2.52
	Asian	148	48	43.61	7.61	0.87	2.80

continued

Grade	Group	Number of Students	Raw Score			Alpha	SEM
			Maximum	Mean	Standard Deviation		
6	Hispanic	754	48	45.07	5.79	0.85	2.21
	White	1,154	48	44.21	6.28	0.81	2.76
	Native Hawaiian/Other Pacific Islander	5	48	N/A	N/A	N/A	N/A
	Multi	9	48	N/A	N/A	N/A	N/A
7	All Students	2,797	48	44.71	6.12	0.84	2.48
	Male	1,884	48	44.79	5.96	0.84	2.39
	Female	913	48	44.57	6.44	0.83	2.68
	American Indian/Alaskan Native	14	48	45.36	6.32	0.17	5.76
	Black	728	48	44.69	6.21	0.86	2.31
	Asian	145	48	45.21	5.97	0.88	2.05
	Hispanic	690	48	44.84	6.00	0.81	2.59
	White	1,197	48	44.54	6.18	0.82	2.61
	Native Hawaiian/Other Pacific Islander	11	48	48.00	0.00	N/A	N/A
	Multi	12	48	46.92	1.93	0.60	1.23
8	All Students	2,577	48	44.48	6.00	0.84	2.43
	Male	1,719	48	44.44	6.07	0.83	2.50
	Female	858	48	44.57	5.87	0.85	2.29
	American Indian/Alaskan Native	22	48	46.59	2.24	0.62	1.38
	Black	666	48	44.37	6.49	0.83	2.65
	Asian	135	48	45.21	5.19	0.87	1.85
	Hispanic	620	48	44.99	5.59	0.85	2.17
	White	1,115	48	44.14	6.01	0.82	2.54
	Native Hawaiian/Other Pacific Islander	7	48	N/A	N/A	N/A	N/A
	Multi	12	48	46.33	2.02	0.61	1.26
High School	All Students	3,005	48	44.01	6.57	0.86	2.49
	Male	1,915	48	44.04	6.57	0.86	2.48
	Female	1,090	48	43.96	6.58	0.85	2.52
	American Indian/Alaskan Native	21	48	44.81	4.63	0.77	2.22
	Black	829	48	44.18	6.64	0.87	2.36
	Asian	138	48	43.45	7.05	0.83	2.89
	Hispanic	716	48	44.25	6.68	0.85	2.55
	White	1,283	48	43.80	6.47	0.85	2.52
	Native Hawaiian/Other Pacific Islander	6	48	N/A	N/A	N/A	N/A
	Multi	12	48	43.67	5.38	0.77	2.56

Table 10-3. 2010–11 NYSAA: Subgroup Reliabilities—Mathematics

Grade	Group	Number of Students	Raw Score			Alpha	SEM
			Maximum	Mean	Standard Deviation		
3	All Students	2,587	48	44.37	6.45	0.86	2.43
	Male	1,829	48	44.64	6.25	0.86	2.36
	Female	758	48	43.72	6.88	0.86	2.61
	American Indian/Alaskan Native	23	48	46.09	4.49	0.85	1.73
	Black	677	48	44.86	6.12	0.84	2.43
	Asian	122	48	44.76	6.35	0.87	2.30
	Hispanic	655	48	45.05	6.03	0.85	2.35

continued

Grade	Group	Number of Students	Raw Score			Alpha	SEM
			Maximum	Mean	Standard Deviation		
3	White	1,085	48	43.53	6.90	0.86	2.59
	Native Hawaiian/Other Pacific Islander	11	48	47.73	0.65	0.00	0.68
	Multi	14	48	45.36	4.75	0.84	1.88
4	All Students	2,880	48	44.59	6.11	0.85	2.33
	Male	1,986	48	44.63	6.13	0.86	2.33
	Female	894	48	44.48	6.09	0.85	2.35
	American Indian/Alaskan Native	12	48	46.50	3.45	0.83	1.42
	Black	777	48	44.75	6.14	0.86	2.30
	Asian	151	48	44.41	6.57	0.88	2.27
	Hispanic	787	48	45.46	5.19	0.85	1.99
	White	1,128	48	43.85	6.59	0.84	2.59
	Native Hawaiian/Other Pacific Islander	5	48	N/A	N/A	N/A	N/A
	Multi	20	48	45.60	4.50	0.82	1.89
5	All Students	2,784	48	44.97	6.03	0.86	2.27
	Male	1,927	48	45.18	5.78	0.86	2.20
	Female	857	48	44.52	6.52	0.86	2.41
	American Indian/Alaskan Native	18	48	46.39	3.97	0.85	1.52
	Black	758	48	45.06	6.23	0.87	2.22
	Asian	139	48	44.35	7.18	0.89	2.43
	Hispanic	723	48	45.21	6.00	0.88	2.10
	White	1,127	48	44.77	5.81	0.83	2.39
	Native Hawaiian/Other Pacific Islander	5	48	N/A	N/A	N/A	N/A
	Multi	14	48	47.36	1.01	0.12	0.95
6	All Students	2,829	48	44.12	6.77	0.87	2.41
	Male	1,936	48	44.31	6.67	0.88	2.31
	Female	893	48	43.72	6.97	0.86	2.62
	American Indian/Alaskan Native	15	48	47.27	1.33	0.60	0.84
	Black	745	48	44.78	6.11	0.88	2.15
	Asian	148	48	43.11	8.35	0.90	2.63
	Hispanic	754	48	44.32	7.04	0.89	2.31
	White	1,153	48	43.64	6.77	0.86	2.57
	Native Hawaiian/Other Pacific Islander	5	48	N/A	N/A	N/A	N/A
	Multi	9	48	N/A	N/A	N/A	N/A
7	All Students	2,799	48	44.64	5.89	0.84	2.33
	Male	1,884	48	44.68	5.90	0.84	2.32
	Female	915	48	44.56	5.88	0.84	2.35
	American Indian/Alaskan Native	14	48	45.50	4.07	0.40	3.15
	Black	726	48	44.44	6.39	0.85	2.49
	Asian	146	48	45.25	5.83	0.91	1.80
	Hispanic	693	48	45.12	5.47	0.85	2.12
	White	1,197	48	44.37	5.83	0.83	2.42
	Native Hawaiian/Other Pacific Islander	11	48	47.09	2.43	0.55	1.64
	Multi	12	48	45.33	6.41	0.95	1.38
8	All Students	2,581	48	44.58	6.21	0.84	2.45
	Male	1,719	48	44.67	6.04	0.84	2.45
	Female	862	48	44.39	6.53	0.86	2.45
	American Indian/Alaskan Native	22	48	46.32	3.20	0.77	1.53
	Black	667	48	44.46	6.47	0.85	2.50

continued

Grade	Group	Number of Students	Raw Score			Alpha	SEM
			Maximum	Mean	Standard Deviation		
8	Asian	135	48	44.96	6.30	0.91	1.89
	Hispanic	622	48	45.04	5.90	0.83	2.45
	White	1,116	48	44.32	6.20	0.83	2.55
	Native Hawaiian/Other Pacific Islander	7	48	N/A	N/A	N/A	N/A
	Multi	12	48	44.67	6.96	0.76	3.41
High School	All Students	2,999	48	4409	6.47	0.84	2.57
	Male	1,913	48	44.05	6.62	0.85	2.59
	Female	1,086	48	44.16	6.21	0.84	2.51
	American Indian/Alaskan Native	21	48	45.86	3.89	0.62	2.40
	Black	826	48	44.44	6.31	0.86	2.35
	Asian	137	48	43.80	6.95	0.85	2.69
	Hispanic	715	48	44.61	6.14	0.85	2.36
	White	1,282	48	43.60	6.69	0.83	2.78
	Native Hawaiian/Other Pacific Islander	6	48	N/A	N/A	N/A	N/A
	Multi	12	48	40.75	8.04	0.77	3.86

Table 10-4. 2010–11 NYSAA: Subgroup Reliabilities—Science

Grade	Group	Number of Students	Raw Score			Alpha	SEM
			Maximum	Mean	Standard Deviation		
4	All Students	2,876	48	44.94	6.20	0.84	2.46
	Male	1,984	48	44.87	6.39	0.85	2.51
	Female	892	48	45.11	5.78	0.84	2.34
	American Indian/Alaskan Native	12	48	45.42	6.91	0.58	4.50
	Black	775	48	45.09	6.27	0.85	2.41
	Asian	151	48	44.21	7.18	0.87	2.60
	Hispanic	786	48	45.19	6.26	0.84	2.47
	White	1,127	48	44.77	5.94	0.83	2.44
	Native Hawaiian/Other Pacific Islander	5	48	N/A	N/A	N/A	N/A
	Multi	20	48	44.90	5.89	0.87	2.16
8	All Students	2,576	48	44.15	6.84	0.83	2.81
	Male	1,716	48	44.09	6.89	0.83	2.87
	Female	860	48	44.27	6.76	0.84	2.69
	American Indian/Alaskan Native	22	48	44.68	6.18	0.78	2.90
	Black	667	48	43.53	7.66	0.84	3.04
	Asian	135	48	45.21	5.95	0.86	2.25
	Hispanic	620	48	44.62	6.63	0.84	2.62
	White	1,113	48	44.10	6.54	0.82	2.81
	Native Hawaiian/Other Pacific Islander	7	48	N/A	N/A	N/A	N/A
	Multi	12	48	46.67	1.92	0.50	1.36
High School	All Students	3,003	48	44.69	5.90	0.84	2.33
	Male	1,918	48	44.92	5.63	0.84	2.24
	Female	1,085	48	44.27	6.32	0.85	2.48
	American Indian/Alaskan Native	21	48	45.86	3.75	0.41	2.88
	Black	828	48	44.85	5.84	0.86	2.21
	Asian	137	48	44.48	5.87	0.85	2.25

continued

Grade	Group	Number of Students	Raw Score			Alpha	SEM
			Maximum	Mean	Standard Deviation		
High School	Hispanic	717	48	45.31	5.31	0.84	2.14
	White	1,282	48	44.23	6.25	0.84	2.53
	Native Hawaiian/Other Pacific Islander	6	48	N/A	N/A	N/A	N/A
	Multi	12	48	43.58	5.11	0.76	2.51

Table 10-5. 2010–11 NYSAA: Subgroup Reliabilities—Social Studies

Grade	Group	Number of Students	Raw Score			Alpha	SEM
			Maximum	Mean	Standard Deviation		
High School	All Students	3,000	48	44.67	5.88	0.84	2.38
	Male	1,915	48	44.73	5.79	0.83	2.40
	Female	1,085	48	44.55	6.03	0.85	2.36
	American Indian/Alaskan Native	21	48	46.67	3.65	0.34	2.97
	Black	828	48	44.77	6.08	0.84	2.42
	Asian	137	48	44.66	5.67	0.88	1.99
	Hispanic	716	48	45.34	5.04	0.83	2.05
	White	1,280	48	44.21	6.14	0.83	2.56
	Native Hawaiian/Other Pacific Islander	6	48	N/A	N/A	N/A	N/A
	Multi	12	48	42.58	8.99	0.85	3.48

For several reasons, the results of this section should be interpreted with caution. First, inherent differences between grades and content areas preclude making valid inferences about the quality of a test based on statistical comparisons with other tests. Second, reliabilities are dependent not only on the measurement properties of a test but on the statistical distribution of the studied subgroup. For example, it can be readily seen in Tables 10-2 through 10-5 that subgroup sample sizes may vary considerably, which results in natural variation in reliability coefficients. Alternatively α, which is a type of correlation coefficient, may be artificially depressed for subgroups with little variability (Draper & Smith, 1998). Third, there is no industry standard to interpret the strength of a reliability coefficient, and this is particularly true when the population of interest is a single subgroup.

10.3 Decision Accuracy and Consistency

While related to reliability, the accuracy and consistency of classifying students into performance categories is an even more important issue in a standards-based reporting framework (Livingston and Lewis, 1995). Unlike generalizability coefficients, decision accuracy and consistency (DAC) can usually be computed with the data currently available for most alternate assessments. Based on the raw scale cut scores established for each content area via standard setting in June 2008, each student was classified into one of the following performance levels: Not Meeting Learning Standards, Partially Meeting Learning Standards, Meeting Learning Standards, and Meeting Learning Standards with Distinction. (Lookup tables for converting raw scores to performance levels are presented in Chapter

11.) This section of the report explains the methodologies used to assess the reliability of classification decisions and presents the results.

Accuracy refers to the extent to which decisions based on test scores match decisions that would have been made if the scores did not contain any measurement error. Accuracy must be estimated, because errorless test scores do not exist. Consistency measures the extent to which classification decisions based on test scores match the decisions based on scores from a second, parallel form of the same test. Consistency can be evaluated directly from actual responses to test items if two complete and parallel forms of the test are given to the same group of students. In operational test programs, however, such a design is usually impractical. Instead, techniques have been developed to estimate both the accuracy and the consistency of classification decisions based on a single administration of a test. The Livingston and Lewis (1995) technique was used for the NYSAA because it is easily adaptable to all types of testing formats.

The accuracy and consistency estimates reported in the tables below make use of “true scores” in the classical test theory sense. A true score is the score that would be obtained if a test had no measurement error. Of course, true scores cannot be observed and, therefore, must be estimated. In the Livingston and Lewis method, estimated true scores are used to categorize students into their “true” classifications.

For the NYSAA, after various technical adjustments (described in Livingston and Lewis, 1995), a four-by-four contingency table of accuracy was created for each content area and grade, where cell [i, j] represented the estimated proportion of students whose true score fell into classification i (where i = 1 to 4) and observed score into classification j (where j = 1 to 4). The sum of the diagonal entries (i.e., the proportion of students whose true and observed classifications matched) signified overall accuracy.

To calculate consistency, true scores were used to estimate the joint distribution of classifications on two independent, parallel test forms. Following statistical adjustments per Livingston and Lewis (1995), a new four-by-four contingency table was created for each content area and grade and populated by the proportion of students who would be categorized into each combination of classifications according to the two (hypothetical) parallel test forms. Cell [i, j] of this table represented the estimated proportion of students whose observed score on the first form would fall into classification i (where i = 1 to 4) and whose observed score on the second form would fall into classification j (where j = 1 to 4). The sum of the diagonal entries (i.e., the proportion of students categorized by the two forms into exactly the same classification) signified overall consistency.

Another way to measure consistency is to use Cohen’s (1960) coefficient κ (kappa), which assesses the proportion of consistent classifications after removing the proportion of consistent classifications that would be expected by chance. It is calculated using the following formula:

$$\kappa = \frac{(Observed\ agreement) - (Change\ agreement)}{1 - Chance\ agreement} = \frac{\sum_i C_{ii} - \sum_i C_{i.}C_{.i}}{1 - \sum_i C_{i.}C_{.i}}$$

where

$C_{i.}$ is the proportion of students whose observed performance level would be Level *i* (where *i* = 1 – 4) on the first hypothetical parallel form of the test;

C_{i} is the proportion of students whose observed performance level would be Level *i* (where *i* = 1 – 4) on the second hypothetical parallel form of the test; and

C_{ii} is the proportion of students whose observed performance level would be Level *i* (where *i* = 1 – 4) on both hypothetical parallel forms of the test.

Because κ is corrected for chance, its values are lower than those of other consistency estimates.

The accuracy and consistency analyses described above are provided in Table 10-6. The table includes overall accuracy and consistency indices, including kappa. Accuracy and consistency values conditional upon performance level are also given. For these calculations, the denominator is the proportion of students associated with a given performance level. For example, the conditional accuracy value is 0.76 for Not Meeting Learning Standards for Grade 3 ELA. This figure indicates that among the students whose true scores placed them in this classification, 76% would be expected to be in this classification when categorized according to their observed scores. Similarly, a consistency value of 0.70 indicates that 70% of students with observed scores in the Not Meeting Learning Standards level would be expected to score in this classification again if a second, parallel test form were used.

Table 10-6. 2010–11 NYSAA: Summary of Decision Accuracy (and Consistency) Results by Subject and Grade—Overall and Conditional on Performance Level

Subject	*Grade*	*Overall*	*Kappa*	*Conditional on Level*			
				Not Meeting	*Partially Meeting*	*Meeting*	*Meeting with Distinction*
English Language Arts	3	0.86 (0.83)	0.55	0.76 (0.70)	0.47 (0.37)	0.41 (0.32)	0.97 (0.94)
	4	0.83 (0.80)	0.48	0.72 (0.65)	0.48 (0.38)	0.36 (0.27)	0.96 (0.92)
	5	0.80 (0.76)	0.45	0.70 (0.59)	0.52 (0.42)	0.50 (0.42)	0.93 (0.88)
	6	0.83 (0.79)	0.49	0.71 (0.61)	0.63 (0.55)	0.39 (0.28)	0.95 (0.91)
	7	0.91 (0.88)	0.57	0.49 (0.32)	0.67 (0.60)	0.42 (0.33)	0.98 (0.96)
	8	0.88 (0.85)	0.54	0.65 (0.46)	0.65 (0.54)	0.53 (0.44)	0.97 (0.94)
	High School	0.87 (0.84)	0.54	0.74 (0.62)	0.52 (0.41)	0.55 (0.46)	0.97 (0.94)
Mathematics	3	0.85 (0.82)	0.58	0.72 (0.58)	0.63 (0.52)	0.62 (0.58)	0.96 (0.91)
	4	0.80 (0.76)	0.51	0.70 (0.55)	0.70 (0.62)	0.55 (0.48)	0.94 (0.87)
	5	0.83 (0.79)	0.51	0.66 (0.52)	0.63 (0.53)	0.57 (0.49)	0.95 (0.90)
	6	0.86 (0.82)	0.58	0.72 (0.58)	0.63 (0.52)	0.62 (0.56)	0.96 (0.92)
	7	0.80 (0.75)	0.50	0.70 (0.60)	0.43 (0.33)	0.57 (0.50)	0.94 (0.88)
	8	0.77 (0.71)	0.40	0.74 (0.66)	0.45 (0.35)	0.49 (0.37)	0.90 (0.85)
	High School	0.84 (0.80)	0.56	0.68 (0.49)	0.67 (0.56)	0.61 (0.57)	0.96 (0.90)
Science	4	0.90 (0.87)	0.55	0.56 (0.48)	0.32 (0.27)	0.55 (0.42)	0.98 (0.96)
	8	0.86 (0.83)	0.51	0.59 (0.51)	0.55 (0.46)	0.35 (0.23)	0.96 (0.94)
	High School	0.88 (0.85)	0.54	0.69 (0.53)	0.63 (0.52)	0.54 (0.46)	0.97 (0.94)
Social Studies	High School	0.82 (0.79)	0.51	0.73 (0.63)	0.42 (0.32)	0.51 (0.45)	0.96 (0.91)

For some testing situations, of greatest concern may be decisions around level thresholds. For example, in testing done for NCLB accountability purposes, the primary concern is distinguishing between students who are proficient and those who are not yet proficient. In this case, the accuracy of the Partially Meeting/Meeting threshold is of greatest interest. Table 10-7 provides accuracy and consistency estimates at each cutpoint, as well as false positive and false negative decision rates. (A false positive is the proportion of students whose observed scores were above the cut and whose true scores were below the cut. A false negative is the proportion of students whose observed scores were below the cut and whose true scores were above the cut.)

The indices described above are derived from Livingston and Lewis's (1995) method of estimating the accuracy and consistency of classifications. It should be noted that Livingston and Lewis discuss two versions of the accuracy and consistency tables. A standard version performs calculations for forms parallel to the form taken. An "adjusted" version adjusts the results of one form to match the observed score distribution obtained in the data. The tables on the previous pages use the standard version for two reasons: (1) this "unadjusted" version can be considered a smoothing of the data, thereby decreasing the variability of the results; and (2) for results dealing with the consistency of two parallel forms, the unadjusted tables are symmetrical, indicating that the two parallel forms have the same statistical properties. This second reason is consistent with the notion of forms that are parallel; that is, it is more intuitive and interpretable for two parallel forms to have the same statistical distribution.

Note that, as with other methods of evaluating reliability, DAC statistics calculated based on small groups can be expected to be lower than those calculated based on larger groups. For this reason, the values presented in the tables above should be interpreted with caution. In addition, it is important to remember that it is inappropriate to compare DAC statistics between grades and content areas.

Table 10-7. 2010–11 NYSAA: Summary of Decision Accuracy (and Consistency) Results by Content Area and Grade—Conditional on Cutpoint

Content Area	*Grade*	*Not Meeting/Partially Meeting*			*Partially Meeting/Meeting*			*Meeting/Meeting with Distinction*		
		Accuracy (consistency)	*False Positive*	*False Negative*	*Accuracy (consistency)*	*False Positive*	*False Negative*	*Accuracy (consistency)*	*False Positive*	*False Negative*
English Language Arts	3	0.97 (0.96)	0.02	0.01	0.95 (0.94)	0.03	0.02	0.93 (0.90)	0.05	0.02
	4	0.97 (0.96)	0.02	0.01	0.95 (0.93)	0.03	0.02	0.90 (0.87)	0.07	0.03
	5	0.98 (0.97)	0.01	0.01	0.96 (0.94)	0.03	0.02	0.85 (0.83)	0.10	0.04
	6	0.98 (0.97)	0.01	0.01	0.95 (0.94)	0.03	0.02	0.89 (0.86)	0.07	0.04
	7	0.99 (0.98)	0.00	0.01	0.97 (0.95)	0.02	0.01	0.95 (0.93)	0.04	0.02
	8	0.99 (0.99)	0.00	0.00	0.97 (0.95)	0.02	0.02	0.92 (0.90)	0.05	0.03
	High School	0.98 (0.98)	0.01	0.01	0.96 (0.95)	0.02	0.02	0.92 (0.90)	0.05	0.03
Mathematics	3	0.99 (0.99)	0.00	0.01	0.97 (0.95)	0.02	0.02	0.90 (0.88)	0.08	0.02
	4	0.99 (0.99)	0.00	0.00	0.95 (0.94)	0.03	0.02	0.85 (0.83)	0.11	0.04
	5	0.99 (0.98)	0.01	0.01	0.97 (0.95)	0.02	0.01	0.88 (0.85)	0.09	0.04
	6	0.99 (0.99)	0.00	0.01	0.97 (0.95)	0.02	0.01	0.91 (0.88)	0.07	0.03
	7	0.97 (0.96)	0.02	0.01	0.95 (0.94)	0.03	0.02	0.87 (0.84)	0.10	0.04
	8	0.97 (0.97)	0.01	0.01	0.96 (0.94)	0.03	0.02	0.83 (0.79)	0.10	0.07
	High School	0.99 (0.99)	0.00	0.00	0.96 (0.95)	0.02	0.02	0.88 (0.86)	0.09	0.03
Science	4	0.97 (0.96)	0.02	0.01	0.97 (0.95)	0.02	0.01	0.95 (0.93)	0.03	0.02
	8	0.96 (0.95)	0.02	0.01	0.96 (0.95)	0.03	0.01	0.93 (0.90)	0.04	0.03
	High School	0.99 (0.99)	0.00	0.01	0.96 (0.95)	0.02	0.02	0.92 (0.90)	0.06	0.02
Social Studies	High School	0.97 (0.96)	0.01	0.01	0.95 (0.94)	0.03	0.02	0.89 (0.87)	0.09	0.02

10.4 Reliability Monitoring Review Analysis

As explained in Chapter 8, the purpose of the Reliability Monitoring Review (RMR) is to ensure scoring consistency and reliability across Scoring Institutes. Specifically, at the end of the Scoring Institute, 20% of the scored datafolios from each scoring site are randomly collected by the Score Site Coordinator (SSC) for RMR. Measured Progress then conducts the RMR at a Scoring Institute in New Hampshire in which the random 20% of datafolios are independently scored by highly experienced and qualified Scorers. The Scorers all have a minimum of a bachelor's degree, as required by the New York State Education Department (the Department). These Scorers must complete the same NYSAA training and qualification process used across New York State. Their scoring of the student datafolios is entirely independent, in the sense that they are given no information regarding the scores that were assigned in-state.

RMR scores are compared with the original scores from the regional Scoring Institutes. The original scores remain the scores of record; the RMR scores do not change or affect the original scores. However, by comparing the RMR scores with the original scores, we obtain another estimate of the reliability of the datafolio scoring. Because this analysis involves a separate, independent rating, this type of reliability estimate is referred to as interrater reliability.

Table 10-8 displays interrater reliability results on performance levels by content area (i.e., aggregated over grade levels within a content area). Table 10-9 shows the same information broken out by grade. Several indices are presented: the percent exact agreement value gives the percentage of exactly matching scores (performance levels) between the original Scorer and the RMR Scorer. Percent adjacent or exact gives the percentage of scores that exactly matched or differed by just one performance level. Kappa is Cohen's κ, which, as described earlier, corrects percentage of exact agreement for agreement due to chance. The standard error for κ is also given. Finally, the intraclass correlation index shows the ratio of variance among students to total variance (where total variance combines variance among students with variance between the Scorer pairs; the higher the agreement between Scorers, the lower that variance component and the higher the intraclass correlation).

Table 10-8. 2010–11 NYSAA: Interrater Reliability Analysis by Content Area

Content Area	*N*	*Kappa*	*Kappa Standard Error*	*Percent Adjacent or Exact*	*Percent Exact*	*Intraclass Correlation*
English Language Arts	3,807	0.87	0.01	96.47	94.26	0.77
Mathematics	3,810	0.88	0.01	97.27	94.30	0.84
Science	1,703	0.83	0.02	95.43	94.36	0.67
Social Studies	594	0.95	0.01	99.00	97.82	0.92

Table 10-9. 2010–11 NYSAA: Interrater Reliability Analysis by Content Area and Grade

Content Area	*Grade*	*N*	*Kappa*	*Kappa Standard Error*	*Percent Adjacent or Exact*	*Percent Exact*	*Intraclass Correlation*
English Language Arts	3	502	0.83	0.03	94.43	92.43	0.71
	4	596	0.89	0.02	97.33	95.14	0.84
	5	555	0.89	0.02	96.57	94.77	0.74
	6	542	0.86	0.02	95.92	93.17	0.75
	7	500	0.78	0.03	95.40	92.80	0.74
	8	516	0.85	0.03	98.06	94.57	0.85
	High School	596	0.90	0.02	97.31	96.47	0.78
Mathematics	3	502	0.91	0.02	98.01	95.82	0.87
	4	598	0.92	0.02	98.50	95.82	0.91
	5	557	0.89	0.02	97.68	94.98	0.79
	6	543	0.83	0.02	94.10	92.08	0.74
	7	502	0.90	0.02	97.42	94.62	0.88
	8	516	0.87	0.02	96.50	93.03	0.83
	High School	592	0.86	0.02	98.66	93.75	0.88
Science	4	597	0.82	0.03	94.48	94.31	0.55
	8	512	0.80	0.03	94.54	92.96	0.67
	High School	594	0.86	0.03	97.16	95.63	0.81
Social Studies	High School	594	0.95	0.01	99.00	97.82	0.92

Table 10-10 displays the interrater reliability results on raw scores for each grade and content area broken down by scoring dimensions (Accuracy and Independence), Alternate Grade Level Indicator (AGLI), and date. The percent exact agreement rates reported here are higher than those reported in Tables 10-8 and 10-9, with most values 98% or higher. Similarly, the Cohen's kappa, percent adjacent or exact[1], and "interclass" correlation results are quite high.

[1] Scores are not required to be exact or adjacent, so it is possible that the percent of scores that were exact and the percent of scores that were adjacent will not sum to 100 percent.

Table 10-10. 2010–11 NYSAA: Interrater Reliability Analysis by Grade, Content Area, Scoring Dimension, AGLI, and Date

Grade	*Content Area*	*Dimension*	*N*	*AGLI*	*Date*	*Kappa*	*Kappa Standard Error*	*Percent Adjacent or Exact*	*Percent Exact*	*Intraclass Correlation*
3	English Language Arts	Accuracy	495	1	1	0.98	0.01	100.01	99.40	0.97
			495	1	2	0.99	0.01	99.79	99.79	0.97
			493	1	3	0.96	0.02	99.79	99.19	0.96
			474	2	1	0.99	0.01	99.79	99.79	0.98
			476	2	2	0.98	0.01	100.00	99.58	0.98
			472	2	3	0.99	0.01	100.00	99.79	0.98
		Independence	495	1	1	0.98	0.01	100.00	99.40	0.98
			495	1	2	0.99	0.01	99.79	99.79	0.95
			493	1	3	0.98	0.02	99.80	99.60	0.95
			474	2	1	0.97	0.01	99.58	99.16	0.98
			476	2	2	0.96	0.02	99.57	98.94	0.95
			472	2	3	0.97	0.02	99.78	99.36	0.94
	Mathematics	Accuracy	496	1	1	0.98	0.01	99.39	99.39	0.97
			494	1	2	0.98	0.02	99.79	99.59	0.96
			496	1	3	0.96	0.02	99.99	99.39	0.96
			494	2	1	0.94	0.02	99.39	98.38	0.98
			491	2	2	0.96	0.02	99.80	99.40	0.97
			490	2	3	0.95	0.03	99.99	99.18	0.97
		Independence	496	1	1	0.96	0.02	99.19	98.79	0.98
			494	1	2	0.97	0.02	99.39	99.19	0.97
			496	1	3	0.97	0.02	99.19	99.19	0.96
			494	2	1	0.96	0.01	99.79	98.78	0.98
			491	2	2	1.00	0.00	99.99	99.99	0.98
			490	2	3	0.98	0.01	100.00	99.39	0.97
4	English Language Arts	Accuracy	593	1	1	0.98	0.01	99.66	99.49	0.97
			593	1	2	0.98	0.02	99.66	99.66	0.97
			593	1	3	0.95	0.03	99.66	99.32	0.96
			578	2	1	0.99	0.01	99.82	99.65	0.98
			577	2	2	0.97	0.02	99.83	99.48	0.98
			577	2	3	0.95	0.03	99.83	99.48	0.98
		Independence	593	1	1	0.97	0.01	99.50	99.16	0.98
			593	1	2	0.95	0.02	99.50	98.99	0.95
			594	1	3	0.91	0.03	99.85	98.49	0.95

continued

Grade	Content Area	Dimension	N	AGLI	Date	Kappa	Kappa Standard Error	Percent Adjacent or Exact	Percent Exact	Intraclass Correlation
4	English Language Arts	Independence	578	2	1	0.97	0.01	100.00	99.13	0.98
			577	2	2	0.94	0.02	99.31	98.61	0.95
			577	2	3	0.96	0.02	99.31	99.31	0.94
	Mathematics	Accuracy	593	1	1	0.97	0.01	99.84	99.33	0.97
			592	1	2	0.96	0.02	99.84	99.16	0.96
			590	1	3	0.99	0.01	100.00	99.83	0.96
			589	2	1	0.96	0.02	100.00	98.81	0.98
			588	2	2	0.97	0.02	100.00	99.49	0.97
			587	2	3	0.94	0.03	100.00	99.15	0.97
		Independence	593	1	1	0.99	0.01	99.83	99.66	0.98
			592	1	2	0.98	0.01	99.83	99.49	0.97
			590	1	3	0.96	0.02	99.49	99.32	0.96
			589	2	1	0.97	0.01	99.49	98.98	0.98
			588	2	2	0.98	0.01	99.65	99.48	0.98
			587	2	3	0.97	0.02	99.66	99.32	0.97
	Science	Accuracy	570	1	1	0.98	0.01	100.00	99.47	1.00
			569	1	2	0.92	0.03	99.66	98.95	0.98
			568	1	3	0.87	0.05	99.82	98.77	0.96
			573	2	1	0.98	0.01	99.83	99.66	0.98
			573	2	2	0.99	0.01	99.99	99.82	0.97
			574	2	3	0.97	0.02	99.83	99.66	0.97
		Independence	570	1	1	0.97	0.01	99.83	99.12	0.99
			569	1	2	0.96	0.02	99.65	99.30	0.99
			568	1	3	0.99	0.01	100.00	99.82	0.97
			573	2	1	0.98	0.01	100.00	99.48	0.99
			573	2	2	1.00	0.00	99.99	99.99	0.98
			574	2	3	0.96	0.02	100.00	99.48	0.96
5	English Language Arts	Accuracy	547	1	1	0.98	0.01	99.81	99.45	0.97
			545	1	2	0.98	0.01	99.82	99.64	0.97
			545	1	3	0.95	0.03	99.44	99.26	0.96
			543	2	1	0.98	0.01	99.63	99.63	0.98
			540	2	2	1.00	0.00	100.00	100.00	0.98
			541	2	3	0.97	0.02	100.00	99.63	0.98

continued

Grade	Content Area	Dimension	N	AGLI	Date	Kappa	Kappa Standard Error	Percent Adjacent or Exact	Percent Exact	Intraclass Correlation
5	English Language Arts	Independence	547	1	1	0.99	0.01	100.00	99.82	0.98
			545	1	2	0.94	0.02	99.45	98.54	0.95
			545	1	3	0.95	0.02	99.44	99.07	0.95
			543	2	1	0.98	0.01	99.63	99.45	0.98
			540	2	2	0.96	0.02	99.44	99.44	0.95
			541	2	3	0.96	0.02	99.63	99.45	0.94
	Mathematics	Accuracy	548	1	1	0.96	0.02	100.00	98.91	0.97
			546	1	2	0.97	0.02	100.00	99.45	0.96
			544	1	3	0.99	0.01	99.99	99.81	0.96
			545	2	1	0.97	0.02	100.01	99.27	0.98
			544	2	2	0.96	0.02	100.01	99.27	0.97
			542	2	3	0.98	0.02	100.00	99.82	0.97
		Independence	548	1	1	0.99	0.01	99.99	99.63	0.98
			546	1	2	0.97	0.02	99.81	99.45	0.97
			544	1	3	1.00	0.00	99.99	99.99	0.96
			545	2	1	0.96	0.02	99.45	98.90	0.98
			544	2	2	0.96	0.02	99.63	99.27	0.98
			542	2	3	0.94	0.03	99.63	98.89	0.97
6	English Language Arts	Accuracy	529	1	1	0.97	0.01	99.82	99.25	0.97
			526	1	2	0.92	0.03	99.42	98.66	0.97
			527	1	3	0.97	0.02	100.00	99.62	0.96
			523	2	1	0.97	0.01	99.81	99.24	0.98
			522	2	2	0.98	0.02	99.82	99.63	0.98
			524	2	3	0.93	0.03	99.62	99.05	0.98
		Independence	529	1	1	0.97	0.02	99.43	99.05	0.98
			526	1	2	0.97	0.02	99.61	99.42	0.95
			527	1	3	1.00	0.00	100.01	100.01	0.95
			523	2	1	0.96	0.01	99.61	98.85	0.98
			522	2	2	0.97	0.01	99.23	99.23	0.95
			524	2	3	0.96	0.02	99.62	99.05	0.94
	Mathematics	Accuracy	524	1	1	0.96	0.02	99.61	98.85	0.97
			520	1	2	0.96	0.02	99.99	99.23	0.96
			520	1	3	0.95	0.02	99.62	99.24	0.96
			519	2	1	0.98	0.01	99.61	99.23	0.98

continued

Grade	Content Area	Dimension	N	AGLI	Date	Kappa	Kappa Standard Error	Percent Adjacent or Exact	Percent Exact	Intraclass Correlation
6	Mathematics	Accuracy	518	2	2	0.98	0.01	99.82	99.43	0.97
			517	2	3	0.92	0.03	99.21	98.25	0.97
		Independence	524	1	1	0.96	0.02	99.61	98.85	0.98
			520	1	2	0.94	0.02	99.42	98.47	0.97
			520	1	3	0.96	0.02	99.60	99.22	0.96
			519	2	1	0.98	0.01	99.80	99.22	0.98
			518	2	2	0.98	0.01	99.81	99.43	0.98
			517	2	3	0.97	0.02	100.00	99.43	0.97
7	English Language Arts	Accuracy	488	1	1	0.96	0.02	99.58	98.97	0.97
			490	1	2	0.94	0.03	99.78	99.18	0.97
			489	1	3	0.91	0.03	99.99	98.77	0.96
			476	2	1	0.96	0.02	99.36	98.94	0.98
			474	2	2	0.95	0.02	100.00	99.16	0.98
			474	2	3	0.98	0.02	100.00	99.79	0.98
		Independence	488	1	1	0.99	0.01	99.79	99.59	0.98
			490	1	2	0.94	0.02	99.38	98.57	0.95
			489	1	3	0.94	0.03	99.59	98.98	0.95
			476	2	1	0.98	0.01	99.78	99.36	0.98
			474	2	2	0.95	0.02	99.57	98.73	0.95
			474	2	3	0.89	0.04	99.37	98.32	0.94
	Mathematics	Accuracy	497	1	1	0.95	0.02	99.59	98.79	0.97
			496	1	2	0.95	0.03	99.79	99.19	0.96
			496	1	3	0.90	0.04	99.80	98.80	0.96
			489	2	1	0.96	0.02	99.59	98.77	0.98
			486	2	2	0.95	0.03	99.99	99.17	0.97
			487	2	3	0.94	0.03	99.60	99.18	0.97
		Independence	497	1	1	0.97	0.01	99.60	99.00	0.98
			496	1	2	0.96	0.02	99.39	98.99	0.97
			496	1	3	0.94	0.02	99.39	98.59	0.96
			489	2	1	0.98	0.01	100.00	99.19	0.98
			486	2	2	0.99	0.01	100.00	99.79	0.98
			487	2	3	0.96	0.02	99.80	99.18	0.97
8	English Language Arts	Accuracy	513	1	1	0.97	0.01	99.60	99.02	0.97
			510	1	2	0.99	0.01	100.00	99.80	0.97

continued

Grade	Content Area	Dimension	N	AGLI	Date	Kappa	Kappa Standard Error	Percent Adjacent or Exact	Percent Exact	Intraclass Correlation
8	English Language Arts	Accuracy	511	1	3	0.99	0.01	100.00	99.80	0.96
			502	2	1	0.96	0.02	99.81	98.81	0.98
			499	2	2	0.97	0.02	100.00	99.40	0.98
			499	2	3	0.97	0.02	100.00	99.40	0.98
		Independence	513	1	1	0.97	0.01	99.41	99.02	0.98
			510	1	2	0.97	0.01	99.41	99.21	0.95
			511	1	3	0.95	0.02	99.03	98.83	0.95
			502	2	1	0.98	0.01	99.81	99.21	0.98
			499	2	2	0.94	0.02	99.20	98.60	0.95
			499	2	3	0.93	0.03	99.20	98.60	0.94
	Mathematics	Accuracy	503	1	1	0.95	0.02	99.81	98.81	0.97
			502	1	2	0.95	0.03	99.80	99.20	0.96
			502	1	3	0.92	0.03	99.80	98.80	0.96
			490	2	1	0.96	0.02	100.00	98.78	0.98
			490	2	2	0.95	0.02	99.38	98.77	0.97
			489	2	3	0.99	0.01	99.80	99.80	0.97
		Independence	503	1	1	0.97	0.01	99.41	99.21	0.98
			502	1	2	0.97	0.02	99.80	99.40	0.97
			502	1	3	0.94	0.03	99.61	99.01	0.96
			490	2	1	0.94	0.02	99.79	98.16	0.98
			490	2	2	0.99	0.01	100.00	99.80	0.98
			489	2	3	0.97	0.02	99.79	99.59	0.97
	Science	Accuracy	488	1	1	0.99	0.01	99.99	99.79	1.00
			485	1	2	0.97	0.02	100.01	99.59	0.98
			487	1	3	0.97	0.02	99.58	99.58	0.96
			495	2	1	0.97	0.01	99.99	99.39	0.98
			494	2	2	0.92	0.03	99.59	98.58	0.97
			490	2	3	0.96	0.03	99.79	99.39	0.97
		Independence	488	1	1	0.99	0.01	99.80	99.80	0.99
			485	1	2	0.98	0.01	100.00	99.58	0.99
			486	1	3	0.93	0.03	99.38	98.76	0.97
			495	2	1	0.98	0.01	99.99	99.39	0.99
			494	2	2	0.99	0.01	100.00	99.80	0.98
			490	2	3	0.98	0.02	99.79	99.59	0.96

continued

Grade	Content Area	Dimension	N	AGLI	Date	Kappa	Kappa Standard Error	Percent Adjacent or Exact	Percent Exact	Intraclass Correlation
High School	English Language Arts	Accuracy	584	1	1	0.97	0.01	99.65	99.14	0.97
			585	1	2	0.97	0.01	99.66	99.32	0.97
			585	1	3	0.92	0.03	99.65	98.46	0.96
			580	2	1	0.99	0.01	100.00	99.83	0.98
			579	2	2	0.97	0.01	99.83	99.31	0.98
			580	2	3	0.95	0.02	99.99	98.96	0.98
		Independence	584	1	1	0.97	0.01	100.00	98.97	0.98
			585	1	2	0.97	0.01	99.66	99.15	0.95
			585	1	3	0.95	0.02	99.32	98.98	0.95
			580	2	1	0.99	0.01	100.00	99.83	0.98
			579	2	2	1.00	0.00	100.00	100.00	0.95
			580	2	3	0.97	0.02	99.82	99.48	0.94
	Mathematics	Accuracy	575	1	1	0.97	0.01	99.81	99.12	0.97
			575	1	2	0.90	0.03	99.13	97.57	0.96
			574	1	3	0.89	0.03	99.12	97.74	0.96
			580	2	1	0.98	0.01	99.99	99.65	0.98
			579	2	2	0.94	0.02	99.83	98.79	0.97
			577	2	3	0.96	0.02	99.83	99.31	0.97
		Independence	575	1	1	0.98	0.01	99.49	99.49	0.98
			575	1	2	0.96	0.02	99.64	99.13	0.97
			574	1	3	0.94	0.02	99.29	98.95	0.96
			580	2	1	0.99	0.01	99.82	99.65	0.98
			579	2	2	0.96	0.02	99.13	99.13	0.98
			577	2	3	0.94	0.02	99.12	98.78	0.97
	Science	Accuracy	588	1	1	0.99	0.01	99.99	99.82	1.00
			588	1	2	0.97	0.02	99.83	99.32	0.98
			585	1	3	0.97	0.02	100.00	99.49	0.96
			578	2	1	0.97	0.01	99.83	99.14	0.98
			578	2	2	0.97	0.01	99.82	99.47	0.97
			576	2	3	0.96	0.02	99.82	99.30	0.97
		Independence	588	1	1	0.96	0.02	99.99	98.97	0.99
			588	1	2	0.99	0.01	100.00	99.83	0.99
			585	1	3	0.97	0.02	99.83	99.66	0.97
			578	2	1	0.97	0.02	99.83	99.14	0.99

continued

Grade	*Content Area*	*Dimension*	*N*	*AGLI*	*Date*	*Kappa*	*Kappa Standard Error*	*Percent Adjacent or Exact*	*Percent Exact*	*Intraclass Correlation*
High School	Science	Independence	578	2	2	0.96	0.02	99.30	99.13	0.98
			576	2	3	0.94	0.02	99.32	98.97	0.96
	Social Studies	Accuracy	591	1	1	0.99	0.01	99.99	99.65	1.00
			587	1	2	0.97	0.02	99.82	99.48	0.97
			588	1	3	0.96	0.03	99.66	99.49	0.95
			588	2	1	0.97	0.01	99.65	99.14	0.98
			589	2	2	0.99	0.01	99.83	99.83	0.99
			589	2	3	0.98	0.02	100.01	99.67	0.99
		Independence	591	1	1	0.99	0.01	100.00	99.83	1.00
			587	1	2	0.99	0.01	99.83	99.83	0.98
			588	1	3	0.95	0.02	99.32	99.15	0.94
			588	2	1	0.98	0.01	99.82	99.48	0.99
			589	2	2	0.97	0.02	99.49	99.32	0.96
			587	2	3	0.97	0.02	99.50	99.50	0.95

Chapter 11. COMPARABILITY (SCALING AND EQUATING)

11.1 Comparability of Scores Across Years

In administering the New York State Alternate Assessment (NYSAA), teachers select Alternate Grade Level Indicators (AGLIs), following the test blueprints. Use of the AGLIs and blueprints ensures that the assessment, as it is administered, is appropriate for the individual needs of the student being assessed and that the Required Components are covered. The process enables teachers to customize the assessment for individual students while, at the same time, ensuring comparability across years through the use of the same blueprints, AGLIs, and scoring rubrics from year to year. Additionally, comparability is ensured through the scoring process. Teachers use the same scoring rubric for a datafolio each year, and scoring occurs at regional Scoring Institutes that all follow the same Scoring Training program and Scoring Procedures, as well as the standard scoring quality-control processes, as described in Chapter 8. Additional processes to ensure across-year comparability include calculation of reported scores and categorization into achievement levels, as described below.

11.1.1 Reported Scores

Students' entry scores are calculated based on a combination of their Level of Accuracy and Level of Independence scores for each of the three dates of student performance of the AGLIs in a given entry. The overall score is then the sum of the entry scores. Because of the use of the formula, there may be multiple ways that a student can attain a given total score.

Tables 11-1 through 11-7 show the percentages of students earning scores at each Level of Accuracy and Level of Independence. A score of NS (No Score) is designated if a datafolio does not adhere to the administration guidelines. (Complete information regarding scoring can be found in the two scoring documents entitled Steps for Scoring 2010–11 NYSAA Datafolios and Decision Rules for Scoring 2010–11 NYSAA Datafolios.)

The percentages are presented by grade, content area, Alternate Grade Level Indicator (AGLI), and level of complexity. While the percentages of students with scores at levels 3 and 4 for Independence tended to be somewhat higher at higher levels of complexity in many cases, there were a large number of exceptions; there was no interpretable pattern by level of complexity for Accuracy scores. The percentages of students with scores at levels 3 and 4 tended to be higher for Accuracy than for Independence, but there was a large number of exceptions, especially at the higher grade levels. Furthermore, it is important to note that caution should be used in making such interpretations due to the relatively small number of students at the higher levels of complexity.

Table 11-1. 2010–11 NYSAA: Percentage of Students at Each Level of Accuracy and Independence by Grade, Content Area, AGLI, and Level of Complexity—Grade 3

Content Area	*AGLI*	*Level of Complexity*	*Accuracy*					*Independence*					*N*
			NS	*1*	*2*	*3*	*4*	*NS*	*1*	*2*	*3*	*4*	
English Language Arts	Reading	1	0.69	3.99	6.42	11.71	77.20	0.56	6.29	7.04	8.97	77.13	1,605
		2	0.98	2.40	3.81	13.40	79.41	0.65	2.40	3.92	10.02	83.01	918
		3	4.08	6.12	10.20	10.20	69.39	4.08	0.00	4.08	10.20	81.63	49
		All	0.89	3.46	5.56	12.28	77.81	0.70	4.78	5.87	9.37	79.28	2,573
	Listening	1	1.50	4.10	7.59	12.99	73.83	1.50	8.09	7.79	10.99	71.63	1,001
		2	0.66	2.64	6.11	10.98	79.60	0.66	4.71	3.88	10.49	80.26	1,211
		3	1.02	1.70	6.12	17.35	73.81	1.02	2.38	4.42	13.27	78.91	294
		All	1.04	3.11	6.70	12.53	76.62	1.04	5.79	5.51	11.01	76.66	2,506
Mathematics	Number Sense and Operations	1	0.99	3.52	6.27	10.84	78.37	0.83	9.25	5.94	9.25	74.74	1,817
		2	0.56	1.49	3.53	12.45	81.97	0.56	2.04	3.16	8.55	85.69	538
		3	0.44	0.44	2.62	12.66	83.84	0.00	1.31	1.31	7.42	89.96	229
		All	0.85	2.82	5.38	11.37	79.57	0.70	7.04	4.95	8.97	78.34	2,585
	Measurement	1	0.83	4.06	8.25	10.13	76.74	0.83	8.56	5.89	9.82	74.90	2,291
		2	2.86	7.14	2.86	11.43	75.71	2.86	2.86	4.29	10.00	80.00	70
		3	0.58	1.73	2.31	15.03	80.35	0.58	1.73	5.20	10.98	81.50	173
		All	0.87	3.99	7.70	10.50	76.95	0.87	7.93	5.80	9.91	75.49	2,534

NS = No Score

Table 11-2. 2010–11 NYSAA: Percentage of Students at Each Level of Accuracy and Independence by Grade, Content Area, AGLI, and Level of Complexity—Grade 4

Content Area	*AGLI*	*Level of Complexity*	*Accuracy*					*Independence*					*N*
			NS	*1*	*2*	*3*	*4*	*NS*	*1*	*2*	*3*	*4*	
English Language Arts	Reading	1	0.50	4.48	4.26	8.74	82.01	0.50	6.84	4.54	8.74	79.37	1,784
		2	0.29	3.37	10.12	8.65	77.57	0.29	1.76	2.49	12.02	83.43	682
		3	0.50	1.01	2.01	7.29	89.20	0.50	2.26	5.03	6.53	85.68	398
		All	0.45	3.74	5.34	8.52	81.95	0.45	4.99	4.12	9.22	81.22	2,864
	Writing	1	0.52	4.36	5.15	7.06	82.90	0.52	7.63	5.45	9.25	77.15	2,293
		2	0.27	2.16	2.70	9.19	85.68	0.27	3.51	4.86	14.32	77.03	370
		3	0.71	3.57	5.71	8.57	81.43	0.71	3.57	2.86	12.86	80.00	140
		All	0.50	4.03	4.85	7.42	83.20	0.50	6.89	5.24	10.10	77.27	2,803

continued

Content Area	AGLI	Level of Complexity	Accuracy					Independence					N
			NS	1	2	3	4	NS	1	2	3	4	
Mathematics	Number Sense and Operations	1	0.51	4.73	7.08	10.43	77.25	0.46	8.36	5.24	8.73	77.21	2,176
		2	0.98	0.98	3.92	9.14	84.99	0.82	2.12	3.92	8.16	84.99	613
		3	2.38	0.00	1.19	10.71	85.71	1.19	3.57	2.38	7.14	85.71	84
		All	0.66	3.79	6.23	10.16	79.15	0.56	6.89	4.87	8.56	79.12	2,873
	Measurement	1	0.81	4.39	6.81	9.14	78.86	0.81	9.00	5.15	9.67	75.37	2,233
		2	0.89	1.25	3.39	13.19	81.28	0.89	2.32	5.35	12.30	79.14	561
		3	3.45	3.45	3.45	0.00	89.66	3.45	6.90	3.45	13.79	72.41	29
		All	0.85	3.75	6.09	9.85	79.45	0.85	7.65	5.17	10.24	76.09	2,823
Science	Scientific Inquiry	1	0.93	2.64	3.26	8.18	84.98	0.78	5.90	5.02	7.25	81.05	1,931
		2	0.65	1.30	3.89	9.50	84.67	0.43	2.16	6.48	7.78	83.15	463
		3	0.42	0.85	4.03	11.89	82.80	0.42	3.18	4.67	8.28	83.44	471
		All	0.80	2.13	3.49	9.01	84.57	0.66	4.85	5.20	7.50	81.78	2,865
	Living Environment or Physical Setting/Earth Science	1	0.51	2.57	4.31	7.85	84.76	0.51	5.49	4.14	8.10	81.76	2,369
		2	0.31	1.84	5.52	5.83	86.50	0.31	1.23	4.91	7.06	86.50	326
		3	1.37	1.37	8.22	16.44	72.60	1.37	1.37	5.48	8.22	83.56	73
		All	0.51	2.46	4.55	7.84	84.65	0.51	4.88	4.26	7.98	82.37	2,768

NS = No Score

Table 11-3. 2010–11 NYSAA: Percentage of Students at Each Level of Accuracy and Independence by Grade, Content Area, AGLI, and Level of Complexity—Grade 5

Content Area	AGLI	Level of Complexity	Accuracy					Independence					N
			NS	1	2	3	4	NS	1	2	3	4	
English Language Arts	Reading	1	1.42	4.32	6.42	9.94	77.89	1.42	6.36	6.79	9.94	75.48	1,619
		2	0.56	1.30	3.62	9.28	85.25	0.56	2.97	3.25	9.37	83.86	1,078
		3	0.00	2.99	7.46	7.46	82.09	0.00	8.96	2.99	13.43	74.63	67
		All	1.05	3.11	5.35	9.62	80.86	1.05	5.10	5.32	9.80	78.73	2,764
	Listening	1	0.91	3.44	5.68	12.26	77.72	0.91	5.34	5.30	10.54	77.91	2,096
		2	1.54	1.02	4.44	9.04	83.96	1.54	2.05	7.85	9.22	79.35	586
		3	0.00	2.44	7.32	12.20	78.05	0.00	2.44	4.88	19.51	73.17	41
		All	1.03	2.90	5.44	11.57	79.07	1.03	4.59	5.84	10.39	78.15	2,723
Mathematics	Number Sense and Operations	1	0.76	3.03	5.34	9.92	80.96	0.68	7.49	3.67	8.44	79.71	2,642
		2	0.00	0.92	6.42	12.84	79.82	0.00	0.00	6.42	10.09	83.49	109
		3	0.00	0.00	9.09	13.64	77.27	0.00	0.00	9.09	4.55	86.36	22
		All	0.72	2.92	5.41	10.06	80.89	0.65	7.14	3.82	8.47	79.91	2,773

continued

Content Area	AGLI	Level of Complexity	Accuracy					Independence					N
			NS	1	2	3	4	NS	1	2	3	4	
Mathematics	Geometry	1	0.83	2.65	5.31	9.04	82.17	0.83	5.85	4.06	7.42	81.84	2,412
		2	0.71	2.12	4.95	15.55	76.68	0.71	3.89	6.01	15.90	73.50	283
		3	0.00	0.00	3.23	9.68	87.10	0.00	9.68	6.45	6.45	77.42	31
		All	0.81	2.57	5.25	9.72	81.66	0.81	5.69	4.29	8.29	80.92	2,726

NS = No Score

Table 11-4. 2010–11 NYSAA: Percentage of Students at Each Level of Accuracy and Independence by Grade, Content Area, AGLI, and Level of Complexity—Grade 6

Content Area	AGLI	Level of Complexity	Accuracy					Independence					N
			NS	1	2	3	4	NS	1	2	3	4	
English Language Arts	Reading	1	1.30	4.09	6.76	10.53	77.32	1.30	6.04	7.21	10.07	75.37	1,539
		2	0.56	2.39	5.34	12.08	79.63	0.56	2.39	3.51	5.48	88.06	712
		3	0.89	1.96	8.36	15.66	73.13	0.53	2.67	4.80	9.61	82.38	562
		All	1.07	3.23	6.72	11.94	77.04	1.00	4.44	5.79	8.81	79.96	2,814
	Writing	1	0.78	3.66	9.15	8.41	78.01	0.78	7.10	6.62	10.54	74.96	2,296
		2	2.36	1.18	5.51	14.57	76.38	2.36	2.36	4.72	7.09	83.46	254
		3	0.48	1.44	5.26	11.48	81.34	0.48	1.91	4.78	11.48	81.34	209
		All	0.91	3.26	8.52	9.21	78.11	0.91	6.27	6.31	10.29	76.22	2,759
Mathematics	Number Sense and Operations	1	1.23	3.34	7.62	10.88	76.94	1.14	8.46	5.50	8.21	76.68	2,363
		2	0.36	0.36	5.09	10.91	83.27	0.73	1.09	1.82	9.09	87.27	275
		3	1.13	3.95	5.08	12.99	76.84	0.56	5.65	2.26	9.04	82.49	177
		All	1.14	3.09	7.21	11.01	77.55	1.07	7.57	4.94	8.35	78.08	2,815
	Algebra	1	0.81	4.18	6.96	15.15	72.90	0.81	8.54	6.15	8.75	75.76	2,343
		2	1.03	2.58	5.43	9.04	81.91	1.03	8.27	3.36	7.24	80.10	387
		3	0.00	6.82	9.09	15.91	68.18	0.00	9.09	2.27	9.09	79.55	44
		All	0.83	4.00	6.78	14.31	74.08	0.83	8.51	5.70	8.54	76.42	2,774

NS = No Score

Table 11-5. 2010–11 NYSAA: Percentage of Students at Each Level of Accuracy and Independence by Grade, Content Area, AGLI, and Level of Complexity—Grade 7

Content Area	*AGLI*	*Level of Complexity*	*Accuracy*					*Independence*					*N*
			NS	*1*	*2*	*3*	*4*	*NS*	*1*	*2*	*3*	*4*	
English Language Arts	Reading	1	0.45	3.39	4.67	8.79	82.69	0.45	7.29	6.12	7.40	78.74	1,797
		2	0.88	2.21	8.07	16.02	72.82	0.55	3.09	4.64	11.05	80.66	905
		3	2.56	0.00	8.97	15.38	73.08	2.56	1.28	10.26	11.54	74.36	78
		All	0.65	2.91	5.90	11.33	79.21	0.54	5.76	5.76	8.71	79.24	2,780
	Listening	1	0.69	2.06	6.30	14.08	76.88	0.65	4.24	5.81	9.89	79.42	2,478
		2	1.00	2.50	9.00	13.50	74.00	1.00	4.50	6.00	14.00	74.50	200
		3	6.82	0.00	2.27	11.36	79.55	6.82	4.55	9.09	4.55	75.00	44
		All	0.81	2.06	6.43	14.00	76.71	0.77	4.26	5.88	10.10	78.99	2,722
Mathematics	Number Sense and Operations	1	0.49	3.00	5.63	12.47	78.41	0.45	7.37	5.39	8.63	78.17	2,469
		2	1.26	0.63	3.77	18.24	76.10	1.26	3.14	4.40	6.29	84.91	159
		3	0.62	1.86	8.07	12.42	77.02	0.62	1.24	8.07	6.21	83.85	161
		All	0.57	2.80	5.66	12.80	78.17	0.54	6.77	5.48	8.35	78.85	2,790
	Statistics and Probability	1	0.86	3.22	4.44	9.23	82.25	0.86	9.38	7.16	9.09	73.51	1,397
		2	0.59	3.11	6.30	16.79	73.22	0.59	3.53	5.71	12.51	77.67	1,191
		3	0.62	2.47	7.41	15.43	74.07	0.62	4.94	8.64	8.64	77.16	162
		All	0.73	3.13	5.42	12.87	77.85	0.73	6.58	6.62	10.55	75.53	2,750

NS = No Score

Table 11-6. 2010–11 NYSAA: Percentage of Students at Each Level of Accuracy and Independence by Grade, Content Area, AGLI, and Level of Complexity—Grade 8

Content Area	*AGLI*	*Level of Complexity*	*Accuracy*					*Independence*					*N*
			NS	*1*	*2*	*3*	*4*	*NS*	*1*	*2*	*3*	*4*	
English Language Arts	Reading	1	0.93	4.31	7.31	12.27	75.18	0.82	8.73	6.76	8.84	74.85	1,833
		2	0.71	2.47	6.70	18.17	71.96	0.71	1.23	4.59	10.76	82.72	567
		3	0.61	1.83	7.93	15.85	73.78	0.61	1.83	6.10	8.54	82.93	164
		All	0.90	3.74	7.21	13.80	74.35	0.82	6.63	6.24	9.24	77.08	2,565
	Writing	1	0.81	2.54	8.05	15.13	73.47	0.85	5.81	5.38	10.38	77.58	2,360
		2	3.45	0.00	6.90	10.34	79.31	3.45	3.45	5.75	5.75	81.61	87
		3	1.20	2.41	7.23	14.46	74.70	1.20	2.41	9.64	6.02	80.72	83
		All	0.91	2.45	7.98	14.94	73.72	0.95	5.61	5.53	10.08	77.83	2,530

continued

Content Area	AGLI	Level of Complexity	Accuracy					Independence					N
			NS	1	2	3	4	NS	1	2	3	4	
Mathematics	Geometry	1	1.13	2.93	5.74	12.20	78.00	0.88	5.83	4.86	7.54	80.89	2,386
		2	2.33	4.65	6.98	10.47	75.58	2.33	9.30	9.30	10.47	68.60	86
		3	0.00	1.11	4.44	17.78	76.67	1.11	3.33	5.56	8.89	81.11	90
		All	1.17	2.93	5.74	12.33	77.84	0.98	5.85	5.03	7.69	80.45	2,563
	Algebra	1	0.74	4.43	7.85	12.96	74.03	0.63	6.69	5.37	8.69	78.61	1,898
		2	0.47	2.83	7.08	16.75	72.88	0.47	5.19	2.59	10.85	80.90	424
		3	0.00	1.00	5.47	17.41	76.12	0.00	0.00	5.47	9.95	84.58	201
		All	0.63	3.88	7.53	13.95	74.00	0.55	5.91	4.91	9.16	79.47	2,523
Science	Scientific Inquiry	1	1.03	3.51	8.06	11.32	76.07	0.98	6.36	5.06	7.80	79.79	1,935
		2	0.86	3.23	5.16	12.90	77.85	0.86	5.59	7.53	11.61	74.41	465
		3	1.97	0.66	5.26	6.58	85.53	1.97	3.29	5.92	11.18	77.63	152
		All	1.10	3.29	7.36	11.32	76.93	1.06	6.03	5.56	8.70	78.65	2,553
	Living Environment or Physical Setting/Earth Science	1	0.90	5.28	6.53	11.15	76.14	0.90	5.64	4.98	8.87	79.62	1,668
		2	0.98	1.97	4.49	13.06	79.49	0.98	3.65	4.07	7.02	84.27	712
		3	1.20	1.20	8.43	8.43	80.72	1.20	3.61	4.82	10.84	79.52	83
		All	0.93	4.18	6.01	11.61	77.26	0.93	4.99	4.71	8.40	80.96	2,463

NS = No Score

Table 11-7. 2010–11 NYSAA: Percentage of Students at Each Level of Accuracy and Independence by Grade, Content Area, AGLI, and Level of Complexity—High School

Content Area	AGLI	Level of Complexity	Accuracy					Independence					N
			NS	1	2	3	4	NS	1	2	3	4	
English Language Arts	Reading	1	0.83	4.33	8.61	13.96	72.27	0.64	8.52	7.88	11.84	71.12	2,171
		2	0.77	1.02	8.94	19.41	69.86	0.89	1.53	5.36	8.94	83.27	783
		3	0.00	0.00	0.00	9.68	90.32	0.00	0.00	9.68	25.81	64.52	31
		All	0.80	3.42	8.61	15.34	71.83	0.70	6.60	7.24	11.22	74.24	2,985
	Writing	1	0.83	3.54	7.27	15.68	72.68	0.83	7.39	6.84	10.77	74.17	2,544
		2	0.87	2.92	4.66	16.62	74.93	0.87	2.62	5.83	15.74	74.93	343
		3	0.00	0.00	10.42	22.92	66.67	0.00	2.08	8.33	10.42	79.17	48
		All	0.82	3.41	7.02	15.91	72.84	0.82	6.75	6.75	11.35	74.34	2,935
Mathematics	Algebra	1	0.58	4.54	8.43	13.80	72.66	0.37	7.72	5.82	9.46	76.62	2,421
		2	0.24	5.05	5.53	20.43	68.75	0.24	4.57	3.61	13.70	77.88	416
		3	1.61	4.84	8.06	12.10	73.39	0.81	4.03	4.03	5.65	85.48	124
		All	0.57	4.63	8.00	14.66	72.14	0.37	7.13	5.44	9.90	77.17	2,961

continued

Content Area	*AGLI*	*Level of Complexity*	*Accuracy*					*Independence*					*N*
			NS	*1*	*2*	*3*	*4*	*NS*	*1*	*2*	*3*	*4*	
Mathematics	Statistics and Probability	1	0.98	3.89	5.60	12.27	77.26	0.98	8.08	7.31	10.47	73.15	2,339
		2	1.00	2.40	3.81	19.04	73.75	1.00	7.21	5.61	12.42	73.75	499
		3	0.00	0.00	1.83	3.67	94.50	0.00	0.92	2.75	2.75	93.58	109
		All	0.95	3.50	5.16	13.10	77.30	0.95	7.67	6.85	10.52	74.01	2,947
Science	Living Environment	1	1.09	3.68	5.87	12.65	76.71	0.79	6.39	5.65	8.23	78.94	2,284
		2	0.00	2.65	7.13	13.65	76.58	0.00	3.05	6.11	12.63	78.21	491
		3	0.00	3.29	4.69	14.08	77.93	0.00	4.69	7.98	12.21	75.12	213
		All	0.84	3.48	5.99	12.92	76.77	0.60	5.72	5.89	9.24	78.55	2,988
	Physical Setting/Earth Science	1	1.15	4.40	7.05	8.29	79.09	1.20	6.50	5.69	8.08	78.54	2,339
		2	0.19	5.68	8.14	14.77	71.21	0.19	3.03	7.77	10.98	78.03	528
		3	0.00	1.14	6.82	29.55	62.50	0.00	3.41	6.82	29.55	60.23	88
		All	0.95	4.53	7.24	10.08	77.19	0.98	5.79	6.09	9.24	77.90	2,955
Social Studies	U.S. History	1	1.71	6.78	5.59	8.23	77.69	1.66	8.33	6.63	9.32	74.07	1,932
		2	1.09	3.18	6.07	9.45	80.20	0.50	2.69	3.48	5.57	87.76	1,005
		3	0.00	0.00	10.42	14.58	75.00	0.00	0.00	16.67	10.42	72.92	48
		All	1.47	5.46	5.83	8.74	78.49	1.24	6.30	5.73	8.07	78.66	2,985
	Global History	1	0.84	4.89	6.10	10.38	77.79	0.88	7.87	6.94	8.57	75.74	2,148
		2	0.50	3.63	10.89	6.13	78.85	0.50	2.63	6.38	4.63	85.86	799
		3	0.00	6.25	12.50	37.50	43.75	0.00	0.00	18.75	18.75	62.50	16
		All	0.74	4.56	7.42	9.38	77.89	0.78	6.41	6.85	7.56	78.40	2,963

11.1.2 Performance Level Scores

For purposes of reporting, raw scores on the New York State Alternate Assessment (NYSAA) are translated to performance levels using the cut scores established via standard setting. Tables 11-8 through 11-11 show the raw score to performance level conversion tables.

Table 11-8. 2010–11 NYSAA: Raw Score to Performance Level Conversions—English Language Arts

Raw Score	*Grade 3*	*Grade 4*	*Grade 5*	*Grade 6*	*Grade 7*	*Grade 8*	*High School*
0	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1
11	1	1	1	1	1	1	1
12	1	1	1	1	1	1	1
13	1	1	1	1	1	1	1
14	1	1	1	1	1	1	1
15	1	1	1	1	1	1	1
16	1	1	1	1	1	1	1
17	1	1	1	1	1	1	1
18	1	1	1	1	1	1	1
19	1	1	1	1	1	1	1
20	1	1	1	1	1	1	1
21	1	1	1	1	1	1	1
22	1	1	1	1	2	2	1
23	1	1	1	1	2	2	1
24	1	1	1	1	2	2	1
25	1	1	1	1	2	2	1
26	1	1	1	1	2	2	1
27	1	1	1	1	2	2	2
28	1	1	1	2	2	2	2
29	1	1	1	2	2	2	2
30	1	1	2	2	2	2	2
31	1	1	2	2	2	2	2
32	1	1	2	2	2	2	2
33	2	2	2	2	2	2	2
34	2	2	2	2	2	2	2
35	2	2	2	2	2	3	3
36	2	2	2	2	2	3	3
37	2	2	2	2	3	3	3
38	2	2	2	2	3	3	3
39	2	2	3	2	3	3	3
40	3	2	3	2	3	3	3
41	3	3	3	3	3	3	3
42	3	3	3	3	3	3	3

continued

Raw Score	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	High School
43	3	3	3	3	4	4	4
44	3	3	3	3	4	4	4
45	4	3	3	3	4	4	4
46	4	4	3	4	4	4	4
47	4	4	4	4	4	4	4
48	4	4	4	4	4	4	4

Table 11-9. 2010–11 NYSAA: Raw Score to Performance Level Conversions—Mathematics

Raw Score	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	High School
0	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1
11	1	1	1	1	1	1	1
12	1	1	1	1	1	1	1
13	1	1	1	1	1	1	1
14	1	1	1	1	1	1	1
15	1	1	1	1	1	1	1
16	1	1	1	1	1	1	1
17	1	1	1	1	1	1	1
18	1	1	1	1	1	1	1
19	1	1	1	1	1	1	1
20	1	1	1	1	1	1	2
21	1	1	1	1	1	1	2
22	1	1	1	2	1	1	2
23	2	2	1	2	1	1	2
24	2	2	1	2	1	1	2
25	2	2	2	2	1	1	2
26	2	2	2	2	1	1	2
27	2	2	2	2	1	1	2
28	2	2	2	2	1	1	2
29	2	2	2	2	1	1	2
30	2	2	2	2	1	1	2
31	2	2	2	2	1	1	2
32	2	2	2	2	2	2	2
33	2	2	2	2	2	2	2
34	2	2	2	3	2	2	2
35	3	2	2	3	2	2	3
36	3	2	2	3	2	2	3
37	3	2	3	3	2	2	3
38	3	2	3	3	3	2	3
39	3	3	3	3	3	3	3

continued

Raw Score	*Grade 3*	*Grade 4*	*Grade 5*	*Grade 6*	*Grade 7*	*Grade 8*	*High School*
40	3	3	3	3	3	3	3
41	3	3	3	3	3	3	3
42	3	3	3	3	3	3	3
43	3	3	3	3	3	3	3
44	3	3	3	3	3	3	3
45	3	3	3	4	3	3	3
46	4	3	3	4	3	3	4
47	4	4	4	4	4	4	4
48	4	4	4	4	4	4	4

Table 11-10. 2010–11 NYSAA: Raw Score to Performance Level Conversions—Science

Raw Score	*Grade 4*	*Grade 8*	*High School*
0	1	1	1
1	1	1	1
2	1	1	1
3	1	1	1
4	1	1	1
5	1	1	1
6	1	1	1
7	1	1	1
8	1	1	1
9	1	1	1
10	1	1	1
11	1	1	1
12	1	1	1
13	1	1	1
14	1	1	1
15	1	1	1
16	1	1	1
17	1	1	1
18	1	1	1
19	2	1	1
20	2	1	2
21	2	2	2
22	2	2	2
23	2	2	2
24	2	2	2
25	2	2	2
26	2	2	2
27	2	2	2
28	2	2	2
29	2	2	2
30	2	2	2
31	3	2	2
32	3	2	2
33	3	3	3
34	3	3	3
35	3	3	3
36	3	3	3

continued

Raw Score	*Grade 4*	*Grade 8*	*High School*
37	3	3	3
38	3	3	3
39	3	3	3
40	3	3	3
41	4	3	3
42	4	4	4
43	4	4	4
44	4	4	4
45	4	4	4
46	4	4	4
47	4	4	4
48	4	4	4

Table 11-11. 2010–11 NYSAA: Raw Score to Performance Level Conversions—Social Studies

Raw Score	*High School*
0	1
1	1
2	1
3	1
4	1
5	1
6	1
7	1
8	1
9	1
10	1
11	1
12	1
13	1
14	1
15	1
16	1
17	1
18	1
19	1
20	1
21	1
22	1
23	1
24	1
25	1
26	1
27	1
28	1
29	1
30	1
31	1
32	1
33	2

continued

Raw Score	*High School*
34	2
35	2
36	2
37	2
38	2
39	3
40	3
41	3
42	3
43	3
44	3
45	3
46	4
47	4
48	4

Shown in Tables 11-12 through 11-15 is the percentage of students statewide who scored in each performance level category for each content area. (Note: Performance levels are abbreviated as NM: Not Meeting Learning Standards; PM: Partially Meeting Learning Standards; M: Meeting Learning Standards; and MD: Meeting Learning Standards with Distinction.) In all content areas, students performed well on the assessment, with the percentage of students scoring Meeting Learning Standards or better ranging from 84.4% in Grade 6 English language arts (ELA) to 92.3% in Grade 4 science. The percentage of students categorized as Meeting Learning Standards with Distinction ranged from 61.0% in Grade 7 mathematics to 80.3% in Grade 4 science and in Grade 7 ELA.

Table 11-12. 2010–11 NYSAA: State Results—English Language Arts

Grade	*Percent at Each Performance Level*				
	NM	*PM*	*M*	*MD*	*M + MD*
3	7.8	6.4	13.3	72.5	85.8
4	6.4	8.7	14.7	70.3	84.9
5	3.9	6.3	26.3	63.4	89.8
6	4.5	11.1	17.7	66.8	84.4
7	1.1	7.9	10.7	80.3	90.9
8	1.0	7.0	14.1	77.9	92.0
High School	3.9	5.5	14.8	75.8	90.6

Table 11-13. 2010–11 NYSAA: State Results—Mathematics

Grade	*Percent at Each Performance Level*				
	NM	*PM*	*M*	*MD*	*M + MD*
3	1.3	7.8	23.6	67.2	90.8
4	1.1	11.7	24.9	62.3	87.2
5	2.9	6.4	24.0	66.7	90.7
6	1.6	8.3	19.4	70.7	90.1
7	6.1	4.7	28.2	61.0	89.2
8	6.4	4.9	27.2	61.5	88.7
High School	0.8	9.0	26.3	64.0	90.3

Table 11-14. 2010–11 NYSAA: State Results—Science

Grade	*Percent at Each Performance Level*				
	NM	*PM*	*M*	*MD*	*M + MD*
4	4.9	2.7	12.0	80.3	92.3
8	6.2	7.4	10.5	75.9	86.4
High School	1.3	7.1	14.5	77.1	91.6

Table 11-15. 010–11 NYSAA: State Results—Social Studies

Grade	*Percent at Each Performance Level*				
	NM	*PM*	*M*	*MD*	*M + MD*
High School	6.5	5.8	19.8	67.9	87.6

11.2 Total Raw Score Frequency Distributions

Shown in Tables 11-16 through 11-33 are raw score frequency distributions for each grade and content area. Frequencies are shown for all students in the State, and they are also broken down by gender and ethnicity (Black, Asian, Hispanic, and White). Ethnic groups with fewer than 25 students are not broken out in these tables.

Table 11-16. 2010–11 NYSAA: Raw Score Frequency Distributions—English Language Arts, Grade 3

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
1	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
3	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
4	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
5	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
6	1	0.04	0	0.00	1	0.13	0	0.00	0	0.00	1	0.15	0	0.00
7	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
8	1	0.04	1	0.05	0	0.00	1	0.15	0	0.00	0	0.00	0	0.00
9	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
10	1	0.04	1	0.05	0	0.00	0	0.00	0	0.00	0	0.00	1	0.09
11	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
12	1	0.04	1	0.05	0	0.00	0	0.00	0	0.00	1	0.15	0	0.00
13	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
14	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
15	3	0.12	1	0.05	2	0.26	0	0.00	0	0.00	0	0.00	3	0.28
16	3	0.12	2	0.11	1	0.13	1	0.15	0	0.00	0	0.00	2	0.18
17	1	0.04	1	0.05	0	0.00	0	0.00	0	0.00	0	0.00	1	0.09
18	2	0.08	0	0.00	2	0.26	0	0.00	0	0.00	0	0.00	2	0.18
19	3	0.12	3	0.16	0	0.00	3	0.44	0	0.00	0	0.00	0	0.00
20	2	0.08	1	0.05	1	0.13	0	0.00	0	0.00	0	0.00	2	0.18
21	10	0.39	7	0.38	3	0.40	3	0.44	0	0.00	1	0.15	6	0.55
22	8	0.31	7	0.38	1	0.13	5	0.74	0	0.00	0	0.00	3	0.28
23	8	0.31	7	0.38	1	0.13	2	0.30	1	0.81	3	0.46	2	0.18
24	72	2.79	52	2.84	20	2.65	16	2.37	3	2.44	29	4.47	23	2.11
25	3	0.12	2	0.11	1	0.13	1	0.15	0	0.00	0	0.00	2	0.18
26	4	0.15	3	0.16	1	0.13	2	0.30	0	0.00	0	0.00	2	0.18
27	3	0.12	2	0.11	1	0.13	2	0.30	0	0.00	1	0.15	0	0.00
28	8	0.31	5	0.27	3	0.40	3	0.44	0	0.00	2	0.31	3	0.28
29	3	0.12	1	0.05	2	0.26	0	0.00	1	0.81	0	0.00	2	0.18
30	30	1.16	17	0.93	13	1.72	4	0.59	0	0.00	10	1.54	16	1.47
31	9	0.35	7	0.38	2	0.26	2	0.30	0	0.00	1	0.15	6	0.55
32	26	1.01	18	0.98	8	1.06	4	0.59	1	0.81	7	1.08	14	1.29
33	17	0.66	11	0.60	6	0.79	1	0.15	4	3.25	6	0.92	6	0.55
34	16	0.62	9	0.49	7	0.93	0	0.00	1	0.81	2	0.31	13	1.19

continued

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
35	13	0.50	9	0.49	4	0.53	3	0.44	0	0.00	3	0.46	7	0.64
36	26	1.01	15	0.82	11	1.46	9	1.33	0	0.00	4	0.62	13	1.19
37	24	0.93	20	1.09	4	0.53	6	0.89	0	0.00	3	0.46	15	1.38
38	24	0.93	16	0.88	8	1.06	6	0.89	1	0.81	3	0.46	14	1.29
39	45	1.74	29	1.59	16	2.12	12	1.78	2	1.63	9	1.39	22	2.02
40	46	1.78	27	1.48	19	2.52	13	1.93	0	0.00	7	1.08	26	2.39
41	46	1.78	31	1.70	15	1.99	9	1.33	2	1.63	10	1.54	24	2.21
42	85	3.29	59	3.23	26	3.44	19	2.81	5	4.07	23	3.54	35	3.22
43	58	2.25	39	2.13	19	2.52	13	1.93	2	1.63	11	1.69	30	2.76
44	108	4.18	77	4.21	31	4.11	24	3.56	6	4.88	29	4.47	47	4.32
45	95	3.68	69	3.77	26	3.44	29	4.30	6	4.88	18	2.77	42	3.86
46	168	6.50	122	6.67	46	6.09	42	6.22	7	5.69	37	5.70	76	6.99
47	207	8.01	157	8.59	50	6.62	59	8.74	9	7.32	57	8.78	81	7.44
48	1,403	54.32	999	54.65	404	53.51	381	56.44	72	58.54	371	57.16	547	50.28

Note: Ethnic groups with fewer than 25 students are not broken out in this table.

Table 11-17. 2010–11 NYSAA: Raw Score Frequency Distributions—English Language Arts, Grade 4

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
1	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
3	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
4	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
5	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
6	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
7	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
8	1	0.03	1	0.05	0	0.00	1	0.13	0	0.00	0	0.00	0	0.00
9	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
10	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
11	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
12	1	0.03	1	0.05	0	0.00	0	0.00	0	0.00	1	0.13	0	0.00
13	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
14	1	0.03	1	0.05	0	0.00	0	0.00	0	0.00	1	0.13	0	0.00
15	3	0.10	3	0.15	0	0.00	2	0.26	0	0.00	0	0.00	1	0.09

continued

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
16	3	0.10	1	0.05	2	0.22	1	0.13	1	0.66	0	0.00	1	0.09
17	2	0.07	1	0.05	1	0.11	0	0.00	1	0.66	1	0.13	0	0.00
18	4	0.14	3	0.15	1	0.11	1	0.13	0	0.00	2	0.25	1	0.09
19	7	0.24	2	0.10	5	0.56	1	0.13	0	0.00	3	0.38	3	0.27
20	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
21	3	0.10	1	0.05	2	0.22	2	0.26	0	0.00	1	0.13	0	0.00
22	5	0.17	3	0.15	2	0.22	2	0.26	0	0.00	1	0.13	2	0.18
23	8	0.28	6	0.30	2	0.22	1	0.13	1	0.66	2	0.25	4	0.35
24	69	2.40	46	2.31	23	2.58	23	2.96	2	1.32	23	2.92	20	1.77
25	2	0.07	2	0.10	0	0.00	0	0.00	0	0.00	2	0.25	0	0.00
26	2	0.07	2	0.10	0	0.00	0	0.00	0	0.00	0	0.00	2	0.18
27	4	0.14	4	0.20	0	0.00	1	0.13	0	0.00	0	0.00	3	0.27
28	6	0.21	3	0.15	3	0.34	0	0.00	0	0.00	1	0.13	5	0.44
29	6	0.21	3	0.15	3	0.34	2	0.26	1	0.66	0	0.00	3	0.27
30	34	1.18	24	1.21	10	1.12	5	0.64	5	3.31	8	1.02	16	1.42
31	9	0.31	7	0.35	2	0.22	3	0.39	1	0.66	0	0.00	5	0.44
32	13	0.45	9	0.45	4	0.45	8	1.03	1	0.66	0	0.00	4	0.35
33	18	0.62	11	0.55	7	0.78	3	0.39	1	0.66	6	0.76	8	0.71
34	18	0.62	16	0.80	2	0.22	6	0.77	0	0.00	5	0.63	7	0.62
35	23	0.80	17	0.86	6	0.67	2	0.26	1	0.66	6	0.76	13	1.15
36	28	0.97	20	1.01	8	0.90	7	0.90	1	0.66	6	0.76	14	1.24
37	32	1.11	17	0.86	15	1.68	6	0.77	2	1.32	7	0.89	14	1.24
38	27	0.94	17	0.86	10	1.12	2	0.26	1	0.66	4	0.51	20	1.77
39	58	2.01	43	2.16	15	1.68	20	2.57	3	1.99	6	0.76	27	2.39
40	47	1.63	29	1.46	18	2.02	13	1.67	1	0.66	8	1.02	25	2.22
41	48	1.67	33	1.66	15	1.68	11	1.42	0	0.00	12	1.52	25	2.22
42	91	3.16	60	3.02	31	3.47	26	3.35	6	3.97	20	2.54	38	3.37
43	49	1.70	39	1.96	10	1.12	12	1.54	2	1.32	10	1.27	23	2.04
44	101	3.51	69	3.47	32	3.58	32	4.12	3	1.99	23	2.92	42	3.72
45	134	4.65	97	4.88	37	4.14	37	4.76	3	1.99	29	3.68	64	5.67
46	179	6.21	124	6.24	55	6.16	48	6.18	13	8.61	34	4.31	81	7.18
47	183	6.35	136	6.84	47	5.26	43	5.53	6	3.97	47	5.96	87	7.71
48	1,662	57.69	1,137	57.19	525	58.79	456	58.69	95	62.91	519	65.86	570	50.53

Note: Ethnic groups with fewer than 25 students are not broken out in this table.

Table 11-18. 2010–11 NYSAA: Raw Score Frequency Distributions—English Language Arts, Grade 5

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
1	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
3	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
4	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
5	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
6	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
7	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
8	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
9	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
10	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
11	1	0.04	1	0.05	0	0.00	0	0.00	0	0.00	0	0.00	1	0.09
12	1	0.04	0	0.00	1	0.12	1	0.13	0	0.00	0	0.00	0	0.00
13	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
14	3	0.11	2	0.10	1	0.12	0	0.00	2	1.44	1	0.14	0	0.00
15	2	0.07	0	0.00	2	0.24	2	0.26	0	0.00	0	0.00	0	0.00
16	4	0.14	3	0.16	1	0.12	1	0.13	2	1.44	0	0.00	1	0.09
17	1	0.04	1	0.05	0	0.00	1	0.13	0	0.00	0	0.00	0	0.00
18	1	0.04	1	0.05	0	0.00	0	0.00	1	0.72	0	0.00	0	0.00
19	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
20	3	0.11	1	0.05	2	0.24	1	0.13	0	0.00	1	0.14	1	0.09
21	6	0.22	3	0.16	3	0.35	0	0.00	2	1.44	2	0.28	2	0.18
22	7	0.25	4	0.21	3	0.35	3	0.40	0	0.00	1	0.14	3	0.27
23	7	0.25	4	0.21	3	0.35	2	0.26	1	0.72	1	0.14	3	0.27
24	55	1.98	41	2.13	14	1.65	21	2.78	2	1.44	16	2.22	16	1.43
25	1	0.04	0	0.00	1	0.12	0	0.00	0	0.00	0	0.00	1	0.09
26	2	0.07	1	0.05	1	0.12	0	0.00	0	0.00	2	0.28	0	0.00
27	5	0.18	2	0.10	3	0.35	1	0.13	1	0.72	1	0.14	2	0.18
28	5	0.18	2	0.10	3	0.35	2	0.26	0	0.00	0	0.00	3	0.27
29	5	0.18	2	0.10	3	0.35	0	0.00	0	0.00	1	0.14	4	0.36
30	20	0.72	14	0.73	6	0.71	4	0.53	1	0.72	6	0.83	9	0.80
31	9	0.32	8	0.41	1	0.12	3	0.40	0	0.00	1	0.14	5	0.45
32	12	0.43	6	0.31	6	0.71	4	0.53	2	1.44	2	0.28	4	0.36
33	14	0.50	9	0.47	5	0.59	3	0.40	0	0.00	3	0.42	8	0.71
34	11	0.40	10	0.52	1	0.12	2	0.26	1	0.72	3	0.42	5	0.45

continued

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
35	21	0.76	16	0.83	5	0.59	3	0.40	1	0.72	6	0.83	11	0.98
36	30	1.08	20	1.04	10	1.18	8	1.06	0	0.00	9	1.25	13	1.16
37	24	0.86	16	0.83	8	0.94	8	1.06	2	1.44	3	0.42	11	0.98
38	34	1.23	22	1.14	12	1.42	11	1.46	0	0.00	7	0.97	15	1.34
39	65	2.34	46	2.39	19	2.24	18	2.38	2	1.44	14	1.94	30	2.68
40	43	1.55	32	1.66	11	1.30	12	1.59	1	0.72	14	1.94	15	1.34
41	46	1.66	29	1.50	17	2.01	9	1.19	1	0.72	14	1.94	22	1.96
42	80	2.88	52	2.70	28	3.31	19	2.51	5	3.60	17	2.35	39	3.48
43	81	2.92	58	3.01	23	2.72	19	2.51	1	0.72	14	1.94	46	4.10
44	117	4.22	77	3.99	40	4.72	32	4.23	7	5.04	36	4.99	41	3.66
45	138	4.97	105	5.45	33	3.90	33	4.37	7	5.04	24	3.32	72	6.42
46	161	5.80	118	6.12	43	5.08	35	4.63	5	3.60	38	5.26	83	7.40
47	187	6.74	122	6.33	65	7.67	47	6.22	6	4.32	38	5.26	93	8.30
48	1,573	56.68	1,100	57.05	473	55.84	451	59.66	86	61.87	447	61.91	562	50.13

Note: Ethnic groups with fewer than 25 students are not broken out in this table.

Table 11-19. 2010–11 NYSAA: Raw Score Frequency Distributions—English Language Arts, Grade 6

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
1	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
3	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
4	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
5	1	0.04	1	0.05	0	0.00	0	0.00	0	0.00	0	0.00	1	0.09
6	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
7	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
8	1	0.04	0	0.00	1	0.11	0	0.00	1	0.68	0	0.00	0	0.00
9	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
10	1	0.04	0	0.00	1	0.11	0	0.00	0	0.00	0	0.00	1	0.09
11	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
12	2	0.07	0	0.00	2	0.22	1	0.13	0	0.00	1	0.13	0	0.00
13	2	0.07	1	0.05	1	0.11	2	0.27	0	0.00	0	0.00	0	0.00
14	1	0.04	1	0.05	0	0.00	1	0.13	0	0.00	0	0.00	0	0.00

continued

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
15	5	0.18	3	0.15	2	0.22	3	0.40	0	0.00	0	0.00	2	0.17
16	5	0.18	4	0.21	1	0.11	2	0.27	0	0.00	0	0.00	2	0.17
17	4	0.14	2	0.10	2	0.22	1	0.13	0	0.00	0	0.00	3	0.26
18	2	0.07	2	0.10	0	0.00	0	0.00	0	0.00	1	0.13	1	0.09
19	2	0.07	1	0.05	1	0.11	1	0.13	0	0.00	0	0.00	1	0.09
20	2	0.07	0	0.00	2	0.22	0	0.00	0	0.00	0	0.00	2	0.17
21	10	0.35	8	0.41	2	0.22	2	0.27	3	2.03	3	0.40	2	0.17
22	7	0.25	5	0.26	2	0.22	3	0.40	0	0.00	3	0.40	1	0.09
23	8	0.28	7	0.36	1	0.11	3	0.40	0	0.00	2	0.27	3	0.26
24	66	2.33	53	2.73	13	1.46	24	3.22	5	3.38	17	2.25	20	1.73
25	1	0.04	1	0.05	0	0.00	0	0.00	0	0.00	1	0.13	0	0.00
26	3	0.11	2	0.10	1	0.11	2	0.27	0	0.00	1	0.13	0	0.00
27	5	0.18	4	0.21	1	0.11	0	0.00	0	0.00	1	0.13	4	0.35
28	6	0.21	4	0.21	2	0.22	2	0.27	1	0.68	1	0.13	2	0.17
29	5	0.18	3	0.15	2	0.22	1	0.13	0	0.00	1	0.13	3	0.26
30	34	1.20	20	1.03	14	1.57	9	1.21	3	2.03	2	0.27	20	1.73
31	10	0.35	10	0.52	0	0.00	2	0.27	2	1.35	2	0.27	4	0.35
32	20	0.71	14	0.72	6	0.67	3	0.40	2	1.35	7	0.93	8	0.69
33	19	0.67	16	0.82	3	0.34	4	0.54	0	0.00	5	0.66	10	0.87
34	14	0.49	9	0.46	5	0.56	1	0.13	2	1.35	2	0.27	9	0.78
35	16	0.57	9	0.46	7	0.79	4	0.54	0	0.00	2	0.27	10	0.87
36	26	0.92	20	1.03	6	0.67	2	0.27	4	2.70	8	1.06	12	1.04
37	21	0.74	14	0.72	7	0.79	5	0.67	1	0.68	3	0.40	12	1.04
38	30	1.06	17	0.88	13	1.46	7	0.94	2	1.35	7	0.93	14	1.21
39	67	2.37	42	2.16	25	2.81	18	2.41	5	3.38	13	1.72	31	2.69
40	45	1.59	28	1.44	17	1.91	12	1.61	2	1.35	15	1.99	16	1.39
41	48	1.70	33	1.70	15	1.69	13	1.74	0	0.00	16	2.12	19	1.65
42	89	3.14	58	2.99	31	3.48	18	2.41	5	3.38	22	2.92	44	3.81
43	84	2.97	58	2.99	26	2.92	23	3.08	3	2.03	14	1.86	42	3.64
44	122	4.31	88	4.53	34	3.82	37	4.96	4	2.70	27	3.58	52	4.51
45	157	5.55	97	5.00	60	6.74	32	4.29	7	4.73	33	4.38	83	7.19
46	193	6.82	127	6.54	66	7.42	33	4.42	6	4.05	52	6.90	100	8.67
47	195	6.89	136	7.01	59	6.63	43	5.76	7	4.73	50	6.63	91	7.89
48	1,502	53.06	1,043	53.74	459	51.57	432	57.91	83	56.08	442	58.62	529	45.84

Note: Ethnic groups with fewer than 25 students are not broken out in this table.

Table 11-20. 2010–11 NYSAA: Raw Score Frequency Distributions—English Language Arts, Grade 7

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
1	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
3	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
4	1	0.04	0	0.00	1	0.11	0	0.00	0	0.00	0	0.00	1	0.08
5	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
6	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
7	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
8	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
9	1	0.04	1	0.05	0	0.00	0	0.00	0	0.00	0	0.00	1	0.08
10	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
11	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
12	1	0.04	0	0.00	1	0.11	0	0.00	0	0.00	0	0.00	1	0.08
13	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
14	1	0.04	0	0.00	1	0.11	0	0.00	0	0.00	1	0.14	0	0.00
15	2	0.07	1	0.05	1	0.11	0	0.00	0	0.00	0	0.00	2	0.17
16	2	0.07	2	0.11	0	0.00	2	0.28	0	0.00	0	0.00	0	0.00
17	1	0.04	1	0.05	0	0.00	1	0.14	0	0.00	0	0.00	0	0.00
18	4	0.14	3	0.16	1	0.11	1	0.14	0	0.00	0	0.00	3	0.25
19	4	0.14	2	0.11	2	0.22	1	0.14	0	0.00	1	0.14	2	0.17
20	5	0.18	4	0.21	1	0.11	1	0.14	0	0.00	3	0.43	1	0.08
21	10	0.36	7	0.37	3	0.33	3	0.41	0	0.00	3	0.43	4	0.33
22	4	0.14	3	0.16	1	0.11	1	0.14	1	0.69	1	0.14	1	0.08
23	6	0.21	2	0.11	4	0.44	2	0.28	0	0.00	2	0.29	2	0.17
24	61	2.18	37	1.97	24	2.63	16	2.20	4	2.76	18	2.61	22	1.84
25	4	0.14	1	0.05	3	0.33	1	0.14	0	0.00	0	0.00	3	0.25
26	3	0.11	2	0.11	1	0.11	2	0.28	0	0.00	0	0.00	1	0.08
27	2	0.07	1	0.05	1	0.11	0	0.00	0	0.00	0	0.00	2	0.17
28	8	0.29	6	0.32	2	0.22	3	0.41	0	0.00	0	0.00	5	0.42
29	5	0.18	3	0.16	2	0.22	0	0.00	0	0.00	1	0.14	4	0.33
30	36	1.29	23	1.22	13	1.42	9	1.24	3	2.07	10	1.45	14	1.17
31	7	0.25	5	0.27	2	0.22	2	0.28	3	2.07	0	0.00	2	0.17
32	17	0.61	13	0.69	4	0.44	5	0.69	2	1.38	1	0.14	9	0.75
33	13	0.47	12	0.64	1	0.11	4	0.55	0	0.00	3	0.43	6	0.50
34	13	0.47	8	0.43	5	0.55	3	0.41	0	0.00	4	0.58	6	0.50

continued

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
35	19	0.68	17	0.90	2	0.22	6	0.83	1	0.69	3	0.43	9	0.75
36	24	0.86	18	0.96	6	0.66	6	0.83	0	0.00	11	1.59	7	0.59
37	17	0.61	12	0.64	5	0.55	5	0.69	1	0.69	4	0.58	7	0.59
38	28	1.00	17	0.90	11	1.20	8	1.10	0	0.00	6	0.87	14	1.17
39	50	1.79	32	1.70	18	1.97	12	1.65	1	0.69	13	1.88	24	2.01
40	51	1.82	33	1.75	18	1.97	14	1.93	4	2.76	10	1.45	23	1.92
41	59	2.11	41	2.18	18	1.97	18	2.48	1	0.69	11	1.59	29	2.42
42	93	3.33	60	3.19	33	3.61	27	3.71	2	1.38	20	2.90	43	3.60
43	58	2.08	38	2.02	20	2.19	15	2.06	3	2.07	14	2.03	26	2.17
44	123	4.40	84	4.46	39	4.27	24	3.30	1	0.69	32	4.64	64	5.35
45	150	5.37	103	5.47	47	5.15	28	3.85	7	4.83	44	6.38	69	5.77
46	176	6.30	112	5.95	64	7.01	41	5.64	8	5.52	42	6.09	83	6.94
47	215	7.69	150	7.97	65	7.12	52	7.15	6	4.14	48	6.96	107	8.95
48	1,521	54.42	1,028	54.62	493	54.00	414	56.95	97	66.90	384	55.65	599	50.08

Note: Ethnic groups with fewer than 25 students are not broken out in this table.

Table 11-21. 2010–11 NYSAA: Raw Score Frequency Distributions—English Language Arts, Grade 8

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
1	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
3	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
4	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
5	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
6	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
7	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
8	1	0.04	1	0.06	0	0.00	1	0.15	0	0.00	0	0.00	0	0.00
9	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
10	1	0.04	1	0.06	0	0.00	0	0.00	0	0.00	0	0.00	1	0.09
11	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
12	1	0.04	1	0.06	0	0.00	1	0.15	0	0.00	0	0.00	0	0.00
13	1	0.04	1	0.06	0	0.00	1	0.15	0	0.00	0	0.00	0	0.00
14	1	0.04	0	0.00	1	0.12	0	0.00	0	0.00	0	0.00	0	0.00
15	1	0.04	0	0.00	1	0.12	0	0.00	0	0.00	0	0.00	1	0.09

continued

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
16	3	0.12	3	0.17	0	0.00	2	0.30	0	0.00	1	0.16	0	0.00
17	1	0.04	1	0.06	0	0.00	0	0.00	0	0.00	0	0.00	1	0.09
18	4	0.16	3	0.17	1	0.12	1	0.15	0	0.00	0	0.00	3	0.27
19	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
20	5	0.19	4	0.23	1	0.12	1	0.15	0	0.00	2	0.32	2	0.18
21	7	0.27	4	0.23	3	0.35	3	0.45	0	0.00	1	0.16	3	0.27
22	4	0.16	2	0.12	2	0.23	1	0.15	0	0.00	1	0.16	2	0.18
23	6	0.23	5	0.29	1	0.12	2	0.30	0	0.00	1	0.16	3	0.27
24	34	1.32	23	1.34	11	1.28	15	2.26	1	0.74	9	1.45	9	0.81
25	1	0.04	1	0.06	0	0.00	0	0.00	0	0.00	1	0.16	0	0.00
26	3	0.12	2	0.12	1	0.12	1	0.15	0	0.00	1	0.16	1	0.09
27	7	0.27	6	0.35	1	0.12	0	0.00	1	0.74	0	0.00	6	0.54
28	5	0.19	2	0.12	3	0.35	1	0.15	1	0.74	1	0.16	2	0.18
29	13	0.51	11	0.64	2	0.23	3	0.45	1	0.74	3	0.48	6	0.54
30	38	1.48	20	1.16	18	2.10	8	1.20	0	0.00	6	0.97	24	2.16
31	12	0.47	7	0.41	5	0.58	2	0.30	1	0.74	3	0.48	6	0.54
32	27	1.05	18	1.05	9	1.05	5	0.75	2	1.48	5	0.81	15	1.35
33	15	0.58	10	0.58	5	0.58	3	0.45	2	1.48	10	1.61	0	0.00
34	15	0.58	12	0.70	3	0.35	4	0.60	0	0.00	2	0.32	9	0.81
35	15	0.58	13	0.76	2	0.23	3	0.45	2	1.48	1	0.16	9	0.81
36	37	1.44	20	1.16	17	1.98	11	1.65	2	1.48	6	0.97	18	1.62
37	20	0.78	11	0.64	9	1.05	7	1.05	0	0.00	2	0.32	11	0.99
38	22	0.85	16	0.93	6	0.70	4	0.60	2	1.48	3	0.48	13	1.17
39	51	1.98	34	1.98	17	1.98	18	2.71	3	2.22	6	0.97	24	2.16
40	55	2.14	42	2.45	13	1.52	7	1.05	3	2.22	18	2.90	25	2.25
41	63	2.45	46	2.68	17	1.98	15	2.26	2	1.48	13	2.10	33	2.96
42	99	3.85	60	3.49	39	4.55	24	3.61	2	1.48	27	4.35	45	4.04
43	77	2.99	55	3.20	22	2.57	18	2.71	2	1.48	13	2.10	42	3.77
44	89	3.46	64	3.73	25	2.92	19	2.86	5	3.70	20	3.23	42	3.77
45	169	6.57	109	6.35	60	7.00	46	6.92	5	3.70	32	5.16	85	7.64
46	178	6.92	127	7.40	51	5.95	53	7.97	6	4.44	37	5.97	78	7.01
47	204	7.93	132	7.69	72	8.40	45	6.77	10	7.41	45	7.26	100	8.98
48	1,289	50.08	850	49.50	439	51.23	340	51.13	82	60.74	350	56.45	494	44.38

Note: Ethnic groups with fewer than 25 students are not broken out in this table.

Table 11-22. 2010–11 NYSAA: Raw Score Frequency Distributions—English Language Arts, High School

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
1	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
3	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
4	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
5	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
6	1	0.03	0	0.00	1	0.09	0	0.00	0	0.00	0	0.00	1	0.08
7	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
8	2	0.07	1	0.05	1	0.09	1	0.12	0	0.00	0	0.00	1	0.08
9	1	0.03	1	0.05	0	0.00	0	0.00	0	0.00	0	0.00	1	0.08
10	1	0.03	1	0.05	0	0.00	0	0.00	0	0.00	1	0.14	0	0.00
11	1	0.03	1	0.05	0	0.00	0	0.00	1	0.73	0	0.00	0	0.00
12	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
13	1	0.03	1	0.05	0	0.00	0	0.00	0	0.00	0	0.00	1	0.08
14	3	0.10	2	0.10	1	0.09	0	0.00	0	0.00	2	0.28	1	0.08
15	3	0.10	1	0.05	2	0.18	2	0.24	0	0.00	1	0.14	0	0.00
16	2	0.07	1	0.05	1	0.09	1	0.12	0	0.00	0	0.00	1	0.08
17	3	0.10	2	0.10	1	0.09	0	0.00	0	0.00	1	0.14	2	0.16
18	5	0.17	4	0.21	1	0.09	3	0.36	0	0.00	2	0.28	0	0.00
19	5	0.17	3	0.16	2	0.18	1	0.12	0	0.00	1	0.14	3	0.23
20	9	0.30	6	0.31	3	0.28	2	0.24	1	0.73	2	0.28	4	0.31
21	10	0.33	6	0.31	4	0.37	4	0.48	1	0.73	2	0.28	3	0.23
22	12	0.40	9	0.47	3	0.28	3	0.36	1	0.73	5	0.70	3	0.23
23	10	0.33	8	0.42	2	0.18	2	0.24	1	0.73	0	0.00	7	0.55
24	34	1.13	23	1.20	11	1.01	12	1.45	1	0.73	16	2.24	5	0.39
25	4	0.13	3	0.16	1	0.09	1	0.12	0	0.00	0	0.00	3	0.23
26	10	0.33	6	0.31	4	0.37	3	0.36	0	0.00	2	0.28	5	0.39
27	4	0.13	2	0.10	2	0.18	1	0.12	0	0.00	1	0.14	2	0.16
28	9	0.30	7	0.37	2	0.18	3	0.36	1	0.73	1	0.14	4	0.31
29	14	0.47	8	0.42	6	0.55	3	0.36	1	0.73	3	0.42	7	0.55
30	58	1.93	36	1.88	22	2.02	14	1.69	2	1.46	4	0.56	37	2.89
31	12	0.40	8	0.42	4	0.37	6	0.72	3	2.19	0	0.00	3	0.23
32	23	0.77	14	0.73	9	0.83	7	0.85	1	0.73	3	0.42	11	0.86
33	25	0.83	10	0.52	15	1.38	5	0.60	0	0.00	7	0.98	13	1.01
34	19	0.63	13	0.68	6	0.55	7	0.85	1	0.73	3	0.42	8	0.62

continued

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
35	32	1.07	15	0.78	17	1.56	7	0.85	1	0.73	5	0.70	18	1.40
36	33	1.10	19	0.99	14	1.29	10	1.21	2	1.46	8	1.12	13	1.01
37	28	0.93	15	0.78	13	1.19	6	0.72	2	1.46	10	1.40	10	0.78
38	41	1.37	28	1.47	13	1.19	7	0.85	2	1.46	11	1.54	21	1.64
39	66	2.20	35	1.83	31	2.85	14	1.69	1	0.73	20	2.81	29	2.26
40	76	2.53	50	2.62	26	2.39	18	2.17	6	4.38	10	1.40	41	3.20
41	63	2.10	44	2.30	19	1.75	16	1.93	6	4.38	10	1.40	30	2.34
42	105	3.50	69	3.61	36	3.31	30	3.62	6	4.38	19	2.66	47	3.67
43	93	3.10	59	3.09	34	3.13	20	2.42	2	1.46	21	2.95	50	3.90
44	145	4.83	99	5.18	46	4.23	34	4.11	8	5.84	39	5.47	63	4.91
45	142	4.73	93	4.87	49	4.50	36	4.35	4	2.92	38	5.33	62	4.84
46	213	7.10	142	7.43	71	6.53	57	6.88	10	7.30	41	5.75	98	7.64
47	286	9.54	194	10.15	92	8.46	75	9.06	11	8.03	57	7.99	141	11.00
48	1,395	46.52	872	45.63	523	48.07	417	50.36	61	44.53	367	51.47	533	41.58

Note: Ethnic groups with fewer than 25 students are not broken out in this table.

Table 11-23. 2010–11 NYSAA: Raw Score Frequency Distributions—Mathematics, Grade 3

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
1	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
3	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
4	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
5	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
6	1	0.04	1	0.05	0	0.00	1	0.15	0	0.00	0	0.00	0	0.00
7	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
8	1	0.04	0	0.00	1	0.13	0	0.00	0	0.00	1	0.15	0	0.00
9	2	0.08	1	0.05	1	0.13	0	0.00	0	0.00	1	0.15	1	0.09
10	1	0.04	1	0.05	0	0.00	0	0.00	0	0.00	0	0.00	1	0.09
11	1	0.04	1	0.05	0	0.00	1	0.15	0	0.00	0	0.00	0	0.00
12	2	0.08	1	0.05	1	0.13	0	0.00	0	0.00	0	0.00	2	0.18
13	1	0.04	0	0.00	1	0.13	0	0.00	0	0.00	0	0.00	1	0.09
14	1	0.04	1	0.05	0	0.00	1	0.15	0	0.00	0	0.00	0	0.00
15	4	0.15	3	0.16	1	0.13	1	0.15	0	0.00	0	0.00	3	0.28

continued

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
16	3	0.12	2	0.11	1	0.13	1	0.15	0	0.00	1	0.15	1	0.09
17	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
18	3	0.12	1	0.05	2	0.26	0	0.00	0	0.00	1	0.15	2	0.18
19	2	0.08	2	0.11	0	0.00	0	0.00	0	0.00	0	0.00	2	0.18
20	3	0.12	3	0.16	0	0.00	0	0.00	1	0.82	1	0.15	1	0.09
21	6	0.23	2	0.11	4	0.53	1	0.15	0	0.00	1	0.15	4	0.37
22	3	0.12	2	0.11	1	0.13	0	0.00	0	0.00	1	0.15	2	0.18
23	4	0.15	4	0.22	0	0.00	3	0.44	0	0.00	0	0.00	1	0.09
24	39	1.51	28	1.53	11	1.45	12	1.78	1	0.82	13	1.98	13	1.20
25	4	0.15	3	0.16	1	0.13	0	0.00	1	0.82	0	0.00	3	0.28
26	7	0.27	4	0.22	3	0.40	2	0.30	1	0.82	1	0.15	3	0.28
27	9	0.35	7	0.38	2	0.26	1	0.15	1	0.82	2	0.31	5	0.46
28	6	0.23	4	0.22	2	0.26	0	0.00	0	0.00	2	0.31	4	0.37
29	4	0.15	3	0.16	1	0.13	1	0.15	0	0.00	1	0.15	2	0.18
30	69	2.67	40	2.19	29	3.83	11	1.63	5	4.10	11	1.68	41	3.78
31	9	0.35	6	0.33	3	0.40	0	0.00	0	0.00	3	0.46	6	0.55
32	16	0.62	12	0.66	4	0.53	4	0.59	2	1.64	2	0.31	8	0.74
33	18	0.70	12	0.66	6	0.79	3	0.44	1	0.82	3	0.46	10	0.92
34	18	0.70	9	0.49	9	1.19	5	0.74	1	0.82	5	0.76	7	0.65
35	21	0.81	10	0.55	11	1.45	4	0.59	0	0.00	3	0.46	13	1.20
36	30	1.16	21	1.15	9	1.19	9	1.33	0	0.00	4	0.61	17	1.57
37	29	1.12	17	0.93	12	1.59	4	0.59	2	1.64	4	0.61	19	1.75
38	34	1.31	19	1.04	15	1.98	11	1.63	0	0.00	2	0.31	21	1.94
39	34	1.31	23	1.26	11	1.45	6	0.89	1	0.82	7	1.07	19	1.75
40	54	2.09	43	2.35	11	1.45	15	2.22	1	0.82	14	2.14	24	2.21
41	40	1.55	22	1.20	18	2.38	10	1.48	2	1.64	7	1.07	20	1.84
42	97	3.75	63	3.44	34	4.49	20	2.96	5	4.10	24	3.66	47	4.33
43	68	2.63	49	2.68	19	2.51	16	2.37	2	1.64	12	1.83	38	3.50
44	91	3.52	69	3.77	22	2.91	21	3.11	1	0.82	28	4.27	40	3.69
45	113	4.37	75	4.10	38	5.02	35	5.18	2	1.64	26	3.97	49	4.52
46	165	6.38	111	6.07	54	7.13	39	5.77	8	6.56	35	5.34	80	7.37
47	178	6.88	130	7.11	48	6.34	49	7.25	7	5.74	38	5.80	81	7.47
48	1,395	53.94	1,024	55.99	371	49.01	389	57.54	77	63.11	401	61.22	494	45.53

Note: Ethnic groups with fewer than 25 students are not broken out in this table.

Table 11-24. 2010–11 NYSAA: Raw Score Frequency Distributions—Mathematics, Grade 4

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
1	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
3	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
4	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
5	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
6	1	0.03	0	0.00	1	0.11	1	0.13	0	0.00	0	0.00	0	0.00
7	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
8	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
9	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
10	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
11	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
12	1	0.03	1	0.05	0	0.00	0	0.00	0	0.00	0	0.00	1	0.09
13	2	0.07	2	0.10	0	0.00	0	0.00	0	0.00	0	0.00	2	0.18
14	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
15	1	0.03	1	0.05	0	0.00	1	0.13	0	0.00	0	0.00	0	0.00
16	2	0.07	2	0.10	0	0.00	0	0.00	0	0.00	0	0.00	2	0.18
17	1	0.03	1	0.05	0	0.00	0	0.00	0	0.00	0	0.00	1	0.09
18	3	0.10	2	0.10	1	0.11	0	0.00	0	0.00	1	0.13	2	0.18
19	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
20	3	0.10	2	0.10	1	0.11	0	0.00	0	0.00	1	0.13	2	0.18
21	11	0.38	9	0.45	2	0.22	7	0.90	1	0.66	0	0.00	3	0.27
22	6	0.21	5	0.25	1	0.11	1	0.13	2	1.32	0	0.00	3	0.27
23	5	0.17	4	0.20	1	0.11	0	0.00	0	0.00	0	0.00	5	0.44
24	41	1.43	31	1.56	10	1.12	14	1.80	1	0.66	10	1.27	16	1.42
25	3	0.10	1	0.05	2	0.22	0	0.00	1	0.66	1	0.13	1	0.09
26	4	0.14	1	0.05	3	0.34	1	0.13	0	0.00	1	0.13	2	0.18
27	4	0.14	3	0.15	1	0.11	1	0.13	1	0.66	1	0.13	1	0.09
28	10	0.35	6	0.30	4	0.45	2	0.26	0	0.00	0	0.00	8	0.71
29	7	0.24	3	0.15	4	0.45	1	0.13	0	0.00	2	0.25	4	0.36
30	68	2.36	42	2.12	26	2.91	20	2.58	5	3.31	17	2.16	26	2.31
31	17	0.59	11	0.55	6	0.67	3	0.39	3	1.99	2	0.25	9	0.80
32	23	0.80	16	0.81	7	0.78	6	0.77	1	0.66	4	0.51	12	1.07
33	30	1.04	18	0.91	12	1.34	4	0.52	3	1.99	9	1.14	12	1.07
34	19	0.66	13	0.66	6	0.67	4	0.52	2	1.32	5	0.64	8	0.71

continued

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
35	23	0.80	15	0.76	8	0.90	6	0.77	0	0.00	2	0.25	15	1.33
36	30	1.04	21	1.06	9	1.01	7	0.90	0	0.00	7	0.89	16	1.42
37	25	0.87	18	0.91	7	0.78	7	0.90	0	0.00	7	0.89	10	0.89
38	29	1.01	24	1.21	5	0.56	9	1.16	1	0.66	6	0.76	13	1.15
39	60	2.09	37	1.86	23	2.58	12	1.55	4	2.65	6	0.76	38	3.37
40	50	1.74	28	1.41	22	2.46	12	1.55	2	1.32	13	1.65	23	2.04
41	41	1.43	29	1.46	12	1.34	9	1.16	1	0.66	9	1.14	22	1.95
42	71	2.47	57	2.87	14	1.57	16	2.06	3	1.99	17	2.16	33	2.93
43	83	2.88	49	2.47	34	3.81	26	3.35	4	2.65	16	2.03	36	3.20
44	109	3.79	74	3.73	35	3.92	24	3.09	7	4.64	29	3.68	48	4.26
45	129	4.48	94	4.74	35	3.92	37	4.77	3	1.99	29	3.68	57	5.06
46	172	5.98	123	6.20	49	5.49	49	6.31	8	5.30	42	5.34	72	6.39
47	189	6.57	132	6.65	57	6.38	50	6.44	5	3.31	52	6.61	77	6.84
48	1,604	55.75	1,109	55.90	495	55.43	446	57.47	93	61.59	498	63.28	546	48.49

Note: Ethnic groups with fewer than 25 students are not broken out in this table.

Table 11-25. 2010–11 NYSAA: Raw Score Frequency Distributions—Mathematics, Grade 5

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
1	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
3	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
4	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
5	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
6	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
7	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
8	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
9	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
10	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
11	1	0.04	1	0.05	0	0.00	0	0.00	0	0.00	0	0.00	1	0.09
12	2	0.07	0	0.00	2	0.23	2	0.26	0	0.00	0	0.00	0	0.00
13	1	0.04	0	0.00	1	0.12	1	0.13	0	0.00	0	0.00	0	0.00
14	2	0.07	1	0.05	1	0.12	1	0.13	0	0.00	0	0.00	1	0.09
15	3	0.11	0	0.00	3	0.35	1	0.13	0	0.00	1	0.14	1	0.09

continued

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
16	6	0.22	6	0.31	0	0.00	1	0.13	2	1.44	2	0.28	1	0.09
17	1	0.04	1	0.05	0	0.00	1	0.13	0	0.00	0	0.00	0	0.00
18	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
19	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
20	3	0.11	2	0.10	1	0.12	0	0.00	1	0.72	1	0.14	1	0.09
21	4	0.14	3	0.16	1	0.12	2	0.26	1	0.72	0	0.00	1	0.09
22	5	0.18	4	0.21	1	0.12	4	0.53	1	0.72	0	0.00	0	0.00
23	6	0.22	3	0.16	3	0.35	2	0.26	0	0.00	1	0.14	3	0.27
24	46	1.66	28	1.45	18	2.11	11	1.45	2	1.44	19	2.63	14	1.25
25	2	0.07	2	0.10	0	0.00	0	0.00	0	0.00	1	0.14	1	0.09
26	3	0.11	1	0.05	2	0.23	0	0.00	0	0.00	2	0.28	1	0.09
27	6	0.22	5	0.26	1	0.12	0	0.00	1	0.72	4	0.55	1	0.09
28	16	0.58	10	0.52	6	0.70	4	0.53	0	0.00	2	0.28	10	0.89
29	4	0.14	3	0.16	1	0.12	0	0.00	0	0.00	2	0.28	2	0.18
30	43	1.55	33	1.71	10	1.17	14	1.85	3	2.16	10	1.38	16	1.42
31	11	0.40	9	0.47	2	0.23	3	0.40	1	0.72	0	0.00	7	0.62
32	17	0.61	10	0.52	7	0.82	5	0.66	1	0.72	4	0.55	6	0.53
33	17	0.61	9	0.47	8	0.94	4	0.53	0	0.00	3	0.41	10	0.89
34	15	0.54	12	0.62	3	0.35	5	0.66	1	0.72	3	0.41	6	0.53
35	15	0.54	7	0.36	8	0.94	3	0.40	1	0.72	4	0.55	7	0.62
36	29	1.04	16	0.83	13	1.53	3	0.40	1	0.72	8	1.11	17	1.51
37	16	0.58	12	0.62	4	0.47	3	0.40	1	0.72	4	0.55	8	0.71
38	28	1.01	17	0.88	11	1.29	6	0.79	1	0.72	5	0.69	16	1.42
39	48	1.73	33	1.71	15	1.76	13	1.72	5	3.60	7	0.97	23	2.05
40	46	1.66	30	1.56	16	1.88	13	1.72	2	1.44	10	1.38	21	1.87
41	30	1.08	20	1.04	10	1.17	8	1.06	0	0.00	4	0.55	18	1.60
42	60	2.16	34	1.76	26	3.05	17	2.25	4	2.88	16	2.21	23	2.05
43	52	1.87	32	1.66	20	2.35	8	1.06	4	2.88	10	1.38	28	2.49
44	88	3.17	58	3.01	30	3.52	27	3.57	2	1.44	20	2.77	39	3.47
45	130	4.68	95	4.93	35	4.11	32	4.23	7	5.04	32	4.43	57	5.08
46	170	6.12	119	6.18	51	5.99	44	5.81	4	2.88	35	4.84	85	7.57
47	194	6.98	137	7.11	57	6.69	43	5.68	5	3.60	44	6.09	99	8.82
48	1,659	59.70	1,174	60.92	485	56.92	476	62.88	88	63.31	469	64.87	599	53.34

Note: Ethnic groups with fewer than 25 students are not broken out in this table.

Table 11-26. 2010–11 NYSAA: Raw Score Frequency Distributions—Mathematics, Grade 6

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
1	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
3	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
4	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
5	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
6	1	0.04	1	0.05	0	0.00	0	0.00	0	0.00	0	0.00	1	0.09
7	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
8	1	0.04	0	0.00	1	0.11	0	0.00	1	0.68	0	0.00	0	0.00
9	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
10	1	0.04	0	0.00	1	0.11	0	0.00	0	0.00	0	0.00	1	0.09
11	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
12	5	0.18	4	0.21	1	0.11	1	0.13	0	0.00	1	0.13	3	0.26
13	1	0.04	1	0.05	0	0.00	1	0.13	0	0.00	0	0.00	0	0.00
14	4	0.14	2	0.10	2	0.22	1	0.13	0	0.00	1	0.13	2	0.17
15	3	0.11	2	0.10	1	0.11	0	0.00	0	0.00	1	0.13	2	0.17
16	5	0.18	3	0.15	2	0.22	0	0.00	0	0.00	3	0.40	2	0.17
17	2	0.07	2	0.10	0	0.00	1	0.13	0	0.00	1	0.13	0	0.00
18	4	0.14	3	0.15	1	0.11	1	0.13	0	0.00	1	0.13	2	0.17
19	4	0.14	1	0.05	3	0.34	1	0.13	0	0.00	1	0.13	2	0.17
20	3	0.11	2	0.10	1	0.11	2	0.27	0	0.00	1	0.13	0	0.00
21	12	0.42	8	0.41	4	0.45	1	0.13	3	2.03	7	0.93	1	0.09
22	4	0.14	4	0.21	0	0.00	1	0.13	1	0.68	0	0.00	2	0.17
23	6	0.21	5	0.26	1	0.11	1	0.13	1	0.68	2	0.27	2	0.17
24	49	1.73	35	1.81	14	1.57	7	0.94	6	4.05	22	2.92	13	1.13
25	3	0.11	2	0.10	1	0.11	1	0.13	0	0.00	1	0.13	1	0.09
26	4	0.14	1	0.05	3	0.34	0	0.00	0	0.00	1	0.13	3	0.26
27	5	0.18	1	0.05	4	0.45	4	0.54	0	0.00	0	0.00	1	0.09
28	16	0.57	12	0.62	4	0.45	4	0.54	2	1.35	2	0.27	8	0.69
29	12	0.42	8	0.41	4	0.45	2	0.27	1	0.68	2	0.27	7	0.61
30	64	2.26	39	2.01	25	2.80	12	1.61	5	3.38	14	1.86	33	2.86
31	22	0.78	16	0.83	6	0.67	2	0.27	1	0.68	9	1.20	10	0.87
32	29	1.03	20	1.03	9	1.01	9	1.21	3	2.03	3	0.40	14	1.21
33	20	0.71	13	0.67	7	0.78	5	0.67	0	0.00	2	0.27	13	1.13
34	10	0.35	6	0.31	4	0.45	3	0.40	0	0.00	2	0.27	5	0.43

continued

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
35	23	0.81	16	0.83	7	0.78	7	0.94	1	0.68	2	0.27	13	1.13
36	26	0.92	17	0.88	9	1.01	4	0.54	3	2.03	4	0.53	15	1.30
37	40	1.41	25	1.29	15	1.68	13	1.74	1	0.68	8	1.06	18	1.56
38	34	1.20	21	1.08	13	1.46	7	0.94	1	0.68	8	1.06	18	1.56
39	64	2.26	34	1.76	30	3.36	13	1.74	0	0.00	14	1.86	37	3.21
40	54	1.91	36	1.86	18	2.02	15	2.01	2	1.35	11	1.46	26	2.25
41	44	1.56	29	1.50	15	1.68	8	1.07	1	0.68	12	1.59	23	1.99
42	92	3.25	62	3.20	30	3.36	18	2.42	5	3.38	21	2.79	48	4.16
43	62	2.19	41	2.12	21	2.35	15	2.01	2	1.35	14	1.86	31	2.69
44	99	3.50	67	3.46	32	3.59	34	4.56	3	2.03	24	3.19	37	3.21
45	114	4.03	67	3.46	47	5.27	24	3.22	8	5.41	24	3.19	57	4.94
46	190	6.72	137	7.07	53	5.94	46	6.17	8	5.41	49	6.51	82	7.11
47	192	6.79	128	6.61	64	7.17	40	5.37	8	5.41	49	6.51	93	8.06
48	1,505	53.20	1,066	55.03	439	49.22	441	59.19	81	54.73	436	57.90	528	45.75

Note: Ethnic groups with fewer than 25 students are not broken out in this table.

Table 11-27. 2010–11 NYSAA: Raw Score Frequency Distributions—Mathematics, Grade 7

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
1	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
3	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
4	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
5	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
6	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
7	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
8	1	0.04	0	0.00	1	0.11	0	0.00	0	0.00	0	0.00	1	0.08
9	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
10	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
11	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
12	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
13	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
14	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
15	2	0.07	2	0.11	0	0.00	1	0.14	0	0.00	0	0.00	1	0.08

continued

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
16	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
17	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
18	5	0.18	4	0.21	1	0.11	2	0.28	1	0.68	1	0.14	1	0.08
19	1	0.04	1	0.05	0	0.00	0	0.00	0	0.00	1	0.14	0	0.00
20	2	0.07	0	0.00	2	0.22	0	0.00	1	0.68	0	0.00	1	0.08
21	5	0.18	2	0.11	3	0.33	1	0.14	0	0.00	3	0.43	1	0.08
22	4	0.14	3	0.16	1	0.11	1	0.14	0	0.00	2	0.29	1	0.08
23	6	0.21	3	0.16	3	0.33	2	0.28	1	0.68	1	0.14	2	0.17
24	44	1.57	31	1.65	13	1.42	25	3.45	1	0.68	4	0.58	14	1.17
25	3	0.11	3	0.16	0	0.00	2	0.28	0	0.00	0	0.00	1	0.08
26	8	0.29	7	0.37	1	0.11	2	0.28	1	0.68	0	0.00	4	0.33
27	10	0.36	7	0.37	3	0.33	2	0.28	0	0.00	1	0.14	7	0.58
28	8	0.29	5	0.27	3	0.33	1	0.14	0	0.00	1	0.14	6	0.50
29	9	0.32	7	0.37	2	0.22	2	0.28	0	0.00	3	0.43	4	0.33
30	47	1.68	27	1.43	20	2.18	6	0.83	1	0.68	14	2.02	26	2.17
31	16	0.57	11	0.58	5	0.55	3	0.41	0	0.00	4	0.58	9	0.75
32	16	0.57	13	0.69	3	0.33	5	0.69	2	1.37	3	0.43	6	0.50
33	27	0.96	15	0.80	12	1.31	8	1.10	2	1.37	8	1.15	9	0.75
34	18	0.64	15	0.80	3	0.33	4	0.55	1	0.68	3	0.43	9	0.75
35	20	0.71	16	0.85	4	0.44	5	0.69	1	0.68	4	0.58	10	0.83
36	25	0.89	18	0.96	7	0.76	7	0.97	0	0.00	7	1.01	11	0.92
37	26	0.93	20	1.06	6	0.66	7	0.97	1	0.68	3	0.43	15	1.25
38	29	1.04	23	1.22	6	0.66	8	1.10	0	0.00	10	1.44	11	0.92
39	73	2.61	39	2.07	34	3.71	18	2.48	3	2.05	13	1.88	39	3.26
40	59	2.11	39	2.07	20	2.18	11	1.52	5	3.42	15	2.16	27	2.25
41	41	1.46	22	1.17	19	2.07	6	0.83	0	0.00	11	1.59	22	1.84
42	71	2.54	40	2.12	31	3.38	15	2.07	4	2.74	21	3.03	30	2.50
43	65	2.32	42	2.23	23	2.51	19	2.62	2	1.37	12	1.73	32	2.67
44	132	4.72	87	4.62	45	4.91	33	4.55	5	3.42	21	3.03	72	6.01
45	137	4.89	94	4.99	43	4.69	41	5.66	1	0.68	30	4.33	65	5.43
46	182	6.50	122	6.48	60	6.55	43	5.93	12	8.22	33	4.76	91	7.60
47	206	7.36	141	7.49	65	7.10	48	6.62	7	4.79	45	6.49	103	8.60
48	1,501	53.63	1,024	54.38	477	52.07	397	54.76	94	64.38	419	60.46	567	47.33

Note: Ethnic groups with fewer than 25 students are not broken out in this table.

Table 11-28. 2010–11 NYSAA: Raw Score Frequency Distributions—Mathematics, Grade 8

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
1	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
3	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
4	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
5	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
6	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
7	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
8	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
9	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
10	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
11	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
12	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
13	1	0.04	1	0.06	0	0.00	0	0.00	0	0.00	1	0.16	0	0.00
14	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
15	6	0.23	2	0.12	4	0.47	3	0.45	1	0.74	0	0.00	2	0.18
16	4	0.16	2	0.12	2	0.23	1	0.15	0	0.00	0	0.00	3	0.27
17	1	0.04	0	0.00	1	0.12	0	0.00	0	0.00	0	0.00	1	0.09
18	8	0.31	6	0.35	2	0.23	3	0.45	0	0.00	2	0.32	3	0.27
19	4	0.16	3	0.17	1	0.12	2	0.30	0	0.00	0	0.00	1	0.09
20	2	0.08	0	0.00	2	0.23	2	0.30	0	0.00	0	0.00	0	0.00
21	5	0.19	2	0.12	3	0.35	3	0.45	0	0.00	1	0.16	1	0.09
22	4	0.16	3	0.17	1	0.12	0	0.00	1	0.74	3	0.48	0	0.00
23	13	0.50	8	0.47	5	0.58	3	0.45	2	1.48	2	0.32	6	0.54
24	36	1.40	25	1.46	11	1.28	11	1.65	1	0.74	11	1.77	12	1.08
25	2	0.08	2	0.12	0	0.00	1	0.15	0	0.00	0	0.00	1	0.09
26	6	0.23	3	0.17	3	0.35	0	0.00	0	0.00	1	0.16	5	0.45
27	4	0.16	3	0.17	1	0.12	1	0.15	1	0.74	1	0.16	1	0.09
28	6	0.23	4	0.23	2	0.23	1	0.15	0	0.00	2	0.32	3	0.27
29	15	0.58	10	0.58	5	0.58	3	0.45	1	0.74	3	0.48	8	0.72
30	32	1.24	20	1.16	12	1.40	6	0.90	0	0.00	6	0.96	20	1.80
31	15	0.58	9	0.52	6	0.70	3	0.45	0	0.00	5	0.80	7	0.63
32	12	0.47	8	0.47	4	0.47	2	0.30	1	0.74	6	0.96	3	0.27
33	19	0.74	11	0.64	8	0.93	4	0.60	2	1.48	2	0.32	11	0.99
34	13	0.50	9	0.52	4	0.47	3	0.45	0	0.00	1	0.16	8	0.72

continued

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
35	12	0.47	9	0.52	3	0.35	3	0.45	1	0.74	3	0.48	5	0.45
36	22	0.85	15	0.87	7	0.81	4	0.60	2	1.48	3	0.48	13	1.17
37	32	1.24	23	1.34	9	1.05	8	1.20	2	1.48	5	0.80	17	1.53
38	16	0.62	13	0.76	3	0.35	5	0.75	0	0.00	2	0.32	9	0.81
39	45	1.75	23	1.34	22	2.56	13	1.95	1	0.74	10	1.61	21	1.89
40	61	2.37	43	2.50	18	2.09	23	3.45	3	2.22	4	0.64	31	2.79
41	52	2.02	40	2.33	12	1.40	14	2.10	3	2.22	8	1.29	26	2.34
42	77	2.99	52	3.03	25	2.91	15	2.25	6	4.44	19	3.05	36	3.23
43	72	2.79	49	2.85	23	2.67	21	3.15	1	0.74	20	3.22	29	2.61
44	112	4.35	72	4.19	40	4.65	27	4.05	2	1.48	30	4.82	51	4.58
45	118	4.58	73	4.25	45	5.23	21	3.15	6	4.44	32	5.14	57	5.12
46	164	6.36	103	6.00	61	7.09	56	8.41	3	2.22	32	5.14	71	6.38
47	208	8.07	146	8.50	62	7.21	64	9.61	6	4.44	35	5.63	100	8.98
48	1,378	53.47	925	53.87	453	52.67	340	51.05	89	65.93	372	59.81	551	49.51

Note: Ethnic groups with fewer than 25 students are not broken out in this table.

Table 11-29. 2010–11 NYSAA: Raw Score Frequency Distributions—Mathematics, High School

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
1	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
3	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
4	1	0.03	1	0.05	0	0.00	0	0.00	0	0.00	0	0.00	1	0.08
5	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
6	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
7	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
8	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
9	2	0.07	2	0.10	0	0.00	0	0.00	1	0.74	0	0.00	1	0.08
10	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
11	1	0.03	0	0.00	1	0.09	0	0.00	0	0.00	0	0.00	1	0.08
12	3	0.10	1	0.05	2	0.18	0	0.00	0	0.00	0	0.00	3	0.23
13	3	0.10	2	0.10	1	0.09	1	0.12	0	0.00	2	0.28	0	0.00
14	1	0.03	1	0.05	0	0.00	0	0.00	0	0.00	0	0.00	1	0.08
15	4	0.13	4	0.21	0	0.00	1	0.12	0	0.00	1	0.14	2	0.16

continued

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
16	3	0.10	2	0.10	1	0.09	1	0.12	0	0.00	1	0.14	1	0.08
17	1	0.03	1	0.05	0	0.00	1	0.12	0	0.00	0	0.00	0	0.00
18	2	0.07	2	0.10	0	0.00	1	0.12	0	0.00	0	0.00	1	0.08
19	2	0.07	1	0.05	1	0.09	1	0.12	0	0.00	0	0.00	1	0.08
20	3	0.10	2	0.10	1	0.09	0	0.00	0	0.00	1	0.14	2	0.16
21	5	0.17	1	0.05	4	0.37	3	0.36	0	0.00	2	0.28	0	0.00
22	10	0.33	5	0.26	5	0.46	3	0.36	1	0.74	1	0.14	4	0.31
23	7	0.23	5	0.26	2	0.18	2	0.24	1	0.74	2	0.28	2	0.16
24	48	1.60	39	2.04	9	0.83	12	1.46	3	2.21	14	1.96	19	1.48
25	5	0.17	3	0.16	2	0.18	1	0.12	0	0.00	0	0.00	4	0.31
26	3	0.10	2	0.10	1	0.09	0	0.00	0	0.00	0	0.00	3	0.23
27	8	0.27	5	0.26	3	0.28	3	0.36	0	0.00	2	0.28	3	0.23
28	5	0.17	4	0.21	1	0.09	3	0.36	0	0.00	0	0.00	2	0.16
29	9	0.30	4	0.21	5	0.46	2	0.24	1	0.74	2	0.28	4	0.31
30	67	2.24	44	2.30	23	2.13	16	1.94	3	2.21	11	1.54	36	2.81
31	11	0.37	6	0.31	5	0.46	3	0.36	0	0.00	2	0.28	6	0.47
32	26	0.87	20	1.05	6	0.55	6	0.73	3	2.21	7	0.98	9	0.70
33	33	1.10	21	1.10	12	1.11	6	0.73	1	0.74	5	0.70	21	1.64
34	28	0.94	12	0.63	16	1.48	6	0.73	2	1.47	4	0.56	16	1.25
35	18	0.60	9	0.47	9	0.83	5	0.61	1	0.74	4	0.56	8	0.63
36	56	1.87	34	1.78	22	2.03	14	1.70	1	0.74	12	1.68	29	2.27
37	26	0.87	16	0.84	10	0.92	8	0.97	0	0.00	7	0.98	10	0.78
38	43	1.44	29	1.52	14	1.29	7	0.85	4	2.94	8	1.12	22	1.72
39	58	1.94	40	2.09	18	1.66	15	1.82	1	0.74	13	1.82	29	2.27
40	64	2.14	42	2.20	22	2.03	11	1.33	5	3.68	15	2.10	33	2.58
41	59	1.97	36	1.88	23	2.13	15	1.82	4	2.94	10	1.40	28	2.19
42	115	3.84	65	3.40	50	4.62	30	3.64	5	3.68	23	3.22	57	4.45
43	96	3.21	55	2.88	41	3.79	22	2.67	2	1.47	25	3.50	47	3.67
44	95	3.17	60	3.14	35	3.23	27	3.28	4	2.94	21	2.94	42	3.28
45	156	5.21	95	4.97	61	5.64	36	4.37	9	6.62	31	4.34	75	5.86
46	198	6.62	133	6.96	65	6.01	55	6.67	7	5.15	41	5.74	91	7.11
47	260	8.69	181	9.47	79	7.30	79	9.59	9	6.62	54	7.56	113	8.83
48	1,458	48.71	926	48.46	532	49.17	428	51.94	68	50.00	393	55.04	553	43.20

Note: Ethnic groups with fewer than 25 students are not broken out in this table.

Table 11-30. 2010–11 NYSAA: Raw Score Frequency Distributions—Science, Grade 4

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
1	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
3	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
4	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
5	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
6	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
7	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
8	1	0.03	1	0.05	0	0.00	1	0.13	0	0.00	0	0.00	0	0.00
9	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
10	1	0.03	1	0.05	0	0.00	0	0.00	0	0.00	1	0.13	0	0.00
11	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
12	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
13	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
14	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
15	1	0.03	1	0.05	0	0.00	0	0.00	0	0.00	0	0.00	1	0.09
16	3	0.10	3	0.15	0	0.00	1	0.13	0	0.00	2	0.25	0	0.00
17	1	0.03	0	0.00	1	0.11	0	0.00	0	0.00	0	0.00	1	0.09
18	1	0.03	1	0.05	0	0.00	0	0.00	0	0.00	0	0.00	1	0.09
19	2	0.07	2	0.10	0	0.00	1	0.13	0	0.00	0	0.00	1	0.09
20	3	0.10	2	0.10	1	0.11	1	0.13	1	0.66	0	0.00	0	0.00
21	4	0.14	3	0.15	1	0.11	1	0.13	0	0.00	0	0.00	3	0.27
22	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
23	10	0.35	7	0.35	3	0.34	4	0.52	0	0.00	1	0.13	5	0.44
24	100	3.48	73	3.68	27	3.03	28	3.62	9	5.96	36	4.58	26	2.31
25	4	0.14	3	0.15	1	0.11	2	0.26	0	0.00	0	0.00	2	0.18
26	2	0.07	2	0.10	0	0.00	0	0.00	0	0.00	0	0.00	2	0.18
27	1	0.03	1	0.05	0	0.00	1	0.13	0	0.00	0	0.00	0	0.00
28	7	0.24	5	0.25	2	0.22	2	0.26	0	0.00	1	0.13	3	0.27
29	4	0.14	2	0.10	2	0.22	1	0.13	0	0.00	1	0.13	2	0.18
30	38	1.32	28	1.41	10	1.12	5	0.65	5	3.31	12	1.53	15	1.33
31	7	0.24	4	0.20	3	0.34	1	0.13	2	1.32	0	0.00	4	0.36
32	17	0.59	12	0.61	5	0.56	6	0.78	1	0.66	5	0.64	5	0.44
33	13	0.45	9	0.45	4	0.45	6	0.78	1	0.66	3	0.38	3	0.27
34	10	0.35	8	0.40	2	0.22	2	0.26	0	0.00	1	0.13	7	0.62

continued

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
35	16	0.56	10	0.50	6	0.67	5	0.65	0	0.00	1	0.13	10	0.89
36	17	0.59	13	0.66	4	0.45	2	0.26	0	0.00	4	0.51	11	0.98
37	22	0.77	16	0.81	6	0.67	4	0.52	2	1.32	7	0.89	9	0.80
38	28	0.97	21	1.06	7	0.78	4	0.52	3	1.99	5	0.64	16	1.42
39	52	1.81	32	1.61	20	2.24	8	1.03	2	1.32	8	1.02	33	2.93
40	43	1.50	31	1.56	12	1.35	7	0.90	4	2.65	6	0.76	26	2.31
41	38	1.32	24	1.21	14	1.57	9	1.16	1	0.66	10	1.27	18	1.60
42	69	2.40	41	2.07	28	3.14	24	3.10	2	1.32	14	1.78	29	2.58
43	51	1.77	30	1.51	21	2.35	12	1.55	2	1.32	15	1.91	21	1.87
44	88	3.06	58	2.93	30	3.36	24	3.10	3	1.99	23	2.93	36	3.20
45	100	3.48	72	3.63	28	3.14	28	3.62	6	3.97	22	2.80	43	3.82
46	172	5.98	118	5.95	54	6.05	49	6.33	2	1.32	41	5.22	77	6.84
47	163	5.67	112	5.65	51	5.72	37	4.78	8	5.30	46	5.85	69	6.13
48	1,785	62.11	1,236	62.36	549	61.55	498	64.34	97	64.24	521	66.28	647	57.46

Note: Ethnic groups with fewer than 25 students are not broken out in this table.

Table 11-31. 2010–11 NYSAA: Raw Score Frequency Distributions—Science, Grade 8

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
1	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
3	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
4	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
5	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
6	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
7	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
8	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
9	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
10	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
11	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
12	1	0.04	1	0.06	0	0.00	1	0.15	0	0.00	0	0.00	0	0.00
13	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
14	1	0.04	0	0.00	1	0.12	0	0.00	0	0.00	0	0.00	1	0.09
15	1	0.04	0	0.00	1	0.12	0	0.00	0	0.00	0	0.00	1	0.09

continued

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
16	3	0.12	2	0.12	1	0.12	1	0.15	0	0.00	0	0.00	2	0.18
17	3	0.12	2	0.12	1	0.12	0	0.00	1	0.74	0	0.00	2	0.18
18	4	0.16	2	0.12	2	0.23	0	0.00	1	0.74	1	0.16	2	0.18
19	2	0.08	1	0.06	1	0.12	0	0.00	0	0.00	0	0.00	2	0.18
20	8	0.31	6	0.35	2	0.23	4	0.60	0	0.00	1	0.16	3	0.27
21	13	0.51	10	0.58	3	0.35	5	0.75	0	0.00	3	0.48	5	0.45
22	9	0.35	7	0.41	2	0.23	5	0.75	0	0.00	1	0.16	3	0.27
23	16	0.62	10	0.58	6	0.70	8	1.20	1	0.74	4	0.65	3	0.27
24	84	3.27	60	3.50	24	2.80	32	4.81	1	0.74	27	4.35	22	1.98
25	1	0.04	1	0.06	0	0.00	0	0.00	0	0.00	0	0.00	1	0.09
26	2	0.08	1	0.06	1	0.12	0	0.00	0	0.00	0	0.00	2	0.18
27	5	0.19	3	0.18	2	0.23	2	0.30	0	0.00	1	0.16	2	0.18
28	7	0.27	5	0.29	2	0.23	1	0.15	0	0.00	1	0.16	5	0.45
29	4	0.16	3	0.18	1	0.12	1	0.15	0	0.00	0	0.00	3	0.27
30	43	1.67	23	1.34	20	2.33	12	1.80	2	1.48	8	1.29	21	1.89
31	11	0.43	10	0.58	1	0.12	5	0.75	0	0.00	2	0.32	4	0.36
32	21	0.82	15	0.88	6	0.70	8	1.20	2	1.48	6	0.97	5	0.45
33	13	0.51	10	0.58	3	0.35	4	0.60	1	0.74	3	0.48	5	0.45
34	14	0.54	10	0.58	4	0.47	2	0.30	1	0.74	1	0.16	10	0.90
35	16	0.62	5	0.29	11	1.28	2	0.30	0	0.00	2	0.32	11	0.99
36	27	1.05	17	0.99	10	1.17	7	1.05	2	1.48	5	0.81	12	1.08
37	11	0.43	9	0.53	2	0.23	2	0.30	0	0.00	3	0.48	6	0.54
38	30	1.17	22	1.28	8	0.93	7	1.05	0	0.00	7	1.13	16	1.44
39	44	1.71	35	2.04	9	1.05	11	1.65	1	0.74	8	1.29	23	2.07
40	49	1.91	36	2.10	13	1.52	9	1.35	4	2.96	12	1.94	24	2.16
41	38	1.48	28	1.63	10	1.17	11	1.65	3	2.22	8	1.29	15	1.35
42	73	2.84	46	2.68	27	3.15	16	2.41	5	3.70	7	1.13	45	4.05
43	65	2.53	46	2.68	19	2.21	18	2.71	4	2.96	10	1.61	32	2.88
44	102	3.97	58	3.38	44	5.13	18	2.71	3	2.22	23	3.71	55	4.95
45	144	5.60	96	5.60	48	5.59	35	5.26	2	1.48	29	4.68	77	6.93
46	173	6.73	117	6.83	56	6.53	58	8.72	4	2.96	45	7.26	64	5.76
47	169	6.57	114	6.65	55	6.41	41	6.17	7	5.19	35	5.65	83	7.47
48	1,365	53.07	903	52.68	462	53.85	339	50.98	90	66.67	367	59.19	544	48.96

Note: Ethnic groups with fewer than 25 students are not broken out in this table.

Table 11-32. 2010–11 NYSAA: Raw Score Frequency Distributions—Science, High School

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
1	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
3	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
4	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
5	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
6	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
7	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
8	1	0.03	1	0.05	0	0.00	0	0.00	0	0.00	0	0.00	1	0.08
9	1	0.03	0	0.00	1	0.09	0	0.00	0	0.00	0	0.00	1	0.08
10	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
11	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
12	1	0.03	0	0.00	1	0.09	0	0.00	0	0.00	0	0.00	1	0.08
13	1	0.03	0	0.00	1	0.09	0	0.00	0	0.00	0	0.00	1	0.08
14	1	0.03	0	0.00	1	0.09	1	0.12	0	0.00	0	0.00	0	0.00
15	4	0.13	3	0.16	1	0.09	1	0.12	0	0.00	3	0.42	0	0.00
16	3	0.10	2	0.10	1	0.09	0	0.00	0	0.00	0	0.00	3	0.23
17	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
18	2	0.07	2	0.10	0	0.00	0	0.00	0	0.00	0	0.00	2	0.16
19	1	0.03	1	0.05	0	0.00	0	0.00	1	0.73	0	0.00	0	0.00
20	6	0.20	4	0.21	2	0.18	1	0.12	0	0.00	1	0.14	4	0.31
21	3	0.10	2	0.10	1	0.09	0	0.00	0	0.00	1	0.14	2	0.16
22	6	0.20	1	0.05	5	0.46	1	0.12	0	0.00	2	0.28	3	0.23
23	8	0.27	4	0.21	4	0.37	2	0.24	0	0.00	1	0.14	5	0.39
24	34	1.13	19	0.99	15	1.38	13	1.57	3	2.19	9	1.26	9	0.70
25	4	0.13	2	0.10	2	0.18	1	0.12	0	0.00	0	0.00	3	0.23
26	5	0.17	3	0.16	2	0.18	1	0.12	0	0.00	0	0.00	4	0.31
27	5	0.17	2	0.10	3	0.28	3	0.36	0	0.00	1	0.14	1	0.08
28	2	0.07	1	0.05	1	0.09	2	0.24	0	0.00	0	0.00	0	0.00
29	9	0.30	5	0.26	4	0.37	3	0.36	0	0.00	2	0.28	4	0.31
30	50	1.67	30	1.57	20	1.85	13	1.57	3	2.19	8	1.12	25	1.95
31	12	0.40	8	0.42	4	0.37	2	0.24	0	0.00	0	0.00	10	0.78
32	32	1.07	21	1.10	11	1.01	14	1.69	2	1.46	4	0.56	11	0.86
33	21	0.70	12	0.63	9	0.83	5	0.60	1	0.73	3	0.42	12	0.94
34	23	0.77	12	0.63	11	1.01	5	0.60	2	1.46	2	0.28	14	1.09

continued

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
35	17	0.57	10	0.52	7	0.65	4	0.48	1	0.73	4	0.56	8	0.63
36	43	1.43	25	1.31	18	1.66	9	1.09	3	2.19	6	0.84	25	1.95
37	38	1.27	20	1.04	18	1.66	11	1.33	0	0.00	3	0.42	24	1.88
38	23	0.77	13	0.68	10	0.92	7	0.85	2	1.46	6	0.84	8	0.63
39	42	1.40	27	1.41	15	1.38	7	0.85	0	0.00	6	0.84	28	2.19
40	65	2.17	43	2.25	22	2.03	16	1.93	2	1.46	16	2.24	31	2.42
41	56	1.87	31	1.62	25	2.31	12	1.45	5	3.65	11	1.54	27	2.11
42	83	2.77	46	2.40	37	3.41	28	3.39	6	4.38	21	2.94	27	2.11
43	86	2.87	52	2.72	34	3.14	16	1.93	4	2.92	19	2.66	44	3.44
44	122	4.07	81	4.23	41	3.78	30	3.63	8	5.84	32	4.48	50	3.91
45	154	5.14	100	5.22	54	4.98	36	4.35	4	2.92	39	5.45	72	5.63
46	212	7.07	135	7.05	77	7.10	50	6.05	12	8.76	55	7.69	90	7.03
47	225	7.51	162	8.46	63	5.81	60	7.26	8	5.84	55	7.69	100	7.81
48	1,597	53.27	1,034	54.02	563	51.94	473	57.19	70	51.09	405	56.64	630	49.22

Note: Ethnic groups with fewer than 25 students are not broken out in this table.

Table 11-33. 2010–11 NYSAA: Raw Score Frequency Distributions—Social Studies, High School

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
1	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
2	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
3	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
4	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
5	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
6	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
7	1	0.03	0	0.00	1	0.09	0	0.00	0	0.00	0	0.00	1	0.08
8	1	0.03	1	0.05	0	0.00	0	0.00	0	0.00	0	0.00	1	0.08
9	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
10	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
11	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
12	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
13	1	0.03	0	0.00	1	0.09	0	0.00	0	0.00	0	0.00	1	0.08
14	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
15	4	0.13	3	0.16	1	0.09	3	0.36	0	0.00	1	0.14	0	0.00

continued

Raw Score	All Students		Male		Female		Black		Asian		Hispanic		White	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
16	2	0.07	2	0.10	0	0.00	2	0.24	0	0.00	0	0.00	0	0.00
17	5	0.17	1	0.05	4	0.37	4	0.48	0	0.00	0	0.00	1	0.08
18	4	0.13	1	0.05	3	0.28	1	0.12	0	0.00	0	0.00	3	0.23
19	3	0.10	2	0.10	1	0.09	2	0.24	0	0.00	1	0.14	0	0.00
20	5	0.17	3	0.16	2	0.18	0	0.00	1	0.73	1	0.14	2	0.16
21	6	0.20	3	0.16	3	0.28	1	0.12	0	0.00	1	0.14	4	0.31
22	6	0.20	5	0.26	1	0.09	3	0.36	0	0.00	0	0.00	3	0.23
23	2	0.07	2	0.10	0	0.00	0	0.00	0	0.00	0	0.00	2	0.16
24	21	0.70	17	0.89	4	0.37	5	0.60	0	0.00	7	0.98	8	0.63
25	2	0.07	2	0.10	0	0.00	0	0.00	0	0.00	0	0.00	2	0.16
26	5	0.17	4	0.21	1	0.09	2	0.24	0	0.00	1	0.14	2	0.16
27	4	0.13	2	0.10	2	0.18	1	0.12	0	0.00	0	0.00	3	0.23
28	5	0.17	2	0.10	3	0.28	0	0.00	1	0.73	0	0.00	4	0.31
29	5	0.17	4	0.21	1	0.09	1	0.12	0	0.00	2	0.28	2	0.16
30	54	1.80	35	1.83	19	1.75	12	1.45	4	2.92	5	0.70	32	2.50
31	12	0.40	7	0.37	5	0.46	4	0.48	0	0.00	3	0.42	5	0.39
32	48	1.60	29	1.52	19	1.75	13	1.57	5	3.65	7	0.98	22	1.72
33	24	0.80	13	0.68	11	1.01	7	0.85	2	1.46	3	0.42	12	0.94
34	22	0.73	14	0.73	8	0.74	5	0.60	2	1.46	5	0.70	10	0.78
35	34	1.13	18	0.94	16	1.48	5	0.60	1	0.73	8	1.12	20	1.56
36	33	1.10	20	1.05	13	1.20	7	0.85	2	1.46	6	0.84	18	1.41
37	27	0.90	15	0.78	12	1.11	4	0.48	0	0.00	3	0.42	20	1.56
38	35	1.17	23	1.20	12	1.11	12	1.45	1	0.73	10	1.40	11	0.86
39	67	2.24	44	2.30	23	2.12	21	2.54	1	0.73	17	2.38	28	2.19
40	50	1.67	31	1.62	19	1.75	14	1.69	2	1.46	17	2.38	17	1.33
41	57	1.90	36	1.88	21	1.94	14	1.69	0	0.00	13	1.82	30	2.35
42	98	3.27	59	3.09	39	3.60	24	2.90	5	3.65	17	2.38	51	3.99
43	72	2.40	56	2.93	16	1.48	18	2.18	5	3.65	15	2.10	33	2.58
44	93	3.10	60	3.14	33	3.04	24	2.90	9	6.57	25	3.50	35	2.74
45	155	5.17	95	4.97	60	5.54	40	4.84	6	4.38	32	4.48	76	5.94
46	211	7.04	134	7.01	77	7.10	53	6.41	4	2.92	47	6.58	105	8.21
47	178	5.94	122	6.38	56	5.17	54	6.53	10	7.30	36	5.04	75	5.86
48	1,644	54.87	1,047	54.76	597	55.07	471	56.95	76	55.47	431	60.36	640	50.04

Note: Ethnic groups with fewer than 25 students are not broken out in this table.

11.3 Linkages Across Grades

In developing the NYSAA, a content-based approach for addressing continuity across grades was implemented. Specifically, issues of continuity were addressed in the following processes: 1) development, 2) administration, and 3) standard setting.

As explained in Chapter 4, the AGLIs describe the content to be included in students' instructional programs for each grade level. The AGLIs are based on the grade-level expectations assessed by the New York State learning standards, but have been reduced in depth and breadth. The AGLIs are designed to follow a developmental continuum of skills that increases across grades. The assessment tasks must align to the AGLIs, which are designed to measure grade-specific content and skills. These assessment tasks and AGLIs, along with test blueprints that have also been designed to mirror the developmental continuum reflected in the AGLIs and ensure that each datafolio builds upon the appropriate knowledge and skills, thereby reflecting the desired continuity across grades.

During administration, the test blueprint serves as a guide to the teachers as to how to select AGLIs that are appropriate for a given student. In addition, teachers must select, modify, or create assessment tasks that are aligned with the AGLIs chosen. As with other aspects of the development and administration of the NYSAA, use of the test blueprints and the AGLIs ensures that the student is being assessed at a level that is appropriate for his/her individual needs and that the AGLIs and assessment tasks to which students are exposed follow a developmentally appropriate continuum from year to year. Thus, linkages across grades are built into the design of the datafolio.

Finally, the continuity of the NYSAA across grades was further verified through the standard-setting procedures. The achievement level descriptors used for standard setting were based on the student expectations as delineated in the AGLIs. Proficiency across grades, therefore, was expected to follow the developmental continuum established by the AGLIs and, thus, to reflect a higher level of cognition as the grades increased.

Chapter 12. VALIDITY

12.1 Procedural Validity

In order to ensure consistency of the information given to teachers across New York State, sets of documents and training programs were developed and distributed statewide. New York State has a set of Alternate Assessment Training Network (AATN) Specialists and Score Site Coordinators (SSCs) who present a turnkey training provided to them by the New York State Education Department (the Department) and Measured Progress.

For the administration of the New York State Alternate Assessment (NYSAA), the materials included the following:

- NYSAA Administration Manual: This document contained all the guidelines and specific requirements of the NYSAA; all the forms required to be used in the datafolio; and the Test Blueprints, Alternate Grade Level Indicators (AGLIs), and Sample Assessment Tasks (SATs) for the Required Components for each grade level and content area.
- Training program video: The entire Administration Training program that is used with teachers is contained in this video. All AATN Specialists are required to use the video in its entirety to train teachers. It ensures that the exact same message is imparted statewide.
- Training program PowerPoint slides and handouts: All PowerPoint slides and handouts developed by the Department and Measured Progress are required to be used by the AATN Specialists while training teachers. The handouts contained PowerPoint slide printouts and guided practice activities.

For the scoring of the NYSAA, the materials included the following:

- Steps for Scoring 2010–11 NYSAA Datafolios and Decision Rules for Scoring 2010–11 NYSAA Datafolios: These are the two main documents used to guide the scoring process for each datafolio (see Appendices B and C).
- Training program video: The entire Scoring Training program that is used with Scorers is contained in this video. All SSCs and AATN Specialists are required to use the video in its entirety to train Scorers. It ensures that the exact same message is imparted statewide.
- Datafolio practices and qualifiers: All Scorers must complete the four practice samples provided and then must qualify by scoring datafolio samples. All Scorers are qualified using calibrated materials that were initially identified during a benchmarking process.

12.2 Content Validity

The Standards for Educational and Psychological Testing (AERA, APA, NCME, 1999) notes that an important part of establishing test validity is ensuring that a close, substantive relationship exists between a test's content and the underlying construct it is intended to measure. The Standards further elaborate that the test content refers to the "themes, wording, and format of the items, tasks, or questions on a test, as well as the guidelines for procedures regarding administration and scoring" (1999, p. 11). In addition to describing the content in detail, content validity evidence must, of course, relate the content to the construct the test is intended to measure. One important approach in this regard mentioned in the Standards is the use of "expert judgment of the relationship between parts of the test and the construct" (1999, p. 11).

The New York State (NYS) learning standards provide the framework for the New York State Testing Program, including the NYSAA. These learning standards are the constructs that are intended to be measured by the NYSAA. Chapters 4 through 6 of this report describe in detail the development and design of the content for the NYSAA, with special emphasis on the relationship of the test content to the NYS learning standards. Chapter 8 provides a detailed description of the scoring process for the NYSAA, again emphasizing that the procedures used ensure strong adherence to the NYS learning standards. Another important component of the scoring procedure is the standard setting process, in which expert judgment is used to set the scores on the test that correspond to different levels of classification of student achievement relative to the NYS learning standards. The Standard Setting Report documenting the June 2008 standard setting meeting describes the rigorous procedures that were adhered to in order to ensure that the content-related aspects of the standard setting maintained a strong substantive alignment with the NYS learning standards.

As shown from the above definition of construct validity and in the descriptions of the contents of Chapters 4, 5, 6 and 8 of this report, a complete description of the content validity of the NYSAA is available to the reader.

12.3 Consequential Validity

Beginning in 1997, the Department began discussions on how to provide students who have severe cognitive disabilities access to the general education standards. To that end, an advisory committee made up of New York State stakeholders was formed. Their goal was to develop a handbook that would provide teachers with an alternate pathway for this group of students to gain access to the NYS learning standards. On July 17, 1997, the New York State Board of Regents endorsed a set of alternate performance indicators (APIs) that were linked to the NYS learning standards. The purpose of the APIs was to provide teachers with a way of teaching academic content to students with severe

cognitive disabilities. The final manual, entitled The Learning Standards and Alternate Performance Indicators for Students with Severe Disabilities, was published in 1998 and distributed statewide.

As mandated in the reauthorized Individuals with Disabilities Education Act of 1997 (IDEA 1997), states were required to have an alternate assessment in place by July 2000 for those students who could not participate in the general education assessment, even with accommodations. Because of the groundbreaking work already done, the Department, in collaboration with Measured Progress and under the guidance of the advisory committee, endorsed the use of the APIs in 1997 as a way to measure the knowledge, skills, and understanding of students with severe cognitive disabilities against the NYS learning standards. The advisory committee concluded that all students must be given the opportunity to achieve the learning standards, but that not all standards are appropriate for this group of students, which was in line with the intent of IDEA 1997. It was understood that this group of students would be assessed against APIs because of their inability to participate in the general assessment, even with accommodations. The APIs, while based on the learning standards, were, by their very nature, functional, and limited to students with severe cognitive disabilities. They reflected what was determined to be appropriate for this group of students. They were not grade specific, nor were they aligned to grade-level content. The Committees on Special Education (CSE) determined which students were appropriate for the NYSAA, based on several strict criteria, and decided which APIs the students would be assessed on. The first NYSAA was piloted between March 1998 and March 2000, with full implementation during the 2000–01 school year. The purpose of the NYSAA was to promote the inclusion of students with severe cognitive disabilities in the statewide assessment program. It was not for the purposes of Adequate Yearly Progress (AYP) as defined by the No Child Left Behind Act (NCLB).

The following is the calendar of events the Department followed to develop and implement its first alternate assessment.

Spring 1998	Conduct regional training for teachers on the APIs
March 1998–March 2000	Develop and pilot the alternate assessment system
March–June 2000	Provide information and training on the alternate assessment system
July 2000	Implement a statewide alternate assessment system as required by IDEA 1997
June 2001	Collect data and report student scores to the public

The Department and its stakeholders were committed to building an assessment and accountability system that included students with severe cognitive disabilities. New York State was one of the first states to engage teachers, administrators, policymakers, and others in these important discussions, and it did pioneering work in the early years of alternate assessment.

With the reauthorization of NCLB, states are being held to high levels of student academic achievement, including students with severe cognitive disabilities. The original NYSAA tested students in Grades 4, 8, and in high school in the content areas of English language arts (ELA), mathematics, science/health, and social studies. Based on new testing grade requirements in NCLB, in September 2005 the Department began to implement a revised NYSAA that included Grades 3 through 8 and high school in the content areas of ELA, mathematics, science, and social studies. The students were assessed against the original APIs; however, the format and the number of APIs assessed were modified. Table 12-1 outlines the revised NYSAA.

Table 12-1. 2010–11 NYSAA: Revised NYSAA—Grades 3–8 and High School

Datafolio Component	*Anchor Grade Equivalents 4, 8, and high school*	*Expanded Grade Equivalents 3, 5, 6, and 7*
Table of Contents	✓	✓
Student Page	✓	✓
One Entry Cover Sheet for each content area	English language arts, mathematics, social studies, science	English language arts, mathematics
One Data Summary Sheet for each content area	4 (one for each content area above)	2 (one for English language arts, one for mathematics)
Verifying evidence per API	1 piece per API in each content area	3 pieces for mandatory API in English language arts and mathematics
Parent/Family/Guardian Survey	✓	✓
Permission to tape and photograph	If applicable	If applicable
Video and Audiotape Evaluation Form	If applicable	If applicable

During the 2005–06 testing cycle, the Department submitted its accountability documentation for peer review to the United States Education Department. The results of that review required the Department to revise its alternate assessment to ensure:

- the presence of evidence of alignment between the NYSAA alternate achievement standards and the newly adopted grade level expectations;
- that students are assessed at each required grade;
- the setting of cutpoints and the development of Alternate Performance Level Descriptors (APLDs) for each grade level and content area; and
- the technical quality of the assessment, including research-based standard setting, and the production and submission of the Standard Setting Report and Technical Manual.

The new assessment system had to be in place for the 2006–07 testing cycle, culminating with standard setting in June 2007.

Beginning in July 2006, the Department, in collaboration with Measured Progress, redesigned the NYSAA. The focus and purpose of the assessment is to ensure that students with severe cognitive disabilities are being provided access to the general education curriculum (i.e., grade-level expectations). However, for these students, grade-level expectations need to be expanded in both breadth and depth. This resulted in the AGLIs contained in the NYSAA Administration Manual: Appendix H—NYSAA Frameworks.

The Department brought together groups of stakeholders, including general education content specialists and special education teachers, to develop the AGLIs. The groups referred to the general education Test Blueprints to determine the academic core priorities. From there, each content group reviewed the grade-level expectations for each grade level and content area. The groups determined the essences of the grade-level expectations. Lastly, the groups wrote AGLIs that were aligned to the essences of the grade-level expectations. In addition to developing the AGLIs, stakeholders were also brought together to develop Sample Assessment Tasks (SATs) aligned to the AGLIs. The following year, the stakeholder groups were brought in again to further refine what was originally developed. Chapter 2 of this report contains a more thorough description of the test design and format.

The new NYSAA was first implemented in the late fall of 2006. The administration, which had an abbreviated administration period, culminated with regional Scoring Institutes. Standard setting was conducted in June 2007, resulting in cut scores for each grade level and content area, as well as in APLDs. The cut scores were approved by the Commissioner of Education and submitted, along with the Standard Setting Report, to the United States Education Department. The 2007–08 NYSAA implementation occurred with a full administration period. This administration was based on the refined AGLIs and SATs. The administration again culminated with the regional Scoring Institutes. Standard setting was conducted on the revised AGLIs in June 2008, resulting in new cut scores and updated APLDs for each grade level and content area. The Commissioner of Education approved the updated cut scores in June 2008. The intent of the AGLIs was not changed for the 2010–11 administration; therefore, the cut scores established during the June 2008 standard setting remain consistent for each grade level and content area.

The information in this section and throughout the Technical Manual provides a framework to determine the consequential validity of the NYSAA. In order to demonstrate consequential validity, the assessment should:

- provide multiple measurement occasions;
- show student results are improving; and
- demonstrate that revisions to the NYSAA are considered based on stakeholder feedback.

The revised NYSAA demonstrates that students are provided multiple measurement occasions as embedded in the three data collection points. Also, stakeholder input has been critical throughout the development and revision processes.

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APPENDICES

Appendix A—NYSAA Test Blueprints for Each Content Area

NYSAA Test Blueprint - English Language Arts (ELA)
Effective with 2006–07 Administration

REQUIRED COMPONENTS Two ELA Key Ideas Must be Assessed at each Grade Level Required Key Ideas Vary by Grade as Marked by an X							
ELA Key Idea[1]	**Grade 3**	**Grade 4**	**Grade 5**	**Grade 6**	**Grade 7**	**Grade 8**	**High School**
Reading	X	X	X	X	X	X	X
Writing		X		X		X	X
Listening	X		X		X		
Speaking*	---	---	---	---	---	---	---

*Note: Speaking is not assessed on the general education State assessments.

CHOICE COMPONENTS For Each Required Key Idea, There are Two Possible Standards From Which to Draw Allowable Choices of Standard Vary by Grade as Marked by an X Choose One Standard for Each Key Idea from Standards Marked with an X								
Standards	**Key Idea**	**Grade 3**	**Grade 4**	**Grade 5**	**Grade 6**	**Grade 7**	**Grade 8**	**High School**
1	Reading			X	X	X	X	X
2	Reading	X	X	X	X	X		
3	Reading						X	X
4	Reading	X	X					
1	Writing		X		X		X	X
2	Writing		X		X			
3	Writing						X	X
4	Writing							
1	Listening			X		X		
2	Listening	X		X		X		
3	Listening							
4	Listening	X						

[1]Key Ideas are defined on page 2 of the Introduction of the English Language Arts Core Curriculum (May 2005) as the receptive language skills of listening and reading and as the expressive language skills of writing and speaking.

NYSAA Test Blueprint - Mathematics
Effective with 2006–07 Administration

REQUIRED COMPONENTS Two Mathematics Strands Must be Assessed at each Grade Level Required Strands Vary by Grade as Marked by an X							
MATHEMATICS STRANDS	**Grade 3**	**Grade 4**	**Grade 5**	**Grade 6**	**Grade 7**	**Grade 8**	**High School**
Number Sense & Operations	X	X	X	X	X		
Measurement	X	X					
Geometry			X			X	
Algebra				X		X	X
Statistics & Probability					X		X

CHOICE COMPONENTS For Each Required Strand, There are Two Possible Bands From Which to Draw Allowable Choices Within Bands Vary by Grade as Marked by an X For Each Required Strand, Choose One of the Bands Marked with an X							
Bands	**Grade 3**	**Grade 4**	**Grade 5**	**Grade 6**	**Grade 7**	**Grade 8**	**High School**
Number Sense & Operations							
Number Systems	X	X	X	X			
Number Theory					X		
Operations	X	X	X	X	X		
Measurement							
Units of Measurement	X	X					
Units/Estimation	X	X					
Geometry							
Geometric Relationships			X			X	
Transformational Geometry						X	
Coordinate Geometry			X				
Algebra							
Variables & Expressions				X		X	X
Equations & Inequalities				X			X
Patterns, Relations & Functions						X	
Statistics & Probability							
Collection of Data					X		
Organization & Display of Data							X
Analysis of Data					X		X

See Mathematics Core Curriculum (March 2005) for further information.

NYSAA Test Blueprint - Science
Effective with 2006–07 Administration

REQUIRED COMPONENTS Two Standards must be Assessed at each Grade Level as Marked by an X			
Science Standards	**Grade 4**	**Grade 8**	**High School**
1 - Scientific Inquiry	X	X	
4 - Living Environment	X	X	X
4 - Physical Setting/ Earth Science			X

CHOICE COMPONENTS For Each Required Standard, There are Two Possible Key Ideas From Which to Draw Key Ideas Vary by Grade as Marked by an X Choose One Key Idea for each Standard from Key Ideas Marked with an X				
Standards	**Key Idea**	**Grade 4**	**Grade 8**	**High School***
1 - Scientific Inquiry	1- Develop explanations of natural phenomena	X		
	2- Testing proposed explanations	X	X	
	3- Observations made while testing		X	
4- Living Environment	1- Similarities/differences between living and nonliving things.			X
	3- Changes in organisms over time	X		
	5- Dynamic equilibrium		X	
	7- Human decisions/activities impact			X
4- Physical Setting/ Earth Science	1- Relative motion and perspective			X
	2- Interactions among components of air, water and land	X		X
	3- Particle properties determine observable characteristics of matter and its reactivity		X	

*Note: at the high school level, choices are made within one Standard, i.e., Standard 4. One choice is drawn from the two designated within the Living Environment section of the curriculum and the other choice is drawn from the two designated within the Physical Setting/Earth Science section of the curriculum. See the Core Curricula for Science at http://www.emsc.nysed.gov/ciai/cores.html#MST

NYSAA Test Blueprint - Social Studies (HS only)
Effective with 2010–11 Administration

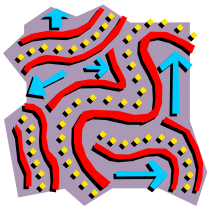
REQUIRED COMPONENTS Two Standards must be Assessed at the High School Grade Level as Marked by an X	
Social Studies Standards	**High School**
1 - US History	X
2 - Global History	X

CHOICE COMPONENTS For Each Required Standard, There are Two Possible Units From Which to Draw as Marked by an X Choose One Unit For Each Standard From Units Marked with an X		
Standards	**Units**	**High School**
1- US History	2 - Constitutional Foundations	X
	7 (B) - World in Uncertain Times: 1980-Present	X
2- World History: Global History and Geography	5 - Age of Revolution	X
	8 - Global Connections and Interactions	X

See the Core Curricula for Social Studies at:
http://www.emsc.nysed.gov/ciai/cores.html#SOCIALSTUDIES

Appendix B—2010–11 Scoring Procedures

2010–11 Scoring Procedures for Scoring NYSAA Datafolios



Follow the steps below to review each NYSAA datafolio. If a discrepancy is not addressed in this document, consult your Table Leader. A Table Leader MUST review and confirm all issues that would result in a "No" for any of the three Connections questions, a "No Score" for a date(s) and/or an adjustment(s) to the Data Summary Sheet (DSS) prior to the Scorer recording the error.

1. Student Demographics, Scorer ID, Scoring Institute Code

- Student ID information must be consistent with demographic label, Student Page, and Scannable Score Document. If information is discrepant or if scannable is missing, consult the Table Leader. Record Scorer comment **19** at the bottom of the Scorer Worksheet.
- Affix demographic label to the upper left corner of the Scorer Worksheet. Apply a student label **to each copy** of the Scorer Worksheet, as directed by the Score Site Coordinator (SSC). If a label is not available, transcribe the information from the Student Page to the Scorer Worksheet.
- Enter the 3-digit Scorer Identification Number and 6-digit Scoring Institute Code in the upper right corner of the Scorer Worksheet.

2. Confirm the Student's Date of Birth (DOB) and Grade Assessed

- **Does the DOB fall within the range indicated on the Student Page for the grade assessed?** If the datafolio was completed using ProFile™, accept the grade level as correct. **Note:** If a DOB is found to be outside the range specified for any grade level, alert your Table Leader.

If **YES** →	Mark the grade assessed in the upper right corner of the Scorer Worksheet.	
If **NO** → *Consult the Table Leader*	**Wrong grade level** was assessed.	Record AGLI code **00099** and "**N**" **for No** for all Connections questions for each AGLI within the content areas that should have been assessed. Record "**N**" **for No Score** for each date. Record Procedural Error comment **1**.

3. Testing Accommodations, Collegial Review, and Table of Contents

- **Testing Accommodations**—Transcribe any Testing Accommodations listed on the Student Page to the Scannable Score Document in spaces provided. If no Testing Accommodations are recorded, continue to review and score the assessment.
- **Collegial Review**—Is a month in which the last Collegial Review took place indicated on the Student Page?

If **YES** →	Record "**Y**" **for Yes** for "Was a collegial review of this datafolio conducted?" on the Scannable Score Document.
If **NO** →	Record "**N**" **for No.** Record Scorer comment **20** at the bottom of the Scorer Worksheet. Continue to review and score the assessment.

- Table of Contents—If missing, continue to review and score the assessment.
- Set the Scannable Score Document aside until all content areas have been reviewed and scored.

Each Required Component must have a DSS and two pieces of Verifying Evidence (VE). The DSS summarizes the student demographic information, the AGLI, the assessment task information, and the student performance data for the assessed task. The student performance information documented on the DSS comes from the three dates of assessment. **The VE confirms what is documented on the DSS for two of the three dates.** The student performance information for the additional date does not require VE.

4. Review Sequence of Documentation for a Content Area (start with ELA, then mathematics, then science, then social studies) Review entire content area to determine if anything is out of order. **Do not reorganize the datafolio.**

a) Are two DSSs present, one for each Required Component? Identify each DSS by its title (e.g., "Grade 3-ELA" and "Grade 3-ELA Cont'd").

If **YES** →	If present, proceed to Step 4b.	
If **NO** → *Consult the Table Leader*	DSS is **missing**.	Record AGLI code **00099** and "**N**" **for No** for each Connections question for the missing AGLI. Record "**N**" **for No Score** for each date. Record Procedural Error comment **2**. Proceed to next AGLI or content area.
	There are two DSSs for the **same Required Component**.	Review and score the assessment documentation that is presented first. Record AGLI code **00099** and "**N**" **for No** for each Connections question for the missing AGLI. Record "**N**" **for No Score** for each date. Record Procedural Error comment **4**. Proceed to next content area.

b) Is the documentation for Required Components in order? Scan the content area to confirm that the first and second Required Components are in order using the titles and the Component box information on the DSSs.

If **YES** →	Continue to review and score the assessment. Proceed to Step 5.	
If **NO** → *Consult the Table Leader*	Documents are **out of order**.	Consider documentation that is out of order and score the assessment **in the correct order**. Record Scorer comment **21**. Proceed to Step 5. **Note: Do not reorganize datafolio.**

5. Review the DSS: Demographics and Components (start with 1st DSS for 1st AGLI)

a) Is demographic information complete on DSS?

If **YES** →	If complete, proceed to Step 5b.	
If **NO** → *Consult the Table Leader*	Demographic information is **discrepant or incomplete**.	Transcribe information from the Student Page to the DSS **in red ink**. Proceed to Step 5b.

b) Is Choice Component complete on DSS?

If **YES** →	If complete, proceed to Step 6.	
If **NO** → *Consult the Table Leader*	Choice Component box is **not checked** on DSS.	Use the AGLI code/text to identify Component in the Frameworks and check appropriate Choice box on DSS **in red ink**. Proceed to Step 6.

6. AGLI from Grade Level (Connection to Grade Level Content)—**Two different Required Components must be assessed** for each content area (e.g., Reading and Writing). Using the AGLI code and text recorded on the DSS, locate the assessed AGLI in the Frameworks. (Note: If ProFile™ was used, accept the AGLI code and text. Document AGLI as outlined in 6b "If **YES→**," then proceed to Step 7.)

a) Is the AGLI indicated on the DSS from specified Required Component for the student's assessed grade?

If **YES →**	Proceed to Step 6b.	
If **NO →** *Consult the Table Leader*	AGLI code is **discrepant or missing from DSS but can be confirmed using AGLI text** documented on DSS or VE and Frameworks.	Adjust or transcribe AGLI code to DSS **in red ink**. Record Scorer comment **22a**. Proceed to Step 6b.
	AGLI for the **assessed grade level cannot be confirmed** in Frameworks.	Record AGLI code **00099** and "**N**" **for No** for each Connections question and "**N**" **for No Score** for each date of the AGLI. Record Procedural Error comment **3**. Proceed to next AGLI or content area.
	Recorded AGLI is **not from one of the two choice components under this Required Component** for the assessed grade.	Record AGLI code **00099** and "**N**" **for No** for each Connections question and "**N**" **for No Score** for each date of the AGLI. Record Procedural Error comment **4**. Proceed to next AGLI or content area.

b) Does the AGLI text that is documented on the DSS match the text listed in the Frameworks for the confirmed AGLI code?

If **YES →**	Record the AGLI code and record "**Y**" **for Yes** for "AGLI from grade level." Proceed to Step 7. a. **Record information for the first Required Component AGLI in the "1st AGLI" space on the Scorer Worksheet. Record information for the second Required Component AGLI in the "2nd AGLI" space on the Scorer Worksheet.**	
If **NO →** *Consult the Table Leader*	AGLI text is **discrepant or missing but AGLI code is documented**, and correct AGLI text can be found in Frameworks.	Adjust or transcribe AGLI text on DSS **in red ink**. Record AGLI code and "**Y**" **for Yes** for "AGLI from grade level." Record Scorer comment **22b**. Proceed to Step 7.
	Discrepant or missing AGLI **text cannot be resolved.**	Record AGLI code **00099** and "**N**" **for No** for each Connections question and "**N**" **for No Score** for each date of the AGLI. Record Procedural Error comment **5**. Proceed to next AGLI or content area.

7. Task Connects to AGLI (Connection to Grade Level Content)

a) Does the assessment task that is documented on the DSS clearly connect to the AGLI? **Even if ProFile™ was used or if the teacher documented that the same or a comparable task was used,** locate the Sample Assessment Task (SAT) in the Frameworks.

If **YES →**	Proceed to Step 7b.		
If **NOT SURE** or if **TASK IS ORIGINAL →**	Any of these criteria apply: • Check the Frameworks to see if the task as written appears as a SAT. • Is the verb/verb phrase and direct object(s) from the AGLI included in the assessment task? • Does the assessment task address the intent of this AGLI and/or the essences of the grade level indicators for this AGLI?		
	If **YES →**	Proceed to Step 7b.	
	If **NO →** *Consult the Table Leader*	Assessment task **does not meet criteria** — task is not connected to the AGLI.	Record "**N**" **for No** for "Task Connects to AGLI" and remaining Connections question. Record "**N**" **for No Score** for each date of the AGLI. Record Procedural Error comment **6a**. Proceed to next AGLI or content area.

7. Task connects to AGLI (Continued)

b) Does the assessment task connect to the AGLI by demonstrating 1) any plural contained in the AGLI; 2) any AND, OR, or AND/OR statements contained in the AGLI? Note: If the AGLI does not contain any plurals or statements, follow "If **YES →**" directions below.

1)
- When an AGLI includes a **plural without parentheses around the "s,"** the plural version of the word must be demonstrated in the task.
- When an AGLI includes a **plural with the "s" in parentheses**, the teacher may choose the singular or plural version of the word to be demonstrated in the task.

2)
- When an AGLI includes an **AND** statement, **all** elements of the AGLI must be demonstrated in the task.
- When an AGLI includes an **OR** statement, the teacher may choose one of the elements of the AGLI most appropriate for the student.
- When an AGLI includes an **AND/OR** statement, the teacher may choose one, some, or all of the elements from the AGLI most appropriate for the student.

If **YES →**	Record "**Y**" **for Yes** for "Task connects to AGLI." Proceed to Step 8.	
If **NO →** *Consult the Table Leader*	AGLI includes a **plural without parentheses around the "s" and the plural is not included** in the assessment task.	Record "**N**" **for No** for "Task Connects to AGLI" and remaining Connections question. Record "**N**" **for No Score** for each date of the AGLI. Record Procedural Error comment **6b**. Proceed to next AGLI or content area.
	AGLI includes an **AND** statement and **not all elements from the AGLI are included in the assessment task.**	Record "**N**" **for No** for "Task Connects to AGLI" and remaining Connections question. Record "**N**" **for No Score** for each date of the AGLI. Record Procedural Error comment **6b**. Proceed to next AGLI or content area.

8. VE Connects to Task (Connection to Grade Level Content)

a) Are two pieces of VE found behind the DSS? Note: A single DCS may be submitted for and considered as two pieces of VE. A single calendar/chart can only be submitted as one piece of VE.

If **YES →**	Proceed to Step 8b.	
If **MORE THAN TWO PIECES OF VE →**	**Three or more pieces** of VE are included. Note: do not confuse this with a student work product that is multiple pages or with supporting evidence.	Only the **first two pieces of VE** can be used to score the assessment. Also, if one or both pieces of evidence for this AGLI are invalid, **other evidence cannot be considered in its place**. Record Scorer comment **24**. Proceed to Step 8b using only the first two pieces of VE.
If **NO →** *Consult the Table Leader*	**Only one piece of evidence is found**. Note: review the datafolio to determine if second piece of VE is misplaced.	Record "**N**" **for No** for "VE connects to task." Record "**N**" **for No Score** for each date of the AGLI and record Procedural Error comment **7**. Proceed to next AGLI or content area.

b) Do both pieces of VE connect to the assessment task? VE must show how the student demonstrated his or her knowledge, skills, and understanding related to the assessment task. **Note:** If VE is a DCS, it must include steps, time-segment, or trial information.

If **YES →**	Proceed to Step 8c.	
If **NO →** *Consult the Table Leader*	One or both pieces of **VE do not connect** to the task.	Record "**N**" **for No** for "VE connects to task." Record "**N**" **for No Score** for each date of the AGLI. Record Procedural Error comment **8a–c**. Proceed to next AGLI or content area.
	DCS included as VE is **missing the steps, time-segment, or trial information**.	Record "**N**" **for No** for "VE connects to task." Record "**N**" **for No Score** for each date of the AGLI. Record Procedural Error comment **14b**. Proceed to next AGLI or content area.
	Video- and/or audiotape **malfunctioned** or the evidence clip is **unable to be located** on the video- and/or audiotape.	Record "**N**" **for No** for "VE connects to task." Record "**N**" **for No Score** for each date of the AGLI. Record Procedural Error comment **13b** or **13d**. Proceed to next AGLI or content area.

8. VE Connects to Task (Continued)

c) Does the VE (in total, both VEs) connect to the assessment task by demonstrating 1) any plural contained in the assessment task; 2) any AND, OR, or AND/OR statements contained in the assessment task? **Note:** If the assessment task does not contain any plurals or statements, follow "If **YES** →" directions below.

1)
- When an assessment task includes a **plural without parentheses around the "s,"** the plural version of the word must be demonstrated in the VE (in total). It is not necessary for both pieces of VE to contain both plural elements of the assessment task. One piece of VE may contain one element and the other piece of VE may contain the other element.
- When an assessment task includes a **plural with the "s" in parentheses**, the teacher may choose the singular or plural version of the word to be demonstrated in the VE.

2)
- When an assessment task contains an **AND** statement, **all** elements of the assessment task must be demonstrated in the VE (in total). It is not necessary for both pieces of VE to contain both elements of the assessment task. One piece of VE may contain one element and the other piece of VE may contain the other element.
- When an assessment task contains an **OR** statement, the VE may contain one of the elements of the assessment task most appropriate for the student.
- When an assessment task contains an **AND/OR** statement, each individual piece of VE may contain one, some, or all element(s) of the assessment task.

If **YES** →	Record "**Y**" **for Yes** for "VE connects to task." Proceed to Step 9.	
If **NO** → *Consult the Table Leader*	Assessment task includes a **plural without parentheses around the "s."** Upon review of both pieces of VE (in total), they **do not satisfy the plural** indicated.	Record "**N**" **for No** for "VE connects to task." Record "**N**" **for No Score** for each date of the AGLI. Record Procedural Error comment **8d**. Proceed to next AGLI or content area.
	Assessment task contains an **AND** statement. Upon review of both pieces of VE (in total), they **do not satisfy the AND statement** indicated.	Record "**N**" **for No** for "VE connects to task." Record "**N**" **for No Score** for each date of the AGLI. Record Procedural Error comment **8d**. Proceed to next AGLI or content area.

9. Dates of Student Performance on the DSS

a) Are three separate dates within the 2010–11 administration period recorded on the DSS (October 4, 2010–February 11, 2011)?

If **YES** →	Proceed to Step 9b.	
If **NO** → *Consult the Table Leader*	One or more dates of student performance within the administration period is **missing from DSS, but can be determined** from valid VE. Note: A valid DCS (see Steps 10a, e, and f) may provide up to three separate dates within the administration period. If so, use last date(s) recorded on DCS. All other valid VE (see Steps 10a and 10b, c, or d) can only provide one date each.	Transcribe date(s) from VE to the DSS **in red ink** in chronological order. Record Scorer comment **26a**. Proceed to Step 9b.
	One or more dates of student performance within the administration period **cannot be determined** from valid VE or one or more dates on DSS are **outside** the **administration period**.	Record "**N**" **for No Score** for date(s) in question. Record Procedural Error comment **9a** or **9b**. Review the remaining date(s) for the AGLI or proceed to next AGLI or content area.

b) Are the three dates documented on the DSS in chronological order?

If **YES** →	Proceed to Step 9c.	
If **NO** → *Consult the Table Leader*	Dates are **not in chronological order.**	Reorder the dates and student performance data for each date on DSS **in red ink**. Record Scorer comment **26b**. Proceed to Step 9c.

9. Dates of Student Performance on the DSS (continued)

c) Do the dates on each piece of VE correspond to two dates within the administration period on the DSS?

If **YES** →	Proceed to Step 10.	
If **NO** → *Consult the Table Leader*	Date(s) on the first two pieces of VE are **discrepant with the date(s) on DSS,** but are within the administration period.	Adjust date(s) on the DSS **in red ink** from the VE. Record Scorer comment **26a** or **26c**. Proceed to Step 10.
	First two pieces of VE behind DSS **do not confirm two dates** of student performance within the administration period.	Record "**N**" **for No Score** for date(s) in question. Record Procedural Error comment **9c**. Accept ratings for the date that does not require evidence and proceed to next AGLI or content area.

10. Valid Evidence: VE and Supporting Evidence (SE)—Review each piece of evidence individually to determine the validity of that piece.

a) Are the seven required elements clearly documented? Required elements may be handwritten or printed on the actual VE, on a VE label that is affixed to the VE, or **a combination of both**. Students may record his or her name and/or date on work products.

Required Elements for Evidence

- Student name
- Date of student performance
- Content area
- AGLI text
- Assessment task
- Level of Accuracy
- Level of Independence

If **YES** →	All elements are clearly documented.	Proceed to Steps 10b, c, d, and/or e depending on type of evidence.
If **NO** → *Consult the Table Leader*	One or more required elements on the VE and/or VE label is **discrepant** with the DSS. Note: a. Required elements documented by the teacher on VE supersedes DSS and VE label. b. Required elements documented on VE label supersedes DSS, if required elements are not otherwise indicated on VE itself. c. Teacher-recorded information supersedes student-recorded information on VE.	Adjust the required elements to DSS **in red ink**. Record Scorer comment **26a** or **27a–f**. Proceed to Steps 10b, c, d and/or e. **Note: Do not make any marks on VE or VE labels.**
	One or more required elements is **missing** from VE (VE itself or VE label) or VE label is **not affixed** to VE.	Record "**N**" **for No Score** for that date. Record Procedural Error comment **10a–g**. Review remaining date(s) for the AGLI or proceed to next AGLI or content area.

b) Is the student work product original? It must be original—meaning no photocopies of student responses, no correction fluid/tape and no black out. Original work may be work products that use assistive technology, computers, and/or interactive white board systems (e.g., SMART board) to complete the student work product.

If **YES** →	Proceed to Step 11.	
If **NO** → *Consult the Table Leader*	Work product is **not original** (i.e., photocopies of student responses, correction fluid/tape, black out).	Record "**N**" **for No Score** for that date. Record Procedural Error comment **11**. Review remaining date(s) for the AGLI or proceed to next AGLI or content area.

10. Valid Evidence: VE and SE (Continued)

c) Are there three photographs with a caption from a single date? There must be a minimum sequence of three photographs of the student performing the task, a minimum of one caption describing the sequence, and photographic sequence from a single date.

If **YES** →	Proceed to Step 11.	
If **NO** → *Consult the Table Leader*	**Fewer than three photographs** are submitted of the student performing the task.	Record "**N**" **for No Score** for that date. Record Procedural Error comment **12d**. Review remaining date(s) for the AGLI or proceed to next AGLI or content area.
	No caption is found.	Record "**N**" **for No Score** for that date. Record Procedural Error comment **12c**. Review remaining date(s) for the AGLI or proceed to next AGLI or content area.
	No date or multiple dates is found on the evidence.	Record "**N**" **for No Score** for the date. Record Procedural Error comment **12a** or **12b**. Review remaining date(s) for the AGLI or proceed to next AGLI or content area.

d) Is the video- and/or audiotape clip brief and does it contain the seven required elements recorded on it? Clip must be 90 seconds or less (excluding markers) and contain at least one recorded marker with the seven required elements.

If **YES** →	Proceed to Step 11.	
If **NO** → *Consult the Table Leader*	Clip duration is **longer than 90 seconds.**	Record "**N**" **for No Score** for the date. Record Procedural Error comment **13c**. Review remaining date(s) for the AGLI or proceed to next AGLI or content area.
	All required elements, such as recorded markers, are not recorded on the clip in any manner. VE label on tape case or box is not acceptable.	Record "**N**" **for No Score** for that date. Record Procedural Error comment **13a**. Review remaining date(s) for the AGLI or proceed to next AGLI or content area.

e) Does the DCS have SE and three dates of data with staff initials for dates that need it? The DCS must have a minimum of three dates, have one piece of SE for each date transcribed to the DSS as VE (acceptable to have up to two dates transcribed as VE, would then have two pieces of SE), and have staff initials recorded for each date that has an Observer Verification Form (OVF) as SE (see Step 10f for types of SE).

If **YES** →	Continue with Step 10f below, review each submitted piece of SE individually.	
If **NO** → *Consult the Table Leader*	**Fewer than three dates** are documented on the DCS.	Record "**N**" **for No Score** for the date(s) transcribed from the DCS to the DSS. Record Procedural Error comment **14c**. Review remaining date(s) for the AGLI or proceed to next AGLI or content area.
	SE is missing for a date(s) transcribed to DSS as VE.	Record "**N**" **for No Score** for the date(s) transcribed from the DCS to the DSS. Record Procedural Error comment **14a**. Review remaining date(s) for the AGLI or proceed to next AGLI or content area.
	Staff initials are missing from DCS and supporting evidence is an OVF for that date.	Record "**N**" **for No Score** for that date. Record Procedural Error comment **14d**. Review remaining date(s) for the AGLI or proceed to next AGLI or content area.

10. Valid Evidence: VE and SE (Continued)

f) Is the SE valid? Review each piece of SE following the information below.

1. **Observer Verification Form (OVF)**—Review Step 10a and OVF criteria below to determine if OVF is valid SE.

NOTE: Ignore an OVF submitted in support of original student work, photographic, videotape, or audiotape evidence. Only a DCS requires SE.

Criteria for an OVF

An OVF is invalid if:

- any of the seven required elements (Student name, Date of performance, Content area, AGLI text, Assessment task, Level of Accuracy, Level of Independence) for valid VE are missing;
- supplementary school personnel (e.g., teacher aide or teacher assistant) signed as the observer;
- the person collecting the data also signed the OVF as the observer (confirmed by comparing initials and staff key information);
- more than one date of student performance is documented on a single OVF;
- the observer's signature and/or title is not included; or
- the signature date is prior to, or more than three calendar days after, the date of student performance.

If **YES** →	Continue to review the other piece of SE submitted or proceed to Step 11.	
If **NO** → *Consult the Table Leader*	**Observer's title is missing from OVF, but can be confirmed** from another OVF in the datafolio.	**Score.** Continue to review the other piece of SE submitted or proceed to Step 11. Record Scorer comment **29**.
	Observer's title is missing from OVF and cannot be confirmed from another OVF in the datafolio.	Record "**N**" **for No Score** for that date. Record Procedural Error comment **15b**. Review the other piece of SE submitted, remaining date(s) for the AGLI or proceed to next AGLI or content area.
	OVF is **invalid per one or more criteria** listed in the bullets above.	Record "**N**" **for No Score** for that date. Record Procedural Error comment **10a–g** or **15a–e**. Review the other piece of SE submitted, remaining date(s) for the AGLI or proceed to next AGLI or content area.

2. **Student Work Product**—Review Steps 10a and b to determine if student work product is valid SE.
3. **Photographs**—Review Steps 10a and c to determine if photographs are valid SE.
4. **Videotape and/or Audiotape**—Review Steps 10a and d to determine if video- and/or audiotape is valid SE.

If **YES** →	Continue to review the other piece of SE submitted or proceed to Step 11.	
If **NO** → *Consult the Table Leader*	Student work product, photographs, or video-/audiotape is **invalid per Step criteria.**	Record "**N**" **for No Score** for that date. Record appropriate Procedural Error comment **indicated in Steps 10a–d**. Review the other piece of SE submitted, remaining date(s) for the AGLI or proceed to next AGLI or content area.

11. Confirm Student Performance Information (Level of Accuracy and Level of Independence Percentages and Ratings)

- **Are the percentages on the VE calculated correctly and are the rubric ratings (4, 3, 2, or 1) on the DSS recorded correctly?** Review the VE comparing calculations for Level of Accuracy and Level of Independence with the percentages recorded on the DSS. Review rubric rating corresponding to each percentage. Accept ratings for the date that does not require VE.

If **YES** →	**Record rubric ratings** for the Level of Accuracy and Level of Independence. Proceed to Step 12.	
If **NOT SURE** →	Information on the VE **contradicts or does not support what is documented** for the Level of Accuracy and/or the Level of Independence, and the Scorer cannot clearly see how to correct calculation.	Accept the percentages the teacher recorded and **record rubric ratings** for the Level of Accuracy and Level of Independence. Record Scorer comment **30**. Proceed to Step 12.
If **NO** → *Consult the Table Leader*	Level of Accuracy and/or Level of Independence on the VE is **discrepant with** what is documented on the DSS.	Adjust the percentage and/or rating on the DSS **in red ink** to match the VE. **Record adjusted rubric ratings** and Scorer comment **27e** or **27f**. Proceed to Step 12. **Note: Never make changes to VE or VE labels.**
	Level of Accuracy and/or Level of Independence was **incorrectly calculated** and the Scorer can clearly see how the percentage calculated can be adjusted. Note: if Scorer cannot clearly see how to correct calculation, follow "If **NOT SURE** →" directions.	Adjust the percentage calculation on DSS **in red ink**. **Record adjusted rubric ratings** and Scorer comment **31**. Proceed to Step 12.
	Level of Accuracy and/or Level of Independence is **missing from the DSS, but is for a date(s) that has valid VE.** Note: A valid DCS (see Steps 10a, e, and f) may provide student performance information for up to three dates within the administration period. If so, use the student performance information from the last date(s) recorded on DCS. All other valid VE (see Steps 10a and 10b, c, or d) can only provide student performance information for one date each.	Transcribe percentage calculation from the VE to the DSS **in red ink**. **Record rubric ratings** and Scorer comment **27e** or **27f**. Proceed to Step 12.
	Level of Accuracy and/or Level of Independence is **missing from the DSS for the date that does not require evidence** and does not have a valid DCS as VE (see Steps 10a, e, and f).	Record "**N**" **for No Score** for that date. Record Procedural Error comment **2**. Review remaining date(s) for the AGLI or proceed to next AGLI or content area.

12. Procedural Error and Scorer Comments

- **Procedural Error Comments (1–18)**—Double check that a Procedural Error Comment has been recorded on the Scorer Worksheet for each No or No Score.
- **Scorer Comments (19–33) / Positive Feedback Comments (34–41)**—Select comments from the back of the Scorer Worksheet that will clarify if something was adjusted in the datafolio and/or if something was questioned during scoring. Scorers are encouraged to also provide positive feedback to teachers.

13. Score the 2nd AGLI—Follow steps 5–12 for the second AGLI from the same content area.

14. Score Mathematics, Science, and Social Studies—Follow Steps 4–13 and score the remaining content areas in order for the grade assessed: Mathematics (Grades 3–8 & HS), Science (Grades 4, 8, & HS), and Social Studies (HS only).

15. Complete the Scannable Score Document—Transcribe the following data

From the Scorer Worksheet:	• **AGLI code**—5 digits
	• **Three Connections questions**—"Y" for Yes or "N" for No
	  • AGLI from grade level
	  • Task connects to AGLI
	  • VE connects to task
	• **Ratings** (4, 3, 2, 1, N)—Level of Accuracy and Level of Independence

From the datafolio Student Page:	• Was a Collegial Review of this datafolio conducted? "Y" for Yes or "N" for No • Transcribe the Testing Accommodations documented on the bottom of the Student Page to the Scannable Score Document in the space provided.
From the "Not Tested" form, if applicable:	• Absent • Administrative Error • Not Enrolled • Took Another Assessment • Medically Excused
Complete the Scannable Score Document for each content area applicable and any other information as directed by the Score Site Coordinator. Confirm AGLIs have been recorded correctly—1st AGLI in 1st AGLI space and 2nd AGLI in 2nd AGLI space.	

CAUTION—Errors in transcribing Connection to Grade Level Content and Performance ratings from the Scorer Worksheet to the Scannable Score Document will directly impact the student receiving a reportable score. DOUBLE CHECK ALL TRANSCRIPTIONS TO THE SCANNABLE SCORE DOCUMENT!

Other Scoring Concerns or Questions Not in the Scoring Procedures

This table outlines other situations that may come up within a datafolio. These may result in a No Score and/or adjustment in the datafolio. If any of these are found, consult the Table Leader for direction.

The following may or may not result in a No or No Score.

- **Incorrect** or **old NYSAA forms were used** (i.e., DSS from the wrong grade or forms used prior to 2006–07).
- **The assessment task indicates that an additional or lower-level skill was assessed** than what was stated in the AGLI.
- Task does not connect to the AGLI, **but VE appears to connect to the AGLI.**
- **Photocopies** (either in part or whole) or **correction fluid/tape or black out** is found on assessment documents.
- Evidence is found that a **mistake in data collection was erased** on the DSS, VE, or supporting evidence and was not crossed out and initialed by the teacher.
- **VE or supporting evidence** clearly appears to be **homework, and student page does not** indicate special education programs and services at home, in a hospital, or other facility.
- VE for ELA is submitted in a **language other than English.**
- Photographic, videotape, or audiotape evidence appears to **include prerequisite or post-activity steps.**
- **More than one set of data (Level of Accuracy and/or Level of Independence) is documented** on the DSS for a single date.

The following may result in an adjustment within the datafolio.

- **Task description includes prompting** (e.g., “Student will complete task with verbal cue” and Independence is documented as 100%).
- **Task description includes a criterion** (e.g., “Student will complete 8 out of 10 problems correctly”).
- **VE** is a work product that appears to include **prompts toward the correct answer or a format that guides the student directly to the correct answer** (e.g., template).

The following may occur in a datafolio and are acceptable, providing they meet requirements.

- **Sample Assessment Task** from the Frameworks **appears discrepant with the AGLI text.**
- VE appears to connect to the task, but **more than what was stated in the assessment task was assessed.**
- Use of a **“variety of objects/strategies”** or use of **“concrete objects”** is not clear in the VE.
- **Extra VE** or **supporting evidence was submitted** beyond the requirements for a specific AGLI.
- **VE label is affixed to incorrect VE** within same AGLI.
- Student work product (VE) or VE label is missing assessment task (documented on the DSS), but the **evidence includes directions that restate the assessment task.**
- Chart or calendar is submitted for a **date other than the last date recorded on the chart or calendar.**
- DCS includes **steps not relevant** to the assessed task, or a **single-step** task is documented on a multi-step DCS.
- **Dates or information printed in the header** and/or **footer** of documents completed with ProFile™ contradict information recorded on the evidence or VE label.

Appendix C—2010–11 Scoring Decision Rules

2010–11 Decision Rules for Scoring NYSAA Datafolios

(For Table Leaders)

Rule #	Scoring Concern/Question	Decision Rule/Rationale	May come up in Step(s)
1	**Incorrect** or **old NYSAA forms were used** (i.e., Data Summary Sheet (DSS) for the wrong grade or forms dated prior to 2006–07).	Incorrect Forms • If an incorrect DSS is used but all assessment requirements can be confirmed, adjust the incorrect information on the DSS **in red ink** and **score the assessment** following the Scoring Procedures. • If an incorrect DSS is used and assessment requirements cannot be confirmed, record Alternate Grade Level Indicator (AGLI) code(s) **00099** and **"N" for No** for each Connections question and **"N" for No Score** for each date of the AGLI(s). Record Procedural Error comment **2**. Continue to next AGLI or content area.	2-10
		Old Forms • Forms dated 2006–07 to present are included. If all requirements are met, **score the assessment** following the Scoring Procedures. • Forms dated prior to 2006–07 are included. Record AGLI code(s) **00099** and **"N" for No** for each Connections question and **"N" for No Score** for each date of the AGLI(s). Record Procedural Error comment **16**. Continue to next AGLI or content area. • Teacher created his/her own 2010–11 forms. If all requirements are clearly documented, **score the assessment** following the Scoring Procedures.	
Assessment Task			
2	**Sample Assessment Task** from the Frameworks **appears discrepant with the AGLI text.**	Sample Assessment Task (SAT) from the Frameworks was assessed for a corresponding AGLI from the Frameworks (as indicated by the SAT code). **Score the assessment** following the Scoring Procedures.	7a
3	**Task description includes prompting** (e.g., "Student will complete task with verbal cue" and Independence is documented as 100%).	• If frequency of prompting **can** be determined from Verifying Evidence (VE), **recalculate percentage based on 100% Independence** and **adjust corresponding rating** on DSS **in red ink** for each date. Record the adjusted rating and Scorer comment **32b**. Continue to next AGLI or content area. • If frequency of prompting **cannot** be determined from VE, **adjust Level of Independence to 0%** and **adjust corresponding rating** on DSS **in red ink** for each date. Record the adjusted rating and Scorer comment **32b**. Continue to next AGLI or content area.	7a
4	**Task description includes a criterion** (e.g., "Student will complete 8 out of 10 problems correctly").	• If Level of Accuracy **can** be determined from VE, **recalculate percentage based on 100% Accuracy** and **adjust corresponding rating** on DSS **in red ink** for each date. Record the adjusted rating and Scorer comment **32a**. Continue to next AGLI or content area. • If Level of Accuracy **cannot** be determined from the VE, **adjust Level of Accuracy to 0% and corresponding rating** on DSS **in red ink** for each date. Record the adjusted rating and Scorer comment **32a**. Continue to next AGLI or content area.	7a

5	**The assessment task indicates that an additional or lower-level skill was assessed** than what was stated in the AGLI.	Teachers may assess students on a skill(s) in addition to the intent of the AGLI, but they cannot assess less than the basic intent of the AGLI. Example of higher-level skill: HS, Science, AGLI 31205 states "identify parts of the water cycle" and the assessment task states that "the student will identify parts of the water cycle by labeling each part on a diagram and answer questions about the water cycle" or "the student will identify the parts of a water cycle by creating a water cycle diagram with each of the parts labeled and presenting it to the class." The student is being assessed on additional skills in addition to identifying the parts of the water cycle. • Intent of AGLI has been met. Record **"Y" for Yes** for "Task connects to AGLI." Continue to **score the assessment** following the Scoring Procedures. Example of lower-level skill: Gr. 5, Mathematics, AGLI 11203 states "compare two fractions that have the same denominator" and the assessment task states "the student will identify a fraction," where "identify a fraction" does not meet the intent of the AGLI which is to "compare two fractions." • Intent of the AGLI has not been met. Record **"N" for No** for "Task connects to AGLI" and remaining Connections question. Record **"N" for No Score** for each date of the AGLI. Record Procedural Error comment **6**. Continue to next AGLI or content area.	7a–b
6	Task does not connect to the AGLI, **but VE appears to connect to the AGLI.**	Record **"N" for No** for "Task connects to AGLI" and remaining Connections question. Record **"N" for No Score** for each date of the AGLI. Record Procedural Error comment **6**. Continue to next AGLI or content area.	8a-b
Verifying Evidence (VE)			

7	**Photocopies** (either in part or whole) or **correction fluid/tape or black out** is found on assessment documents.	• Correction fluid/tape or black out found on page numbers, student page, or table of contents **does not directly impact scores**. **Score the assessment** following the Scoring Procedures.
		• Photocopies of the DSS, VE, or supporting evidence (either in part or in whole) or correction fluid/tape or black out found on information **will directly impact the datafolio. Follow the guidelines below:**
		  • DSS (Demographic, Components, AGLI code/text, Assessment Task, dates, percentages, ratings)—record AGLI code **00099** and **"N" for No** for each Connections question and record **"N" for No Score** for each date of the AGLI. Record Procedural Error comment **11**. Continue to next AGLI or content area.
		  • VE, VE label, and/or supporting evidence— record **"N" for No Score** for that date(s). Review and score other date(s) for that AGLI following the Scoring Procedures. Record Procedural Error comment **11**.
		Digital photo prints in black and white, computer printouts, and interactive white board (e.g., SMART board) printouts are acceptable, since they are not photocopies.
			4–11

8	Evidence is found that a **mistake in data collection was erased** on the DSS, VE, or supporting evidence and was not crossed out and initialed by the teacher.	• If a teacher-made error is crossed out and corrected but not initialed, **score the assessment** following the Scoring Procedures. • If a teacher-made erasure is confirmed, record **"N" for No Score** for that date. Record Procedural Error comment **11**. Continue to review and score other date(s) for the AGLI following the Scoring Procedures. **Note:** A **student may self-correct** on a student work product, which does not require an annotation by the teacher. **Documentation** made by the teacher does **not have to be in permanent ink.**	4–11
9	VE appears to connect to the task, but **more than what was stated in the assessment task was assessed.**	Verifying evidence, that demonstrates the task as written but also includes additional skills, is connected to the task. (For example: The assessment task indicates the student will identify triangles, but the verifying evidence shows the student identifying triangles and squares.) • Record **"Y" for Yes** for "VE connects to task" and accept what the teacher has documented for percentages of Accuracy and Independence. Continue to **score the assessment** following the Scoring Procedures.	8b

10	Use of a **"variety of objects/strategies"** or use of **"concrete objects"** is not clear in the VE.	It is possible that the use of objects, strategies, or manipulatives will not be clear on a student work product. Unless obvious documentation that indicates that the student did not complete the assessment task per the task described, **score the assessment** following the Scoring Procedures.	8b
11	**Extra VE** or **supporting evidence was submitted** beyond the requirements for a specific AGLI.	• VE—Review **only the first two pieces** of VE following the DSS. The other date on the DSS recorded by the teacher is accepted as the date that does not require evidence. **Scorers cannot look for or consider alternate evidence if either or both of the first two pieces of VE are determined to be invalid.** Record Scorer comment **24**. • Supporting evidence—A Data Collection Sheet (DCS) can verify either one or two dates of student performance. One piece of supporting evidence is required for each date transcribed from the DCS to the DSS. **If the supporting evidence for the date(s) is determined to be invalid, Scorers cannot look for or consider alternate supporting evidence.** Record Scorer comment **24**.	8a–b or 10e–-f
12	**VE label is affixed to incorrect VE** within same AGLI.	Verify required elements and adjust required elements to DSS **in red ink**, if necessary. **Score the assessment** following Step 10a and record Scorer comment **21**.	10a
13	Student work product (VE) or VE label is missing assessment task (documented on the DSS), but the **evidence includes directions that restate the assessment task.**	Directions on the student work product restate the assessment task. **Score the assessment** following Step 10a. Record Scorer comment 27d.	10a
14	**VE or supporting evidence** clearly appears to be **homework, and the student page does not** indicate special education programs and services at home, in a hospital, or other facility.	Record **"N" for No Score** for that date. Record Procedural Error comment **17**. Continue to score next date.	10b–f
15	VE for ELA is submitted in a **language other than English.**	Record **"N" for No Score** for that date. Record Procedural Error comment **18**. Continue to score next date.	10b–f
16	Chart or calendar is submitted for a **date other than the last date recorded on the chart or calendar.**	If the date can be verified on the calendar or chart, accept the calendar or chart as evidence for that date. **Score the assessment** following the Scoring Procedures.	10b or 10f
17	**VE** is a work product that appears to include **prompts toward the correct answer or a format that guides the student directly to the correct answer** (e.g., template).	A direct guide or other format that gives the student the answer is considered a cue or prompt and impacts the student's Level of Independence. • If VE appears to include prompts of correct answers or a direct guide, **recalculate Level of Independence percentage based on items that were completed without the prompts or guide divided by the total number of items; if a prompt or guide is applied to a work product as a whole, then adjust Level of Independence to 0%. Adjust the percentage** and **corresponding rating** on the DSS **in red ink** for that date for Level of Independence. Record the **rating for Level of Accuracy** and **adjusted rating for Level of Independence**. Record Scorer comment **33**. Continue to score the next date. Examples: • VE is a sequencing worksheet that contains three boxes labeled "First," "Next," "Last"; the student response choices are pictures that contain the words "First," "Next," "Last." • VE is a map of the northeast with each of the states labeled; the directions state "Find New York and mark it." • VE is a number line where the student must provide missing numbers but the correct number is provided as a shaded number in the spot and the student has to put a sticker of the number on the spot. • VE is an addition-subtraction worksheet with answers dotted and the student traces the answers.	10b or 11

18	Photographic, videotape, or audiotape evidence appears to **include prerequisite or post-activity steps.**	• All of the requirements for VE are met and the additional requirements for photographic, videotape, or audiotape evidence are met. Accept what is documented by the teacher and **score the assessment** following the Scoring Procedures. • If requirements for VE and the other requirements for photographic, videotape, or audiotape evidence are not met, record **"N" for No Score** for that date. Record Procedural Error comment **12** or **13**. Continue to score the next date.	10c or 10d or 11
19	The DCS includes **steps not relevant** to the assessed task, or a **single-step** task is documented on a multi-step DCS.	• All of the requirements for VE are met, the additional requirements for a DCS are met, and there is no obvious error in documentation. **Score as documented on the DCS** following the Scoring Procedures (all steps listed on the DCS are scored, unless the teacher clearly indicates otherwise). • If a single-step task is documented on a multi-step DCS, **score the assessment** following the Scoring Procedures as documented.	10e or 11
Dates			
20	**Dates or information printed in the header** and/or **footer** of documents completed with ProFile™ contradict information recorded on the evidence or VE label.	Information printed in the header and/or footer of a document completed using the ProFile™ software cannot be considered when reviewing documentation of student performance data. **Score the assessment** following the Scoring Procedures.	2–11
21	**More than one set of data (Level of Accuracy and/or Level of Independence) is documented** on the DSS for a single date.	**A DSS must contain three different dates** that are the last three dates of student performance data. • When two scores are documented for a single date, use the score from the first documented session on that date as the score of record on the DSS. • If necessary, adjust other dates recorded on the DSS and continue to **score the assessment** following the Scoring Procedures. If no other information is available and no third date can be confirmed, record **"N" for No Score** for the third date. Record Procedural Error comment **9a**. Continue to score next date. **Note:** A set of data may consist of repeated trials conducted during a single session on a single date (e.g., discrete trials using Applied Behavioral Analysis [ABA]).	9a