



**New Jersey  
Alternate Proficiency Assessment (APA)**

**2009  
Technical Report**

**November 2010**

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## **PART 1: INTRODUCTION**

The purpose of this technical report is to provide information about the New Jersey Alternate Proficiency Assessment (APA) administered in 2008–2009. This report is intended for use by those who evaluate tests, interpret scores, or use test results for making educational decisions. It consists of the following sections: test design and test development, test administration and training, scoring, reliability and validity, standard setting, and reporting. It includes references to additional reports and documents, and Web sites related to the APA.

The 2009 APA assessed Language Arts Literacy and Mathematics in grades 3, 4, 5, 6, 7, 8, and 11. Science was assessed in grades 4 and 8, and in grades 9, 10, or 11, depending on the grade in which a student received Biology instruction. A total of 8,354 students were evaluated with the 2008–2009 APA. Of these, 7,865 had valid Language Arts Literacy scores, 7,776 had valid Mathematics scores, and 2,687 had valid Science scores. Table 1.1 presents the overall performance of students on the 2009 APA. The table shows the number of valid scores and the percent of students at each proficiency level for students assessed.

### **1.1 Purpose of the Assessment**

The New Jersey Alternate Proficiency Assessment was developed for two purposes:

- To measure the progress of a small percentage of students with the most significant cognitive disabilities who cannot participate in the regular statewide assessments even with accommodations.
- To ensure that the educational results for all students are included in the statewide accountability system at the individual, school, district, and state levels.

Accountability through assessment provides equity in program and educational opportunities for all students. Alternate assessment ensures an inclusive statewide assessment system and student accountability linked to the common core of learning within the general curriculum in New Jersey.

The New Jersey APA represents a cohesive approach where curriculum, instruction, and assessment work together to build a comprehensive educational program. Curriculum drives instruction and assessment. Assessment and instruction inform the curriculum as well as each other.

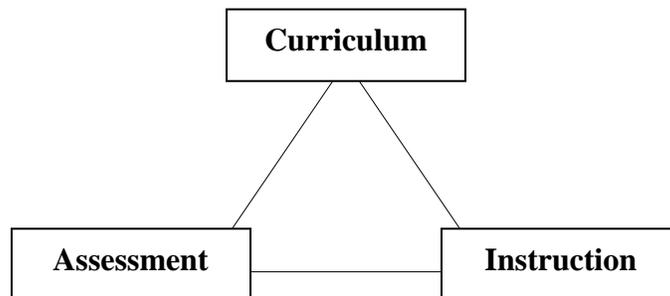
**Table 1.1 2009 APA Number of Valid Scores and Percent of Students at Each Proficiency Level**

	Total Students Enrolled	Language Arts Literacy				Mathematics				Science			
		Number of Valid Scores	% Partially Proficient	% Proficient	% Advanced Proficient	Number of Valid Scores	% Partially Proficient	% Proficient	% Advanced Proficient	Number of Valid Scores	% Partially Proficient	% Proficient	% Advanced Proficient
Grade 3	1219	1190	30.7	47.6	21.7	1164	38.1	43.0	18.9	—	—	—	—
Grade 4	1132	1092	37.1	52.1	10.8	1064	44.9	33.1	22.0	1009	47.8	49.7	2.6
Grade 5	1147	1101	42.1	50.9	7.0	1084	37.8	38.6	23.6	—	—	—	—
Grade 6	1133	1093	36.6	51.8	11.6	1079	41.7	42.1	16.2	—	—	—	—
Grade 7	1158	1111	39.2	45.9	14.9	1092	39.7	43.5	16.8	—	—	—	—
Grade 8	1135	1079	42.6	48.4	9.0	1085	40.6	46.6	12.8	1011	41.3	42.8	15.8
Grade 9*	57	—	—	—	—	—	—	—	—	55	61.8	27.3	10.9
Grade 10*	109	—	—	—	—	—	—	—	—	109	28.4	57.8	13.8
Grade 11*	1187	1125	39.6	34.0	26.4	1136	50.1	33.5	16.5	503	44.9	46.5	8.5
Grade 12	77	74	58.1	31.1	10.8	72	70.8	25.0	4.2	—	—	—	—
All Grades	8354	7865	38.4	47.0	14.6	7776	42.1	40.0	18.0	2687	44.3	46.4	9.3

\*In 2008–2009, APA assessed science in grade 9, 10, or 11, depending on the grade in which a student received biology instruction.

The triangle in Figure 1.1 highlights the relationship between curriculum, instruction, and assessment.

**Figure 1.1 Linkage**



High-quality assessment practices provide information upon which to base ongoing development of curriculum that is responsive to individual student needs. Aside from the use of a portfolio to capture student learning, this philosophy considers students with significant cognitive disabilities as valued and contributing members of their schools and communities. This performance-based assessment is designed to measure achievement of knowledge and skills that will prepare students for positive post-school outcomes in education, employment, and independent living.

## **1.2 Overview of the Assessment**

### **Background**

The New Jersey Alternate Proficiency Assessment process was developed in response to the *Individuals with Disabilities Education Act of 1997 (IDEA '97)* which required that states develop and conduct alternate assessments beginning no later than July 1, 2000. With the reauthorization of *IDEA '97* as the *Individuals with Disabilities Education Improvement Act of 2004 (IDEA 2004)*, requirements for alternate assessments remain as follows:

#### **ALTERNATE ASSESSMENTS—**

- (i) **IN GENERAL—**The State (or, in the case of a district-wide assessment, the local educational agency) has developed and implemented guidelines for the participation of children with disabilities in alternate assessments for those children who cannot participate in regular assessments under subparagraph (A) with accommodations as indicated in their respective individualized education programs.
- (ii) **REQUIREMENTS FOR ALTERNATE ASSESSMENTS—**The guidelines under clause (i) shall provide for alternate assessments that—
  - (I) are aligned with the State’s challenging academic content standards and challenging student academic achievement standards; and
  - (II) if the State has adopted alternate academic achievement standards permitted under the regulations promulgated to carry out section 1111(b)(1) of the

*Elementary and Secondary Education Act of 1965*, measure the achievement of children with disabilities against those standards.

- (iii) CONDUCT OF ALTERNATE ASSESSMENTS—the State conducts the alternate assessments described in this subparagraph. (Sec. 612 (a) (16) (C))

In addition, the *No Child Left Behind Act of 2001 (NCLB)* requires that all students, including those with disabilities, participate in the state assessment program. NCLB also requires that the measurement of progress toward meeting state standards include assessment results for all students.

The Alternate Proficiency Assessment fulfills these requirements and is based on the Core Curriculum Content Standards (CCCS) in the content areas of language arts literacy, mathematics, and science. In this manner, all students in New Jersey are moving toward the same general standards with whatever modifications or supports they need. Including students with disabilities in the assessment and accountability system is critical to ensure appropriate allocation of resources and learning opportunities for these students. The alternate assessment was designed for a very small percentage of the total school population for whom traditional assessments, even with accommodations, would be inappropriate measures of their progress.

### **Portfolio Assessment**

The Alternate Proficiency Assessment (APA) is a portfolio assessment designed to measure progress toward achieving New Jersey's state educational standards for those students with the most significant cognitive disabilities who are unable to participate in the general assessments: New Jersey Assessment of Skills and Knowledge in grades 3–8 (NJ ASK), the High School Proficiency Assessment (HSPA), and the End of Course Biology Test (EOC).

A portfolio is a collection of student work samples, student demographic data, and instructional information that relates to a student's progress on the New Jersey Core Curriculum Content Standard (CCCS), strands, grade-level cumulative progress indicators (CPIs), and skill statements called CPI links. Evidence of student performance as demonstrated in the student portfolio was collected twice during instructional activities over the school year. To score the portfolios, trained expert scorers used a scoring rubric designed to measure student performance on the skill, the level of independence when performing the skill, and the relationship of the skill to the grade level cumulative progress indicator.

## Uses of Assessment Results

The APA measures the student's achievement of the Core Curriculum Content Standards (CCCS) in Language Arts Literacy, Mathematics, and Science. APA results should not be used as the sole basis for instructional decisions.

Each content area assessed receives a proficiency level. The three proficiency levels are:

- **Advanced Proficient** exceeded the level of proficiency
- **Proficient** met the state level of proficiency
- **Partially Proficient** is below the state minimum level of proficiency.

The proficiency level classification allows the APA results to be combined with the results from general assessment for accountability purposes for state and federal reports. For accountability purposes, the APA is both a student assessment and a school/district program assessment.

It is important to recognize that the APA system does not report scale scores. The data provided are the key components when interpreting the portfolio results. The APA scores are based solely on the information provided in the portfolio submitted; therefore, it is inappropriate to compare these scores to other APA students and students taking the general assessments. Scale scores are not appropriate for use for the APA system as there are no issues of equating involved. There are no sets of test items; therefore, there are no item difficulties, nor is there a need to equate test scores from year to year.

For additional information about the APA, the standards on which the APA is based, or information regarding the participation of students with disabilities in the statewide assessment system, see these documents published by the New Jersey Department of Education:

*New Jersey Alternate Proficiency Assessment 2008–2009 Procedures Manual* at [http://pem.ncspearson.com/nj/apa/\(ata4pc55vuusrefaknysb55\)/Documentation\\_0809.aspx](http://pem.ncspearson.com/nj/apa/(ata4pc55vuusrefaknysb55)/Documentation_0809.aspx)

*Core Curriculum Content Standards (July 2004)* at <http://www.nj.gov/njded/cccs>

### 1.3 Organizational Support

**New Jersey Department of Education (NJDOE).** The APA is administered by the Office of State Assessments (OSA) within the New Jersey Department of Education (NJDOE). The NJDOE coordinates the development and implementation of New Jersey's statewide assessment program, which is designed to measure student attainment of New Jersey's Core Curriculum Content Standards. The OSA works collaboratively within the department and with school districts to collect and report information about student academic achievement in order to inform instruction, increase student learning, and help parents and the public assess the effectiveness of their schools.

The staff of the NJDOE plans, schedules, and directs all APA activities. They are extensively involved in the APA development, training, document review, assessment security and authenticity, and quality-control procedures.

**Pearson.** The prime contract for developing, administering, and scoring the APA was awarded to Pearson in May 2004. In partnership with Inclusive Large Scale Standards and Assessment (ILSSA), Pearson presents extensive administrator training materials, sample activities, forms templates, planning tools, instructional materials, and resources for APA educators at <http://pem.ncspearson.com/nj/apa>. Major Pearson activities include:

- Creating and monitoring the schedule for the APA administration, all tasks, subtasks, and activities to be conducted;
- Developing all APA reports, programs, committee communications, training materials, etc., in consultation with NJDOE staff;
- Designing, constructing, proofing, and printing assessment materials, forms, and documents;
- Packaging, distributing, and retrieving all assessment documents;
- Processing and scoring the student portfolios;
- Providing electronic data management and documentation;
- Establishing and implementing required standard setting and psychometric reporting.

**Inclusive Large Scale Standards and Assessment (ILSSA).** ILSSA assists NJDOE and Pearson with content development, planning, and execution including training and scoring support for the APA. ILSSA is a group of educators dedicated to improving educational opportunities for all students, especially those with significant cognitive disabilities. Since 2001, ILSSA has worked with the NJDOE to implement the APA. During their years of partnership with the NJDOE, ILSSA has provided technical assistance and professional development on a range of topics, from all aspects of implementation of the APA, to research-based practices and access to the general curriculum. Beginning in the summer of 2007, ILSSA worked closely with NJDOE on revisions of the APA through the development of an up-front alignment design, redesign of the scoring rubric, standard setting, and increasing the standardization of the assessment items. They also worked closely with New Jersey educators to provide training and support for teachers with examples of standards-based instruction for better meeting requirements of the revised portfolio assessment.

ILSSA was formed in August 1998 in response to states' and school districts' need to respond to the assessment and other requirements of the Individuals with Disabilities Education Act (IDEA '97) and the Elementary and Secondary Education Act.

*New Jersey APA Educators.* Due to the nature of the APA, educators are more extensively involved with the APA administration than the other NJ statewide assessments. For that reason, the NJDOE developed the APA with the very important assistance of several APA educator committees. The committees included representatives of various groups who are knowledgeable about educating students with significant cognitive disabilities and who have an interest in alternate assessment. The committees consisted of panels of special education teachers, child study team members, general education teachers, and administrators. Participants were chosen because of their qualifications as well as their educational expertise. Selection criteria included number of years teaching, student population served, district factor group (DFG), type of educational facility, and regional location. Special care was taken to ensure gender and racial/ethnic representation on the committees. Committee meetings supporting the 2008–2009 APA were as follows:

- APA Advisory Committee: August 26, 2008; January 13, 2009; May 20, 2009
- APA Curriculum (Created Sample Items) Committee: July 28 – August 1, 2008
- APA Rangefinding Committee: March 23 – 27, 2009
- APA Performance Level Descriptors Committee: February 24 – 25, 2009
- APA Standard Setting Committee: June 9 – 12, 2009

## **PART 2: TEST DESIGN AND TEST DEVELOPMENT**

### **2.1 Design History**

The design of the APA has been in transition since the 2006 administration. Peer reviewers from the U.S. Department of Education (USDOE) assist the NJDOE with expert professional judgment. Specific requirements addressed for a need in design change were:

- APA students must be assessed on a subset of skills from the general assessment. The skills must be mapped to the general assessment specifications, and address the breadth and depth of skills tested across grade levels.
- The skills assessed must link to the cumulative progress indicators of the student's assigned grade level.
- Students in the same grade must be assessed on the same content; teachers choose from a limited selection of standards and strands to assess their students.
- Strengthen the alignment of the APA program design to grade level academic content and progress indicators.

The NJ APA was first administered during the 2001–2002 school year in two content areas: language arts literacy and mathematics at grades 4, 8, and 11.

During the 2004–2005 school year, the APA was administered at grades 4, 8, and 11 in language arts literacy, mathematics, and science; and language arts literacy and mathematics in grade 3.

Starting with the 2006–2007 administration, language arts literacy, mathematics, and science are administered in grades 4, 8, and 11; and language arts literacy and mathematics are assessed in grades 3, 5, 6, and 7. With the implementation of the High School End of Course Biology Exam, science is also assessed at grades 9 and 10, if the student is enrolled in a Biology class.

Beginning with the 2002–2003 school year, APA proficiency levels were combined with the other New Jersey state assessment results for state and federal accountability. The APA proficiency levels were designed to parallel other New Jersey state assessment results for state assessment programs. Portfolios were scored based on six dimensions: student progress, connection to standards, social interaction, independence, self-determination, and generalization. For each content area, student performance was classified into three proficiency levels based on progress and program:

- Advanced Proficient
- Proficient
- Partially Proficient

The student progress score for each content area was classified into three levels:

- Substantial Progress
- Considerable Progress
- Minimal Progress

The program score was derived by adding the scores of the remaining five dimensions: connection to standards, social interaction, independence, self-determination, and generalization. A holistic sorting method was used to determine the cut scores for the three program levels:

- Commendable
- Satisfactory
- Needs Improvement

The student progress level and the program level were combined to derive the three proficiency levels. At the recommendation of the APA Advisory Committee, the performance classification weights the program level more than the student progress level due to the use of state assessment results for school and district accountability. Table 2.1 prescribes how the proficiency was classified.

**Table 2.1 APA Proficiency Classification (2003-2007)**

Proficiency Levels		Student Progress Levels		
		Substantial	Considerable	Minimal
Program Levels	Commendable	Advanced Proficient	Advanced Proficient	Proficient
	Satisfactory	Proficient	Proficient	Proficient
	Needs Improvement	Proficient	Partially Proficient	Partially Proficient

A standard setting was conducted in January and February 2003 in order to determine the cut scores for the program level. These cut scores were applied to all grade levels for both mathematics and language arts literacy. When science was added to the APA in the 2004–2005 administration, the same program-level cut scores were applied.

For the 2006–2007 administration, in preparation for the transition to a new test design, the weight of program score determined by the Social Interaction, Independence, and Generalization dimensions was reduced by half. The scoring rubrics were revised to reflect the changes.

2007–2008 was an interim year of the design change. Based on the USDOE peer review, the skills assessed were required to be academic in nature and linked to a grade-level cumulative progress indicator (CPI). For the purpose of Adequate Yearly Progress

reporting, only the dimensions of Student Progress and Connection to Standards were assessed. Though Social Interaction, Independence, Self-Determination, and Generalization would be considered best practice, these dimensions that were assessed in previous years were not assessed. The connection to standards score replaced the previous program dimension score. An interim standard setting was conducted in April 2008. The interim standard setting was to ease the further transition of additional changes for the re-designed APA.

The 2008 APA proficiency level for each content area was based on the total score, which is the sum of the Connection to Standards and Student Progress scores. These two scored dimensions are described below:

- **Student Progress** – to evaluate student progress toward achieving the targeted skills related to the CCCS
- **Connection to Standards** – to determine the extent to which the portfolio content is linked to the CCCS

Each content area assessed received a proficiency classification – Advanced Proficient, Proficient, or Partially Proficient – which allowed the APA results to be combined with New Jersey’s general assessment results for accountability purposes as required by the United States Department of Education.

In 2008–2009 the redesigned APA became operational. The new design, described in Section 2.2, was scored on the three dimensions: Complexity, Independence and Performance which are combined to determine a total score. A new standard setting was held and the cut scores that resulted were used for reporting in 2009.

- The **Complexity** Dimension is used to evaluate the CPI Link assessed and how closely the complexity and difficulty (Matched, Near, Far) links to the CCCS and grade-level cumulative progress indicators (CPI).
- The **Independence** Dimension is used to evaluate the extent to which the student completed the assessment items independently.
- The **Performance** Dimension is used to evaluate the student’s accuracy when performing skills represented in the CPI Links.

Table 2.2 shows the number of portfolios with valid scores for each content area by grade level for the APA test administrations from 2003–2004 through 2008–2009.

**Table 2.2 Number of Valid Scores 2003-2004 Through 2008-2009 Administrations**

Content Area	2003-2004			2004-2005			2005-2006			2006-2007			2007-2008			2008-2009		
	LAL	Math	Science															
Grade 3	835	840	---	784	741	---	908	863	---	1005	956	---	1001	994	---	1190	1164	---
Grade 4	829	814	---	773	742	710	882	804	794	997	982	894	1075	1039	958	1092	1064	1009
Grade 5	---	---	---	---	---	---	---	---	---	1037	1016	---	1018	1021	---	1101	1084	---
Grade 6	---	---	---	---	---	---	---	---	---	1015	1006	---	1038	1021	---	1093	1079	---
Grade 7	---	---	---	---	---	---	---	---	---	990	975	---	1036	1014	---	1111	1092	---
Grade 8	728	694	---	768	755	723	930	852	871	1033	1037	989	930	946	892	1079	1085	1011
Grade 9*	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	55
Grade 10*	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	109
Grade 11*	647	630	---	657	645	554	642	609	596	978	953	885	1054	995	66	1125	1136	503
Grade 12	---	---	---	77	78	---	194	185	---	90	88	---	36	36	---	74	72	---
All Grades	3039	2978	---	3059	2961	1987	3556	3313	2261	7145	7013	2768	7188	7066	1916	7865	7776	2687

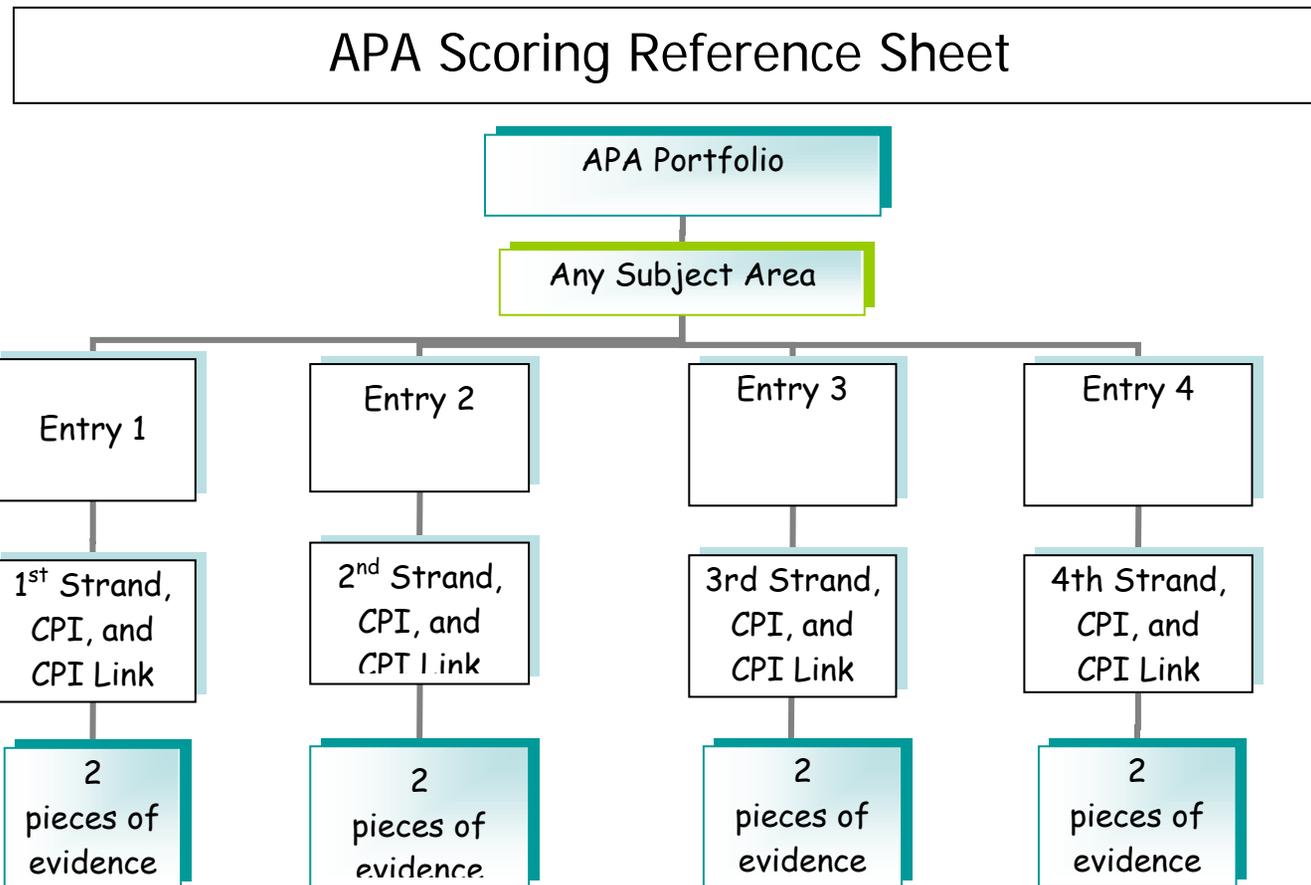
\*In 2008-2009, APA assessed science in grade 9, 10, or 11, depending on the grade in which a student received biology instruction.

## 2.2 Test Design

The design of the APA remains the same across grades and content areas; it is the specific academic content being measured which differs. In each APA subject area, four strands from the NJ CCCS are measured. For each strand, a CPI from the CCCS and an associated CPI link must be identified for measurement. The CPI Links and their CPIs and Strands are available through the NJ DOE Website ([http://pem.ncspearson.com/nj/apa/%28hgf5hyjdcyfnd445xe4zvg45%29/CPILinks\\_0910.aspx](http://pem.ncspearson.com/nj/apa/%28hgf5hyjdcyfnd445xe4zvg45%29/CPILinks_0910.aspx)). To assess student mastery of the CPI link, the teacher uses data collected from classroom learning and assessment activities.

The student's ability to complete the tasks in the activities is measured once early in the assessment window, providing the 1st piece of evidence. The student is then measured late in the assessment window on the same targeted skill to see the extent to which their performance has improved, providing the second piece of evidence. A graphic, representing the structure of the APA is presented in Figure 2.1.

Figure 2.1 APA Structure



Each entry in a student's portfolio is scored on the three dimensions defined previously: complexity, independence, and performance. These dimensions are evaluated using the 2 pieces of evidence submitted for each entry. One piece of representative evidence is collected early in the year as a baseline score; another piece of representative evidence is collected near the end of the year. The difference in student performance exemplified on the two is a measure of the student's performance. Scores are combined across entries to determine the student's proficiency level in a subject. This scoring is described in greater detail in Part 4.

### **2.3 Test Specifications**

The 2008–2009 APA has Test Specifications, by grade and content, which prescribe the standards and strands that must be assessed. Test specifications were written in order to provide more specific guidance on how to link to grade level CPIs, and to address the federal requirement of linkage to the skills tested in the general assessments. Specifying the requirements increases standardization of the assessment for students with significant cognitive disabilities. Students may not be assessed in functional, behavioral, or access (social, motor, etc.) skills. Functional activities and materials might be used to promote understanding during instruction, but the evidence and activities demonstrating student achievement for assessment must be academically focused and represent the entire grade-level CPI Link.

Each APA portfolio in each grade requires four entries per content area of Language Arts Literacy and Mathematics. In Grades 4, 8 and high school the portfolio must also have four entries in Science. The test specifications below identify the standards, strands, and CPIs that must be assessed.

- Four entries based on Language Arts Literacy standards from the CCCS.
  - Two entries based on 2 different strands and CPIs from standard 3.1 (Reading)
  - Two entries based on 2 different strands and CPIs from standard 3.2 (Writing)
- Four entries based on 4 different Mathematics standards from the CCCS with specified strands and CPIs at each grade level.
  - One entry based on a specified strand, CPI and CPI Link from Standard 4.1 (Number and Numerical Operations)
  - One entry based on a specified strand, CPI and CPI Link from Standard 4.2 (Geometry and Measurement)
  - One entry based on a specified strand, CPI and CPI Link from Standard 4.3 (Patterns and Algebra)
  - One entry based on a specified strand, CPI and CPI Link from Standard 4.4 (Data Analysis, Probability, and Discrete Mathematics)
- Four entries based on different Science standards from the CCCS.
  - Grade 4
    - One entry based on a specified strand, CPI and CPI Link from Standard 5.5 (Life Science)

- One entry based on a specified strand, CPI and CPI Link from Standard 5.6 (Physical Science – Chemistry)
- One entry based on a specified strand, CPI and CPI Link from Standard 5.8 (Earth Science)
- One entry based on a specified strand, CPI and CPI Link from Standard 5.9 (Astronomy and Space Science)
- Grade 8
  - One entry based on a specified strand, CPI and CPI Link from Standard 5.5 (Life Science)
  - One entry based on a specified strand, CPI and CPI Link from Standard 5.6 (Physical Science – Chemistry)
  - One entry based on a specified strand, CPI and CPI Link from Standard 5.7 (Physical Science – Physics)
  - One entry based on a specified strand, CPI and CPI Link from Standard 5.9 (Astronomy and Space Science)
- High School
  - Two entries based on 2 different strands, CPIs and CPI Links from standard 5.5 (Life Science)
  - Two entries based on 2 different strands, CPIs and CPI Links from standard 5.10 (Environmental Studies)

## 2.4 Alignment

Federal peer review guidance indicates that a state’s academic achievement standards must be aligned with the State’s academic content standards and capture the full range and depth of knowledge and skills defined in the State’s academic content standards (USED, 2007). For the APA this was achieved by the development of grade-level specific achievement level descriptors and achievement levels that cover the full range of knowledge and skills articulated in the CPI Links. The process for developing the descriptors and setting the achievement levels is fully described in Section 6. This section details the development of the CPI Links and their alignment to the state’s content standards.

Prior to the development of the essences and CPI Links, a subset of the NJ Core Curriculum Content Standards was prioritized for measurement on the APA. In 2007 the NJ DOE worked with ILSSA and NJ educators to identify appropriate standards and associated CPIs for the APA population. The standards and CPIs identified differed across grades to ensure the broadest coverage of the CCCS. Establishing the essences of the CPIs from the core curriculum content standards was accomplished by a committee of NJ educators, facilitated by ILSSA. A flow chart explaining this process is attached as Appendix A.

The CPI Links are skills statements that directly link to the critical essence of CPIs from the NJ Content Standards. Providing these statements removes the need for educators to determine an appropriate instructional link to the CPIs as the CPI Links have already been vetted using criteria developed in NJ based on the peer-reviewed work of special education researchers and the National Alternate Assessment Center (NAAC). The

criteria used as guiding principles for test development and alignment processes are excerpted below from the 2008 NJ APA Test Administrator’s Manual.

Table 1: *Criteria for Instruction and Assessment that Links to Grade Level Content*

1. The content is academic and includes the major domains/ strands of the content area as reflected in state and national standards (e.g., reading, math, science).
2. The content is referenced to the student’s assigned grade level.
3. The achievement expectation is linked to the grade level content, but differs in depth or complexity; it is not grade level achievement.
4. There is some differentiation in achievement across grade levels or grade bands.
5. The focus of achievement promotes access to the activities, materials, and settings typical of the grade level but with the accommodations, adaptations, and supports needed for individualization.
6. The focus of achievement maintains fidelity with the content of the original grade level standards (content centrality) and when possible, the specified performance (category of knowledge).
7. Multiple levels of access to the general curriculum are planned so that students with different levels of symbolic communication can demonstrate learning.

Adapted from Browder, D.M., Wakeman, S.Y., Flowers, C.P., Rickelman, R.J., & Pugalee, D. (In press). Creating access to the general curriculum with links to grade level content for students with significant cognitive disabilities: An explication of the concept. *Journal of Special Education*.

As a result of the development of the essences and the CPI Links, educators no longer need to develop appropriate targeted skills and criteria, resulting in increased standardization in the academic content to which APA students are exposed, and in the expectations of performance on that academic content.

Each Link is presented at three different levels of complexity to provide examples of how the essence of grade level content can be taught to students with the most significant cognitive disabilities who have varied levels of communication and skills. The three levels of connection to each CPI are:

- Matched Link
- Near Link
- Far Link

Each CPI Link maintains fidelity with the grade level CPI (content centrality) but the complexity and difficulty varies from Matched to Far Link (performance centrality). **Complexity** is the expectation level at which the student should perform the skill (remembering, understanding, applying, analyzing, evaluating and creating). **Difficulty** involves the number of concepts, skills, or ideas on which the student will be working or

the type of adaptations and supports in place. Difficulty can be changed by reducing the number of nouns addressed within the CPI, limiting the amount a student has to do, or by using adaptations such as adapted text or limited number of items.

All CPI Links are aligned with grade level CPIs; however, they differ in the level of complexity and difficulty at which the student is expected to perform. Matched Links have more complexity and difficulty than the Far Links.

The different levels of the CPI Links do not correspond to a particular communication system, learning style, or disability category of a student. Students may be using a Matched Link in one entry and a Far Link in another.

**Matched Link:** Contains skill statements that are approximately the *same complexity* level of the CPI expectation but the *level of difficulty is lessened*.

- For instance, if the CPI complexity level is “understanding” then a matched link usually requires the student demonstrate understanding. However, if the CPI expectation is that the student understands similes, metaphors, personification, and alliteration, the matched link *might* only require a few of those concepts, thus modifying the difficulty level.
- Difficulty may also be lessened by providing an adapted text, fewer problems, or other supports.

**Near Link:** *May be the same or lower complexity* as the CPI expectation but the *difficulty level has been lessened even more*.

- Near links were developed in two different ways. If the complexity level for the CPI is at the “understanding” level, then the near link *may be* “understanding” but the difficulty level has been modified to include fewer concepts and additional supports.
- Or, a near link may have been developed by modifying the complexity level so that instead of “understanding” the student is required to demonstrate “remembering.”

**Far Link:** Contains skill statements that are a *lower complexity level and difficulty is lessened even more*.

- For instance, if the CPI expectation is at the “understanding” level, the student is only expected to perform at the “remembering” level.
- Also, the difficulty level has been lessened so that the student is only identifying part of the concept/skill required in the CPI and has additional supports.

## Example of a CPI Link

<p><b>CPI</b> → <b>CPI 3.1.5G13</b> Recognize figurative language in text (e.g., simile, metaphor, personification, alliteration)</p>		
<p>Essence of the CPI: Identify figurative language ← <b>Essence of the CPI</b></p>		
<p><b>Matched Link</b>  <i>Complexity is the same</i>  <i>Difficulty is lessened</i></p>	<p><b>Near Link</b>  <i>Complexity is the same</i>  <i>Difficulty is lessened even more</i>                      OR  <i>Complexity is lessened</i>  <i>Difficulty is lessened</i></p>	<p><b>Far Link</b>  <i>Complexity is lessened</i>  <i>Difficulty is lessened even more</i></p>
<p>→ <b>CPI Link</b></p> <ul style="list-style-type: none"> <li>◆ List the figurative language used in a text</li> <li>◆ Find examples of figurative language found in text</li> <li>◆ Change a metaphor to a simile</li> <li>◆ Personify an object</li> </ul>	<ul style="list-style-type: none"> <li>◆ Label a sentence/fragment as a simile, metaphor, personification, or alliteration</li> <li>◆ Match examples of figurative language to its type (cute as a button : simile)</li> </ul>	<p>← <b>CPI Link</b></p> <ul style="list-style-type: none"> <li>◆ Identify key words for similes (like, as)</li> <li>◆ Identify simile (e.g., match example to term; answer yes/no based on examples)</li> <li>◆ Identify personification (e.g., match example to term; answer yes/no based on examples)</li> <li>◆ Identify alliteration (e.g., match example to term; answer yes/no based on examples)</li> <li>◆ Identify metaphor (e.g., match example to term; answer yes/no based on examples)</li> </ul>

## **Part 3: TEST ADMINISTRATION AND TRAINING**

### **3.1 Participation in the Alternate Proficiency Assessment**

All students with disabilities must participate in the state assessment system. Students with disabilities participate in either the general assessment with accommodations for their grade, or in the APA. The Individualized Education Program (IEP) team makes decisions about state assessment participation. Decisions regarding participation in the APA must be documented in the student's IEP. A sample of the IEP form with guidance about how to document decisions is shown at [www.nj.gov/education/specialed/iep\\_form\\_ann.pdf](http://www.nj.gov/education/specialed/iep_form_ann.pdf). The IEP team determines for each content area assessed, whether an individual student will participate in the general assessment or the APA. A student may participate in the APA in a content area only if the IEP team determines that the student has not been instructed in the knowledge and skills tested by the assessment and if the student is unable to correctly complete any of the tasks on the general assessment, even with accommodations and modifications [*N.J.A.C.* 6A: 14-4.10].

Students with disabilities participate in the state assessments during the same grades as their nondisabled peers. Therefore, students with disabilities in grades 3–8, and high school (9, 10, and/or 11), must participate in the statewide assessment system, regardless of educational placement. The student's assigned grade level determines when a student participates in state assessments. This includes students with disabilities attending the following:

- Local district public schools;
- Local district public schools in another part of town;
- Public schools in other towns;
- Receiving schools including county special services school district, public educational service commissions, approved private schools for the disabled, college-operated programs, Marie H. Katzenbach School for the Deaf, jointure commissions, and regional day schools;
- Private schools in accordance with a Naples placement;
- Private schools for the disabled out of state (placed there by a New Jersey district or authorized state agency); and
- State educational facilities.

Students on homebound instruction were also required to participate in state assessments.

Guidelines for grade 12 students are:

- If a senior was new to the state and had not participated in either the APA or the HSPA, the IEP team determined which assessment was appropriate and the student participated in that assessment.

- Students, who were juniors the previous year and should have participated in the APA but did not, must participate in the APA.

Students with disabilities who participate in one or more content areas of the HSPA, regardless of whether or not they were required to pass the HSPA in order to meet graduation requirements, were not eligible to participate in the APA in that (those) content area(s).

The document, “Guidelines to Determine Which Students Should Participate in the New Jersey Statewide Assessment Through the Alternate Proficiency Assessment,” appears in Appendix B. Also included is a chart that provides the individual determinations that must be made to evaluate student eligibility for participation in the APA.

### **Personnel Responsibilities**

Identifying a student who should take the Alternate Proficiency Assessment as the state assessment of record requires the input of many personnel. The district’s director of special education, the child study team members, and other educators may be involved in this decision, although the IEP team makes the final decision about participation in the APA.

The school administrator, director of special education, and the APA coordinator are responsible for ensuring that the APA is correctly developed for the appropriate students during the prescribed data collection period. The dissemination of information to the APA student’s educators, oversight of the APA process, and the review of the portfolio are all administrators’ responsibilities. It is also the direct responsibility of the administrators to ensure that these assessments are submitted on time for scoring, and that the student demographic information coded on both the general assessment test book/answer folder and the APA assessment scan sheet is accurate and complete.

All educators of students who participate in the APA process are responsible for reviewing the *APA Procedures Manual* and following all procedures when collecting educational information that will be submitted in a portfolio. All educators should review the scoring guidelines and plan how to include student work in the portfolio that meets these guidelines. In most cases, the evidence contained in the portfolio is submitted by several teachers, though the student’s lead teacher does the coordination of the development and submission of the APA to the coordinator.

### **3.2 Test Administration Procedures**

For each school and district with any student assessed with the APA, the NJDOE required that an administrator (special education director, principal, director of curriculum, child study team members, etc.) be assigned to the role of test coordinator. These individuals were responsible for ensuring that all APA tasks were completed, including the dissemination of information, the completion of all portfolios, the review of the completed portfolios for accuracy and authenticity, and adherence to all APA

deadlines. Table 3.1 displays the calendar shown on the inside front cover of the *APA Procedures Manual (2008–2009)*.

**Table 3.1 2008-2009 Calendar for APA**

<b>Event</b>	<b>Date</b>
Administrator Training	September 9, 10, 11, 12, 2008
Training for APA Teachers	September 22–26, 2008 October 1, 2, 3, 2008 October 6, 7, 8 & 10, 2008 October 14–17, 2008
First Collection Period	September 2008–November 21, 2008
Second Collection Period	December 15, 2008–February 20, 2009
Portfolio Completion Date	February 20, 2009
Administrator Review of Portfolio	February 23–27, 2009
Portfolio Collection Materials Sent To Districts/Schools	February 2009
Portfolios Returned to Contractor	March 2–6, 2009
Portfolios Returned after this Date Will NOT be Scored	March 20, 2009
Student Demographic Record Changes	April 6–May 1, 2009
APA Scoring	Spring 2009
Scores Reported to School Districts	June 2009
Portfolios Returned to Districts	September 2009

### 3.3 Pre-Administration Training

For schools with any students participating in the APA, NJDOE required one administrator and at least one teacher to attend a pre-administration training session held at four regional locations across the state in the fall. The mandatory half-day training session for administrators focused on student participation guidelines for the APA, the administrators' roles and responsibilities, and the APA design. For teachers, the all-day training sessions focused on the required portfolio components and scoring rubrics. The training sessions included revisions to the APA as well as the current requirements.

The administrator training for the 2009 assessment was held September 9–12, 2008. Sixteen all-day teacher training sessions were held from September 22–October 17, 2008. In addition to the regional training sessions, online training sessions were simulcast via the Internet with an online application called WebEx. The WebEx training sessions enabled districts and schools to facilitate in-district training and reduce the transportation burden of attending the regional training. The WebEx administrator training session was Wednesday, September 10, and the two teacher training sessions were Thursday, September 25, and October 17. The agenda for the teachers' training session is shown in Table 3.2.

**Table 3.2 Teachers' Training Session Agenda**

- APA - What is it and who participates?
- Grades and Subjects Assessed
- Test Design Changes
- Instruction of CPI Links and Evidence Documentation
- APA Test Design Details
  - Scoring Rubric Dimensions
  - Sample Entries
- General Information and Questions
- Split Session
  1. Collaboration for teachers of students who use symbolic language
  2. Guided assistance for teachers of students who use pre-symbolic/emerging symbolic language

Copies of all APA training materials are available on the Pearson Web site:  
<http://pem.ncspearson.com/nj/apa>.

### 3.4 Test Security Procedures

Due to the nature of the APA, educators are more extensively involved in preparing and handling the assessment materials than for other NJ statewide assessments. The following statements concerning the professional and ethical responsibility of educators administering the APA appeared on page 4 of the *APA Procedures Manual (2008–2009)*.

- **It is the responsibility of all contributors to a student’s portfolio to ensure that any and all data and documentation reflect authentic, accurate, and truthful information.**
- **Any student portfolio that is found to contain inauthentic data and/or documentation may result in professional consequences for staff and financial consequences for the school or district.**

There are several different occurrences that result in a security breach of an APA. As such, it is imperative that all staff involved in the development and submission of an APA adhere to the procedures and guidelines that are defined in this manual.

Evidence submitted in a portfolio must not be fabricated, altered, or duplicated for multiple students. Evidence must be dated with the date of the actual occurrence of the production of this evidence. Materials should not reflect date changes using white out or other methods.

District and school administrators, as well as the student’s educators, are responsible for ensuring that the APA reflect a true picture of the student’s acquired knowledge and skills.

### 3.5 Portfolio Construction

#### Developing an APA Portfolio Entry

An entry is a collection of evidence that documents a student’s knowledge and application of key concepts and skills pertaining to a particular content standard and grade-level CPI. Evidence may include student work samples and captioned photographs.

The APA test specifications for each grade level and content area delineate four standards and strands that must be assessed. A portfolio entry is produced for each set of standards and strands. In addition, a related cumulative progress indicator (CPI) is selected for assessment from the list in the test specifications. For instance, in 5th grade there are three possible CPIs to choose from in the Reading Strand Comprehension Skills and Response to Text.

In addition to the portfolio entries, a completed portfolio contains:

**Table of Contents** – A table of contents helps the teacher and/or student organize the portfolio. A table of contents can be adapted to meet the individual needs of each student.

**Entry Cover Sheet** – The entry cover sheet is used to document the entry type (Language Arts Literacy, Mathematics, and Science), entry number, standard, strand, CPI, CPI link type, and the specific CPI link.

The steps for developing an entry are explained in of the APA Procedures Manual. These six steps are as follows:

**Step 1:** Select a CPI and one related CPI Link to be assessed.

**Step 2:** Assess the student to get an initial piece of evidence (accuracy must be 39% or lower) to collect for APA entry.

- Student must score 39% or below on accuracy in order to assess this link
- Must be completed within the first assessment window:  
September – November 21, 2008
- If adjustments were made to the selected link or prompt level, place only the newest evidence of the initial activity in the portfolio.

**Step 3:** Identify additional age- and grade-appropriate activities for use during instruction. Provide instruction on the CPI Link.

**Step 4:** Determine when evidence can be collected to document the final instructional assessment of the CPI Link for APA purposes.

- December 15, 2008 – February 20, 2009
- Document the evidence
- Include all necessary scoring information

**Step 5:** Based on student’s accuracy score and level of prompt information on the “final” activity, determine if additional instruction and collection of evidence needs to occur for the entry.

- Determine if additional instruction is necessary
- If the accuracy or independence scores are not as high as expected, provide additional instruction
- Reassess the CPI Link
- Collect the final piece of evidence from the very last activity on which the student was assessed
- The second piece of evidence should not be at a more intrusive prompt level than the initial piece of evidence

**Step 6:** Review evidence to ensure that all required information related to test design requirements is included.

- Ensure all required information is included
- Evidence should address all of the universal scoring rules and elements of the APA scoring rubric
- Collected during the two collection periods
- Has at least 5 questions/items/task elements per piece of evidence
- Two different activities

- Assesses the entire CPI Link
- Only assesses the CPI Link
- Has student’s name and full date on the evidence
- Includes accuracy percentage score on the evidence
- Includes independence percentage score on the evidence

For teachers preparing to administer the APA, extensive instructions appeared in the procedures manual on the teacher training slides, and on the Web site [http://pem.ncspearson.com/nj/apa/\(ata4pc55vuusrefaknysb55\)/Documentation\\_0809.aspx](http://pem.ncspearson.com/nj/apa/(ata4pc55vuusrefaknysb55)/Documentation_0809.aspx). The Web site showed 44 sample activities. A number of annotated examples of acceptable evidence and unacceptable evidence were pictured in the procedures manual. Additionally, the instructions listed acceptable and unacceptable work samples.

To begin development of an APA portfolio entry, teachers selected a CPI and one related CPI Link to be assessed. Figure 3.1 presents *Teacher Training* slide 25 listing how decisions for choosing CPI Links should and should not be made. CPI Links for each grade level and each content area appear in Appendix E of the procedures manual.

“Use of Prompting and Scoring Evidence,” Chapter 5 in the procedures manual, describes the types of supports, prompts, and activity formats that are acceptable for instruction and those that are acceptable for assessment. Pages 34–37 from the procedures manual, included in Appendix C of this Technical Report, provide teachers with information about task directions, prompts, and instructional supports.

Additionally, Appendix C shows the “Planning Entry Tool” form with instructions from the Procedures Manual. On page 1 of the “Planning Entry Tool,” teachers documented their planned instructional lessons/unit of study needed to teach the skills and concepts of the CPI and the CPI Link. Also on page 1, teachers listed the supports by answering:

1. How will the student *access* instruction?
2. How will the student *interact* with instruction and materials?
3. How will the student *demonstrate knowledge, skills, and concepts* acquired?

After selecting the CPI and related CPI Link, teachers assessed students to obtain the initial pieces of evidence. Figure 3.2 summarizes important points from *Teacher Training* slides 93 – 96 that teachers had to consider as they prepared to administer and score the initial entry.

**Figure 3.1 Choosing a CPI Link for the APA**  
*Teacher Training 2008–2009*  
Slide 25

**How Do You Choose a CPI Link?**  
**Think About a Student**

**Decisions Are Based On:**

- The student's grade
- What the student already knows
- How quickly the student learns new information
- High expectations for students
- Initial level of prompts (*if any*) needed for the student to succeed
- How well the student performs on the initial activity

**Decisions Are Not Based On:**

- Student's mode of communication
- The student's disability category
- Low expectations for students
- Supports needed by the student to participate and perform in the curriculum

**Figure 3.2 Administering and Scoring an Activity for APA**  
*Teacher Training 2008–2009*  
Slides 93–96

Scoring the activity correctly for assessment purposes is important. The evidence must include scoring information (percent scores) about

- a student’s accuracy when performing the skill, and
- the number of items/questions/task elements that the student performed independently.

Teachers must understand the difference between:

- providing *task directions*,
- providing *supports*,
- providing *indirect prompts* (verbal, model, and gestural),
- providing *physical prompts*, and
- providing the answer (*directly prompting the student with the answer to the question*)

To ensure that scoring information on the evidence is accurate.

Scoring an activity for APA requires documentation of how well the student performed the skill.

- Accurate performance

And documentation of how many of the items/questions/task elements were done independently.

- Independence level

Scoring for APA separates these two concepts.

Scoring the activity for accuracy requires a consistent understanding of when to mark an answer right or wrong.

- Certainly, if the student performed the skill independently, the answer is either correct or incorrect.
- But what about when the student receives a prompt? How do you score the item correct or incorrect?

## **Scoring a Piece of Evidence by Teacher**

When an instructional activity is to be used as evidence in an entry, the teacher must score the activity based on the number of test items (questions, task elements) the student got correct/incorrect, and the number of items that the student completed independently.

Each piece of evidence must include two separate scores: one for accuracy and one for independence.

### **Scoring for Accuracy**

Each item on the assessment evidence should be scored as either correct (+) or incorrect (-). The student should give a response or perform the skill or step for each item of the assessment. If the student requires a specific prompt level to respond, provide an indirect prompt (V, G, M) or, if necessary, a physical prompt. Accuracy is scored based on the student's first attempt to perform the skill. Accuracy scores are documented on the evidence as a percentage score (the number of correct responses divided by the total number of items and multiplied by 100). The total number of test items must always be at least five. If the student required a physical prompt, the item must be scored as incorrect.

### **Scoring for Independence**

Each item on the assessment will receive a second score based on the level of independence at which the student performed the skill. If the student responds independently, the item will be marked with an "I". If the student required a prompt level to respond or perform the skill, then the item must be marked with the level of prompt. The typical hierarchy of prompts goes from least to most intrusive as verbal (V), gestural (G), model (M), and physical (P). The level of prompt a student receives is a teacher's decision, based on the CPI Link selected, the student's prior knowledge, and other instructional information. If the student completes all of the items independently, state that on the evidence. In addition, the percentage of time the student performed the items independently must be calculated and documented for every piece of evidence (calculated by dividing the number of items performed independently by the total number of items multiplied by 100).

Table 3.3 summarizes the correct and incorrect scoring of items for accuracy and independence.

**Table 3.3 Scoring of Items for Accuracy and Independence**

<b>An item is scored as correct + when:</b>	<b>An item is scored incorrect – when:</b>
A student performs item independently and accurately	A student performs item independently but inaccurately
An indirect verbal prompt is provided and the student performs the skill correctly	An indirect verbal prompt is provided and the student performs the skill incorrectly
An indirect gestural prompt is provided and the student performs the skill correctly	An indirect gestural prompt is provided and the student performs the skill incorrectly
An indirect model prompt is provided and the student performs the skill correctly	An indirect model prompt is provided and the student performs the skill incorrectly
	A physical prompt is provided (e.g., the teacher moves the student’s hand, wrist, elbow, etc.) to place the sticker in the correct place on the coordinator grid.

### **Scoring Writing**

One of the requirements for acceptable evidence is that it must include at least five test items, for example, identifying five nouns. Writing tasks may require five discrete components, or may need to be scored using a rubric. The Links will include the word “*rubric*” next to the link when it is necessary to score the task using a rubric. A rubric must include all parts of the CPI Link, and allow calculation of an accuracy and independence score.

When scoring student writing with a rubric, the writing must be scored solely on the skills/concepts within the selected CPI Link. Therefore, it is important that the dimensions of the rubric include only the academic skills included in the CPI Link. Behavioral skills should not be included in the writing rubrics.

Teachers create scoring rubrics specifically to address the academic content required in a CPI Link. These rubrics should follow the guidelines noted above: they should address only academic skills and only those skills/concepts present in the CPI Link.

Appendix D shows examples of appropriate writing rubrics.

## Part 4: SCORING

From March to early June 2009, the Performance Scoring Center (PSC) at Pearson scored the APA portfolios. An APA portfolio included four entries for each assessed content area—Language Arts Literacy, Mathematics, and Science.

Each entry in a portfolio was scored independently by at least two readers for each dimension of the scoring rubric. Table 4.1 shows the total number of Language Arts, Mathematics, and Science readings across grade levels.

**Table 4.1 Total Number of Readings for the APA Portfolios**

	<b>Grade 3</b>	<b>Grade 4</b>	<b>Grade 5</b>	<b>Grade 6</b>	<b>Grade 7</b>
<b>Language Arts Literacy</b>					
Complexity	9811	9068	9242	9113	9318
Performance	9857	9104	9262	9148	9325
Independence	9817	9082	9237	9126	9318
<b>Mathematics</b>					
Complexity	9809	9070	9241	9139	9324
Performance	9871	9103	9247	9150	9334
Independence	9828	9081	9251	9117	9314
<b>Science</b>					
Complexity	--	9059	--	--	--
Performance	--	9106	--	--	--
Independence	--	9083	--	--	--

	<b>Grade 8</b>	<b>Grade 9</b>	<b>Grade 10</b>	<b>Grade 11</b>	<b>Grade 12</b>
<b>Language Arts Literacy</b>					
Complexity	9127	--	--	9604	577
Performance	9145	--	--	9593	588
Independence	9157	--	--	9577	584
<b>Mathematics</b>					
Complexity	9126	--	--	9592	578
Performance	9152	--	--	9582	577
Independence	9131	--	--	9570	576
<b>Science</b>					
Complexity	9100	446	885	9541	--
Performance	9122	445	889	9575	--
Independence	9126	440	881	9559	--

As part of operational scoring, each entry of a portfolio was reviewed and given a rating of 0 to 4 for Complexity, Performance, and Independence. The scoring rubric shown in Figure 4.1 presents the criteria used to score each APA entry.

Each entry is scored independently by at least two readers for each dimension of the rubric. An entry score is derived from two scores, one from each reader. If the scores given by the two readers are not equal or adjacent, a third reader scores the “discrepant”

dimension(s). The third reader’s score is then combined with the equivalent or highest adjacent score.

**Figure 4.1 Alternate Proficiency Assessment Scoring Rubric**

Score Point	0	1	2	3	4
<b>Dimension</b>					
<b>Complexity</b>	Evidence provided is unscorable; all dimensions will receive a score of zero.	CPI link was assessed but there are major flaws in the evidence.	CPI link is a far link to the grade-level indicator.	CPI link is a near link to the grade-level indicator.	CPI link is a matched link to the grade-level indicator.
<b>Performance</b>	Evidence is not scored, score is not a percentage, or score cannot be replicated. All dimensions will receive a score of zero.	Accuracy of work is 0-39% based on the last activity. <u>Or</u> The second piece of evidence has a more intrusive prompt.	Accuracy of work is 40-59% based on the last activity.	Accuracy of work is 60-80% based on the last activity.	Accuracy of work is 81-100% based on the last activity.
<b>Independence</b>	Evidence does not include percentage of time student was independent, is not clear, or percentage cannot be replicated.	Student completed items/tasks independently 0-39% of the time.	Student completed items/tasks independently 40-59% of the time.	Student completed items/tasks independently 60-80% of the time.	Student completed items/tasks independently 81-100% of the time

Major milestones and meetings for the 2008–2009 APA portfolio scoring included:

- Rangefinding preparation.....March 2–6, 2009
- Rangefinding meeting.....March 23–27, 2009
- Scoring preparation .....March 30–April 10, 2009
- PSC and ILSSA meet to finalize training process.....April 13, 2009
- Training.....April 14–20, 2009
- Scoring begins.....April 21, 2009
- Scoring ends.....June 5, 2009

#### **4.1 Scorer Selection**

Since 2004, the Pearson Performance Scoring Center (PSC) has scored the NJ APA at their site in Tucson, Arizona. Scorers selected for the APA at the PSC must have at least a bachelor's degree. Preference was given to candidates with the following credentials:

- educational background, teaching experience, and/or certification in special education
- experience in scoring alternate assessment portfolios
- experience in scoring large-scale educational assessments.

All scorers received rigorous training prior to scoring. Scorers received continuous training and monitoring all through scoring.

In April 2009, the PSC hired 119 scorers including 105 rehires and 14 new hires. There were 66 females and 53 males. Eighty-five scorers had previously scored an alternate assessment; 45 scorers had previously scored the NJ APA. Twenty-one scorers were experienced scorers, but had not scored an alternate assessment before.

All scorers had a minimum of a bachelor's degree. The scorers included 13 education majors, 6 English and writing majors, 16 science and mathematics majors, and 28 social and behavioral science majors (e.g., anthropology, sociology, psychology, social work).

There were 119 scorers present on day one, 3 scorers resigned during the training window, 116 scorers took the qualification test, and 111 scorers met the qualifying criterion. Scorers' characteristics are summarized in Table 4.2.

After completion of scorer training and qualification, 10 table leaders and 5 floating supervisors were selected, based on their qualification scores and ability to oversee a team.

**Table 4.2 Summary of the Scorers' Characteristics**

<b>Scorers' Characteristics</b>	<b>Number</b>
<b>Number of Scorers Hired</b>	<b>119</b>
<b>Experience</b>	
<b>Rehires</b>	<b>105</b>
Previously Scored an Alternate Assessment	<b>84</b>
Previously Scored NJ APA	<b>45</b>
<b>New Hires</b>	<b>14</b>
Previously Scored an Alternate Assessment	<b>1</b>
<b>Education</b>	
<b>Degree Group</b>	
Business	19
Education	13
Engineering	6
Fine Arts	9
Humanities	11
Law	2
Liberal Arts	3
Public Administration	8
Science	16
Social and Behavioral Science	28
General, Other, Unknown	4
<b>Qualification</b>	
<b>Scorers Present for Qualification</b>	<b>116</b>
Scorers Met Criterion	111
Scorers Not Meeting Criterion	5

## **Security at the Scoring Site**

Providing an environment that promotes the security of test items, student responses, data, and employees is of utmost concern to Pearson. Therefore, throughout the NJ APA operational scoring, Pearson employed the following standard safeguards for security at the Tucson site:

- Site personnel were stationed at the entrance to verify that only employees or authorized visitors were permitted access.
- No materials were allowed outside the facility during the project without the permission of a person or persons designated by the NJDOE.
- Scoring personnel signed a nondisclosure and confidentiality form in which they agreed not to use or divulge any information concerning tests, scoring guides, or individual student responses.
- All staff displayed Pearson identification badges at all times while in the scoring facility.
- All contact with the press was handled through the NJDOE.

## **4.2 Rangefinding**

Rangefinding is a most important component within the scoring procedure. Rangefinding is the process by which a wide range of portfolios are reviewed by a committee of New Jersey Special Education teachers for the purpose of selecting exemplars to use in the training, monitoring, and qualification of scorers and for establishing/revising the scoring guidelines. To the extent possible, these portfolios represent the range of abilities and characteristics in the population tested as well as a range of student work sample types.

Preparation for the 2009 rangefinding began with a meeting in Iowa City from March 2–6, 2009, to identify portfolios for New Jersey teachers and administrators to score during rangefinding. Participants in this meeting were:

- ILSSA content specialists who produce the scoring training materials and share the training responsibility with the PSC scoring directors.
- PSC scoring directors with the responsibility for training supervisors and scorers, and overseeing and monitoring scoring.
- Pearson program team members who direct the day-to-day operations for the APA by working with NJDOE staff members and New Jersey educators.

Prior to this meeting, ILSSA and PSC staff reviewed training materials from the rangefinding of the previous assessment year and made necessary revisions. ILSSA and PSC staff members drew upon their experience with the redesign of test specifications and their several years of experience scoring the APA to revise the training materials. ILSSA began work with the NJDOE in 2001. The PSC first scored the NJ APA in 2004. Staff members at the PSC and ILSSA worked closely with the NJDOE to develop the

scoring rubric. Revised materials for rangefinding were reviewed and approved by the NJDOE.

To provide portfolios for rangefinding, the NJDOE sent a list to Pearson of districts who could return their APA portfolios early for scoring. Staff members at ILSSA and PSC pre-screened the early-return portfolios to identify those to use for rangefinding. Portfolios were selected to represent the following:

- range of school districts
- different types of schools
- grade level of students (elementary, middle, high school)
- skill level (access skill, modified expectation)
- severity of disability (severe/profound, moderate, mild-moderate)
- possible score levels (low, medium, high)

Twenty-two New Jersey teachers and administrators participated in the rangefinding meetings from March 23–27, 2009, at Mercer Community College in West Windsor, New Jersey. Rangefinding committee members were certified in special education with appropriate grade-level and content-area expertise.

Staff members from NJDOE, ILSSA, and PSC led the meeting. At the beginning, committee members were introduced to their tasks of reviewing and scoring rangefinding portfolios used to train the scorers. The portfolio components, the scoring handbook, the rangefinding matrix, and the sample entries were discussed.

Then, the rangefinding committee was divided into table groups of teams to aid the discussion of individual portfolios. For each table, a leader was selected to maintain notes, portfolio discussions, and record consensus scores. Each table also included a staff member from NJDOE, ILSSA, or Pearson to facilitate discussion and answer questions. The table groups scored through two phases described as follows:

- Phase I—Three members of a team independently scored a portfolio. After the portfolios were scored, the table leader guided the reconciliation discussion. If there were differences among the three scores, the group reached agreement through discussion and review of the rubric. The group then noted specific details for their scoring of each portfolio on the rangefinding matrix. The scoring worksheets and the rangefinding matrix were placed in an envelope for each portfolio. Then, each portfolio was transferred to another table for one more score.
- Phase II – When each portfolio was scored the fourth time by another table, staff members from NJDOE/ILSSA/PSC/Pearson compared the GROUP score sheet with the fourth score sheet. This provided a check for consistency across the table groups. If scores were not consistent, a scorer from the original team and the fourth scorer from a different table discussed the scores to determine a consensus.

The PSC scoring director was responsible for facilitating the flow of the portfolios and maintaining a log detailing the scoring for each portfolio. Security of the rangefinding material was maintained throughout the meeting. While the meetings were in session, a staff member from Pearson, ILSSA, or NJDOE was present in the meeting room. The rangefinding materials were locked in secure storage when the meetings were not in session.

Immediately after the rangefinding meeting, staff members from NJDOE, ILSSA, and Pearson met to finalize and approve the consensus scores. APA portfolio scoring required a minimum of 16 portfolios to be used as follows:

- 5 for practice
- 3 for qualification
- 2 for additional training and qualification
- 6 for validity (2 per each science grade, if possible)

NJDOE received a copy of the official rangefinding record from Pearson, including the consensus scores and the teachers' comments.

During the week following rangefinding, staff members from NJDOE, ILSSA, and the PSC reviewed decisions at their home sites. The PSC scoring director added information on the placement of each portfolio in the training and qualifying sets. To present a wide range of possible scoring scenarios, a variety of entries from different portfolios were chosen for the qualifying portfolios. Through this work, the NJDOE, ILSSA, and PSC staff continued to discuss the selected portfolios with conference calls and e-mails.

All training sets and qualifying portfolios were submitted to NJDOE for approval and required sign off before scorer training began.

### **4.3 Scorer Training**

Training for scoring the APA portfolios was conducted by ILSSA content specialists and Pearson scoring directors with the guidance of the NJDOE APA Coordinator. The scorers were trained to score all content areas (Language Arts Literacy, Mathematics, and Science) and all grade levels (grades 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12).

Scoring directors began the training with an introduction to the content standards and entry points and how these align to one another. Training included discussion of the training entries, the scores for each dimension, and the rationale behind these scores. ILSSA content specialists designed a slide presentation that showed examples and non-examples of each dimension and content area.

Scorers received the *New Jersey Alternate Proficiency Assessment Scoring Handbook 2008–2009* and paper copies of all training materials. The scorers were encouraged to take notes throughout training as well as during the entire scoring process. Scorers had

their scoring handbooks available to refer to and were instructed to ask questions regarding specific portfolios throughout scoring.

Scorers worked through the scored rangefinding entries, clarified the scoring criteria, and practiced scoring. Scorers were given the opportunity to score the practice sets based on the training in the scoring handbook and the training set. True scores for these practice sets were then reviewed and justified with the group. PSC directors used the Cumulative Training Report by Dimension to assist with the review. Retraining that was indicated by the practice sets was conducted.

Qualification sets were then administered. Three qualification rounds (one portfolio per round—36 scores) were administered and scored. A re-qualification round along with additional training was available for those who required another round to meet the criteria. A reader's scores for the three qualification rounds and re-qualification (if necessary) rounds were averaged.

During qualification, PSC supervisors and directors with the NJDOE APA Coordinator reviewed and analyzed several reports including the Daily Qualifying Reports by Portfolio and the Cumulative Qualifying Reports by Dimension.

To qualify, scorers were required to attain a total of 75% exact agreement and 86.1% exact plus adjacent agreement (summative) across all portfolios and dimensions. Also, a minimum of 83.3% of exact and adjacent agreement scores (summative) was required for the Complexity dimension in order to qualify. Potential scorers who did not meet these requirements but were statistically close (would qualify if successful on two more portfolios) were retrained.

If an entry does not meet the test design requirements, a score of zero is assigned for all dimensions. Because the zero score rules were very important to APA scoring, all scorers received additional training as necessary on the entries with zero rules.

The NJDOE APA Coordinator was present for the final qualification round and the beginning of scoring.

#### **4.4 Scoring Procedures**

The purpose of scoring is to measure whether the evidence submitted for each CPI link demonstrates that the student has attained the conditions required for independent and accurate performance and the degree to which it is aligned to the New Jersey Content Standards. Participants during scoring included the Pearson PSC scoring directors, supervisors, and trained scorers; ILSSA content specialists; and, during the first week of scoring, the NJDOE APA Coordinator.

PSC scoring directors and supervisors ensured that scoring was conducted independently by trained and qualified scorers without discussion between or among scorers. Scoring supervisors monitored scorers with the close supervision of the scoring directors. Scorers

were required to bring questions about scoring a particular portfolio and rubric interpretation to their supervisor and/or director.

Scorers worked at tables of 8 to 10 people with a table leader supervising. Stacks of portfolios to score were labeled:

- To Be First Scored
- First Score Complete
- To Be Second Scored
- Second Score Complete
- To Be Transferred
- To Be Filed

Each scorer began by signing out a portfolio on a batch tracking log. The scorer removed the portfolio from its bag and verified the batch and serial numbers. The scorer reviewed the Scoring Worksheet; circled 1, 2, or 3 indicating which scorer they were; and printed the student's name, grade, and school on the Scoring Worksheet. Then, the scorer used the table of contents to look through the portfolio to be certain the different entries were distinguishable. If the entries were not clearly separated, the scorer attempted to identify the separate entries. If this could be done, the scorer placed an adhesive note between the entries. On the edge of the adhesive note, the scorer wrote the corresponding entry or required component. If the separate entries could not be identified, the scorer took the portfolio to the table leader.

Scorers followed the detailed instructions in the *New Jersey Alternate Proficiency Assessment Scoring Handbook 2008–2009* to score the portfolios. Scorers began their work using the “Universal Scoring Rules for Each Entry” shown in Figure 4.2. Critical points included checking that the appropriate standards, strands, and CPIs were assessed for the grade level; verifying that the dates fell within the appropriate collection period; confirming that the first piece of evidence had an accuracy score of 39%, or lower; replicating the percent score for independence; identifying at least five test items; and determining that only the specified CPI Link was assessed.

Instructions for the scoring rubric in the scoring handbook provided several pages of detailed information for each dimension. These instructions extensively expanded the scoring rubric to include a definition of terms, flowcharts, scoring rules/clarifications, and scoring notes. The instructions for the dimension scoring are shown in Appendix E.

The score for each dimension was not to influence a scorer's score for another dimension. Each dimension of the rubric was reviewed and scored separately. Also, each content area was scored independently. No information from one content area was to influence the scoring of another.

Four monitor codes were used for scoring the APA entries. Scorers assigned codes for off grade; security breach; insufficient evidence due to extended sick leave (illness); or no evidence (not ill). The scoring handbook included the page “Instructions for the Use

of Monitor Codes.” These instructions and the pages “Security Breaches – Preponderance of Evidence” and “Security Alerts” appear in Appendix F.

Entries that did not meet the test design requirements were assigned a score of zero for all dimensions. Scorers escalated portfolios that did not follow the universal rules to their supervisors. The supervisors escalated the portfolio to the floating supervisors or Scoring Directors and ILSSA depending on the issue identified. The portfolios were shelved in the appropriate area to await review. The portfolio was reviewed and a teacher explanation checklist was completed and the appropriate scores were assigned to the monitor. The checklists were used as direct feedback to teachers on the issues encountered. Explanation sheets were written for 6613 portfolios out of 8538 portfolios. This process will be updated for the 2010 scoring season. Issues clearly defined in the Universal Scoring Rules will not require a checklist be completed. More in depth training will be given to supervisors on issues resulting in a score of zero. Supervisors will be authorized to complete more items on the checklist.

When scoring was completed, the scorer returned the portfolio and the monitor to the bag. Then, the scorer placed the portfolio on the “First Score Complete” stack. The scorer signed out another portfolio alternating between the “To Be First Scored” stack and the “To Be Second Scored” stack.

**Figure 4.2 Universal Scoring Rules for Each Entry**  
*New Jersey Alternate Proficiency Assessment Scoring Handbook 2008–2009*  
Pages 10–11

**Review each entry by following the steps below. This review must be completed prior to assigning the scores for each content area.**

1. Review the entry cover sheet and verify the following:
  - a. If a grade is listed, it should be either grade 3, 4, 5, 6, 7, 8, 9, 10, 11, or 12. If the grade listed is any other grade, bring this portfolio to the table leader. If no grade is listed, bring this portfolio to the table leader.
    1. Verify that the grade level on the entry cover sheet is the same grade level as the scan sheet and on the bag. If it does not match, see the table leader.
  - b. Using the CPI Links, verify that appropriate standards, strands, and CPIs were assessed for that grade level. See pages 1-8 of your CPI Links document for required standards, strands, and CPIs by grade. If any of these rules were not adhered to, see a table leader.
    1. For portfolios in grades 9, 10, 11, or 12, make sure that they use 12th grade standards, strands, and CPIs.
  - c. Using the CPI Links, verify that the CPI Link is correct based on the student's assigned grade. If it is not correct, see the table leader.
2. Review the evidence
  - a. Count the number of pieces of evidence provided for each entry. If any entry does not have at least two pieces of evidence OR has more than 4 pieces of evidence per entry, see the table leader.
  - b. Verify that evidence is appropriate. **In order to begin scoring an entry, it must meet the Universal Scoring Rules. If any of the criteria are not met on two pieces of evidence, the entry will score a zero for all dimensions and must be brought to the table leader.** Evidence must include the following:
    1. Name
    2. Complete date (month/day/year)
      - a. Verify that the dates fall within the appropriate collection period
        - i. Sept. 1, 2008–November 21, 2008 for the first piece of evidence

**Figure 4.2 (Continued)**

**Universal Scoring Rules for Each Entry**

*New Jersey Alternate Proficiency Assessment Scoring Handbook 2008 – 2009*  
pages 10–11

- ii. December 15, 2008–February 20, 2009 for the second piece of evidence
      - b. If the dates are earlier or later, place a sticky memo on it and mark **Do not use**
    3. Percent score for accuracy
      - a. First piece of evidence must have an accuracy score of 39% or lower
      - b. If the accuracy score of the first piece of evidence is over 39%, see a table leader
      - c. Must be able to replicate score using reasonable judgment
    4. Percent score for independence
      - a. Must be able to replicate score using reasonable judgment
    5. At least 5 items/questions/task elements/rubric dimensions
    6. Rubric is included when specified in a Writing CPI Link
    7. Appropriate format (student work sample, photographs, writing rubrics) (**For examples refer to the training Power Point, slides...**)
    8. Student response is evident
    9. Reflects student’s mode of communication
    10. Assesses only the CPI Link
  - c. Review the evidence to ensure that it matches the essence of the Standard and Strand (i.e., science should be doing a science activity). **If it does not match the essence of the Standard or Strand, see the table leader. (For examples refer to the training Power Point, slides...)**
  - d. Review the entry to ensure the same CPI Link/skill(s) from that CPI has been assessed in both pieces of evidence.
  - e. Review the entry to ensure that it does not include evidence on more than the skills contained within the CPI Link.

## 4.5 Quality Control of Scoring

A scoring supervisor monitored eight to ten scorers under close supervision of the Scoring Director. Scorers were required to bring questions about scoring a particular portfolio and rubric interpretation to their Scoring Supervisor or Scoring Director in every instance.

- ePS reports - The scoring directors had access to reports that document individual and group performance such as inter-rater reliability, frequency distribution, project completion, and validity. The scoring directors reviewed reports daily to ensure that all items are being scored within acceptable parameters and within the scheduled timeframe.
  - **Rater reliability reports:** The Scoring Director reviews inter-rater reliability reports daily to assess how accurately scorers are assigning scores. There are three reports that address inter-rater reliability specifically and these are available in either daily or cumulative format.
    - “Inter-Rater Reliability by Reader”. Both daily and cumulative Inter-Rater Reliability by Reader reports are available. It provides a view of how reliable the scorers are scoring the project on an on-going basis. This report shows the exact agreement, adjacent and non-adjacent percentages for each scorer. Scoring Directors use this report to look at individual scorer, team, and room totals and determine if any retraining is needed. If a scorer, team or the room as a whole has an average agreement below the acceptable level predetermined by the New Jersey Department of Education, it indicates that there is a misconception held by a portion of the scorers that needs to be addressed. The reliability of resolution scores is also provided.
    - “Inter-Rater Reliability by Dimension”. Both daily and cumulative Inter-Rater Reliability by Dimension reports are available. This report is used in the same manner as the Inter-Rater Reliability Report. This report further breaks down reliability and resolution information by subject and dimension. This report allows the scoring directors to see if a particular dimension within a content area is below the acceptable level predetermined by the New Jersey Department of Education.
    - “Inter-Rater Reliability by Grade and Dimension”. Both daily and cumulative Inter-Rater Reliability by Dimension reports are available. This report is also used in the same manner as the Inter-Rater Reliability Report. It breaks down reliability and resolution information by subject, dimension and grade. Scoring directors use this report to see if a particular grade is below the acceptable level predetermined by the New Jersey Department of Education.
  - **Frequency distribution reports:** Frequency distribution reports document the percentage of scores assigned to each score point (0-4) and condition code (5, 6, A and B) by team, reader and the group overall. These reports are reviewed by the Scoring Director. This report is produced both on a daily and cumulative basis. If a scorer is assigning significantly more or fewer of a

particular score point or condition code than the group/room average, retraining may be required.

- Backreading – In conjunction with the statistics provided in the ePS reader performance reports, scoring supervisors backread between five and ten percent of the portfolios. Immediate backreading helped identify individual trends and tendencies and was the foundation for the individual feedback and retraining provided. Backreading results were documented and recorded by the supervisor on backreading tally forms.
- Validity – Scorers were required to score student portfolios that had a pre-assigned “true score.” Statistics from the scoring of validity portfolios showed how often scorers agree with the true score and can be an indication of problem scorers or scoring trends. Each scorer was required to attain a percentage agreement with the true scores as established by the NJDOE. Any scorer who fell below this Validity requirement was retrained and placed on probation. If a scorer fell below the established percentage on two consecutive validities, they could be released from the project.

Additionally, the NJDOE monitored scoring. Reports available during scoring for the NJDOE review included:

- Cumulative Inter-Rater Reliability by Reader (daily)
- Cumulative Validity Report by Dimension (daily)
- Cumulative Holistic Frequency Distribution (weekly)
- Cumulative Inter-Rater Reliability by Dimension (weekly)
- Cumulative Inter-Rater Reliability by Grade and Dimension (weekly)

#### **4.6 Task Examination**

During scoring, codes were assigned as follows:

5	Off Grade
6	Security Breach
A	Insufficient evidence due to extended sick leave (illness)
B	No evidence (not ill)

The distribution of assigned codes and scores is shown in Table 4.3. The greatest number of codes assigned to portfolio entries was at Grade 11. About 22%, or 6,378 ratings for each dimension were assigned a code instead of scored. Directions to scorers for assigning the codes appear in Appendix F.

Two points to note while interpreting Table 4.3:

- Three content areas—Language Arts Literacy, Mathematics, and Science—were administered in Grades 4 and 8 so there is a greater number of readings for these grades than in Grades 3, 5, 6, and 7 in which only Language Arts Literacy and Mathematics were administered.
- Similarly, Grade 11 shows a greater number of readings since Science was administered in Grade 11 if students were receiving Biology instruction.

Generally, students did better on the Performance and Independence dimensions than the Complexity dimension. For example, at Grade 8, 45.4% of the entries received a score of 4 on the Performance dimension and 55.2% of the entries received a score of 4 on the Independence dimension. For the Complexity dimension, 34.5% of the Grade 8 entries received a score of 2, 17.7% received a score of 3, and 14.9% received a score of 4.

**Table 4.3 Distribution of Codes and Scores**

	Scores Reads	CODES		0		1		2		3		4	
		#	%	#	%	#	%	#	%	#	%	#	%
		<b>Grade 3</b>											
Complexity	19620	564	2.9%	4164	21.2%	1041	5.3%	5847	29.8%	4049	20.6%	3955	20.2%
Performance	19728	564	2.9%	4167	21.1%	1614	8.2%	727	3.7%	3348	17.0%	9308	47.2%
Independence	19645	564	2.9%	4169	21.2%	1305	6.6%	616	3.1%	2032	10.3%	10959	55.8%
<b>Total</b>	<b>58993</b>	1692	2.9%	<b>12500</b>	<b>21.2%</b>	<b>3960</b>	<b>6.7%</b>	<b>7190</b>	<b>12.2%</b>	<b>9429</b>	<b>16.0%</b>	<b>24222</b>	<b>41.1%</b>
<b>Grade 4</b>													
Complexity	27197	1678	6.2%	5787	21.3%	1076	4.0%	8522	31.3%	5419	19.9%	4715	17.3%
Performance	27313	1678	6.1%	5789	21.2%	2057	7.5%	944	3.5%	4471	16.4%	12374	45.3%
Independence	27246	1678	6.2%	5789	21.2%	1823	6.7%	837	3.1%	2953	10.8%	14166	52.0%
<b>Total</b>	<b>81756</b>	5034	6.2%	<b>17365</b>	<b>21.2%</b>	<b>4956</b>	<b>6.1%</b>	<b>10303</b>	<b>12.6%</b>	<b>12843</b>	<b>15.7%</b>	<b>31255</b>	<b>38.2%</b>
<b>Grade 5</b>													
Complexity	18483	812	4.4%	3909	21.1%	879	4.8%	6166	33.4%	3448	18.7%	3269	17.7%
Performance	18509	812	4.4%	3910	21.1%	1357	7.3%	691	3.7%	3189	17.2%	8550	46.2%
Independence	18488	812	4.4%	3922	21.2%	1341	7.3%	654	3.5%	2167	11.7%	9592	51.9%
<b>Total</b>	<b>55480</b>	2436	4.4%	<b>11741</b>	<b>21.2%</b>	<b>3577</b>	<b>6.4%</b>	<b>7511</b>	<b>13.5%</b>	<b>8804</b>	<b>15.9%</b>	<b>21411</b>	<b>38.6%</b>
<b>Grade 6</b>													
Complexity	18252	706	3.9%	3925	21.5%	932	5.1%	6365	34.9%	2980	16.3%	3344	18.3%
Performance	18298	706	3.9%	3926	21.5%	1709	9.3%	803	4.4%	3132	17.1%	8022	43.8%
Independence	18243	706	3.9%	3921	21.5%	1357	7.4%	660	3.6%	2092	11.5%	9507	52.1%
<b>Total</b>	<b>54793</b>	2118	3.9%	<b>11772</b>	<b>21.5%</b>	<b>3998</b>	<b>7.3%</b>	<b>7828</b>	<b>14.3%</b>	<b>8204</b>	<b>15.0%</b>	<b>20873</b>	<b>38.1%</b>
<b>Grade 7</b>													
Complexity	18642	820	4.4%	3974	21.3%	1129	6.1%	5032	27.0%	4059	21.8%	3628	19.5%
Performance	18659	820	4.4%	3975	21.3%	1504	8.1%	708	3.8%	3172	17.0%	8480	45.4%
Independence	18632	820	4.4%	3975	21.3%	1377	7.4%	541	2.9%	1691	9.1%	10228	54.9%
<b>Total</b>	<b>55933</b>	2460	4.4%	<b>11924</b>	<b>21.3%</b>	<b>4010</b>	<b>7.2%</b>	<b>6281</b>	<b>11.2%</b>	<b>8922</b>	<b>16.0%</b>	<b>22336</b>	<b>39.9%</b>
<b>Grade 8</b>													
Complexity	27353	1736	6.3%	6148	22.5%	1141	4.2%	9425	34.5%	4836	17.7%	4067	14.9%
Performance	27419	1736	6.3%	6147	22.4%	1596	5.8%	849	3.1%	4652	17.0%	12439	45.4%
Independence	27414	1736	6.3%	6151	22.4%	1310	4.8%	686	2.5%	2392	8.7%	15139	55.2%
<b>Total</b>	<b>82186</b>	5208	6.3%	<b>18446</b>	<b>22.4%</b>	<b>4047</b>	<b>4.9%</b>	<b>10960</b>	<b>13.3%</b>	<b>11880</b>	<b>14.5%</b>	<b>31645</b>	<b>38.5%</b>

**Table 4.3 (Continued)**

	Scores Reads	CODES		0		1		2		3		4	
		#	%	#	%	#	%	#	%	#	%	#	%
<b>Grade 9</b>													
Complexity	446	8	1.8%	198	44.4%	24	5.4%	133	29.8%	26	5.8%	57	12.8%
Performance	445	8	1.8%	196	44.0%	22	4.9%	26	5.8%	53	11.9%	140	31.5%
Independence	440	8	1.8%	196	44.5%	10	2.3%	2	0.5%	4	0.9%	220	50.0%
<b>Total</b>	<b>1331</b>	<b>24</b>	<b>1.8%</b>	<b>590</b>	<b>44.3%</b>	<b>56</b>	<b>4.2%</b>	<b>161</b>	<b>12.1%</b>	<b>83</b>	<b>6.2%</b>	<b>417</b>	<b>31.3%</b>
<b>Grade 10</b>													
Complexity	885	0	0.0%	168	19.0%	24	2.7%	187	21.1%	236	26.7%	270	30.5%
Performance	889	0	0.0%	168	18.9%	38	4.3%	32	3.6%	206	23.2%	445	50.1%
Independence	881	0	0.0%	168	19.1%	8	0.9%	6	0.7%	41	4.7%	658	74.7%
<b>Total</b>	<b>2655</b>	<b>0</b>	<b>0.0%</b>	<b>504</b>	<b>19.0%</b>	<b>70</b>	<b>2.6%</b>	<b>225</b>	<b>8.5%</b>	<b>483</b>	<b>18.2%</b>	<b>1373</b>	<b>51.7%</b>
<b>Grade 11</b>													
Complexity	28737	6378	22.2%	5673	19.7%	956	3.3%	6237	21.7%	4820	16.8%	4673	16.3%
Performance	28750	6378	22.2%	5668	19.7%	1340	4.7%	811	2.8%	3768	13.1%	10785	37.5%
Independence	28706	6378	22.2%	5669	19.7%	1341	4.7%	648	2.3%	1777	6.2%	12893	44.9%
<b>Total</b>	<b>86193</b>	<b>19134</b>	<b>22.2%</b>	<b>17010</b>	<b>19.7%</b>	<b>3637</b>	<b>4.2%</b>	<b>7696</b>	<b>8.9%</b>	<b>10365</b>	<b>12.0%</b>	<b>28351</b>	<b>32.9%</b>
<b>Grade 12</b>													
Complexity	1155	56	4.8%	410	35.5%	89	7.7%	291	25.2%	189	16.4%	120	10.4%
Performance	1165	56	4.8%	412	35.4%	67	5.8%	35	3.0%	237	20.3%	358	30.7%
Independence	1160	56	4.8%	410	35.3%	56	4.8%	22	1.9%	60	5.2%	556	47.9%
<b>Total</b>	<b>3480</b>	<b>168</b>	<b>4.8%</b>	<b>1232</b>	<b>35.4%</b>	<b>212</b>	<b>6.1%</b>	<b>348</b>	<b>10.0%</b>	<b>486</b>	<b>14.0%</b>	<b>1034</b>	<b>29.7%</b>
<b>Total</b>	<b>482800</b>	<b>38274</b>	<b>7.9%</b>	<b>103084</b>	<b>21.4%</b>	<b>28523</b>	<b>5.9%</b>	<b>58503</b>	<b>12.1%</b>	<b>71499</b>	<b>14.8%</b>	<b>182917</b>	<b>37.9%</b>

## **Part 5: RELIABILITY AND VALIDITY**

### **5.1 Reliability**

Many traditional measures of reliability are not appropriate to portfolio-based alternate assessments because they do not offer opportunities for test-retest, or provide internal standardized items or tasks as a sample of a domain which can be used for all students. These limitations do not prohibit applying the concept of reliability to portfolio-type alternate assessments. Instead of trying to apply traditional statistics, we need instead to look for opportunities to look for sources of consistency in student performance and opportunities in which sources of error external to the students and their abilities may be impacting student scores. For consistency we can look to students' scoring patterns within and across subject areas. For sources of error, we can look to inter-rater reliability, generalizability, and decision accuracy.

#### **Scoring Patterns**

An analysis of scoring patterns in a portfolio assessment is analogous to a factor analysis in a more traditional assessment; it can provide evidence about the structure of the construct being measured. In some portfolios, correlations between the sub-scores or dimensions within a content area that are stronger than correlations between sub-scores across content areas would provide evidence that the assessment is measuring distinct constructs. However, the nature of the APA scoring dimensions does not support such an analysis: "progress" is not related to "connection to the standard" within English Language Arts in the same way that "computation" and "number sense" would be related to each other as dimensions of a math portfolio.

This does not mean that looking at scoring patterns on the APA is meaningless. We would expect to see positive correlations between students' scores on all three scored dimensions across pieces of evidence within a subject area, correlated separately for each marking period. This would be an indication that the student was demonstrating similar levels of mastery across multiple instances, i.e. consistency. Analyses of student scoring patterns are planned for the 2010–2011 year and beyond.

#### **Inter-rater Reliability**

Inter-rater reliability investigates the extent to which examinees would obtain the same performance level if the portfolio had been scored by different scorers. Inter-rater reliability is calculated as the percent agreement between raters. The metrics tracked and reported are "exact agreement" and "adjacent agreement." Exact agreement is when the two independent scorers assign the same score to the same student work. Adjacent agreement is when the two independent scorers assign adjacent scores to the same work.

Table 5.1 shows the percent of portfolio entries scored with exact agreement and adjacent agreement as well as the percent of scores that require resolution. All entries were scored for each of the three dimensions—Complexity, Performance, and Independence. For the

Complexity dimension, a third scorer must score if the first two scores are not equal or adjacent. For the Performance and Independence dimensions, a third scorer must score if the first two scores are not equal.

Table 5.1 shows that scores for Grade 3 Language Arts Literacy entries on the Complexity dimension were in exact agreement for 97% of the entries and were in adjacent agreement for 2.1% of the entries. A third reader was required for scoring 0.9% of the entries. For the Grade 3 Language Arts Literacy entries on the Performance and Independence dimensions, scores were in exact agreement for 98.2% of the entries on the Performance dimension and were in exact agreement for 99.0% of the entries on the Independence dimension. A third reader was required for scoring 1.8% of the entries on the Performance dimension and 1.0% of the entries on the Independence dimension.

Generally, about 1% of the entries required a third reader for resolution. Exceptions included Performance for Grade 3 Language Arts Literacy and Mathematics which required 1.8% and 2.1%, respectively. For grades and content areas with less than 100 submissions, the percent requiring resolution was as low as 0% for Independence in both Grade 12 Mathematics and Grade 9 Science and as high as 3.8% and 2.8% for Performance and Independence in Grade 12 Language Arts Literacy. A high inter-rater reliability coefficient indicates that subjectivity and differences between scorers estimates of student work was not a source of significant error in the students' scores.

### **Generalizability**

Generalizability analyses provide estimates of the error variance associated with facets such as scorers, evidence, occasions, and administrators. Generalizability analyses were conducted for standard setting judges for the 2008–2009 APA, but have not yet been conducted for scoring. They are planned for the 2010-2011 administrations and beyond.

### **Decision Accuracy**

Decision consistency, or decision accuracy, analyses allow for comparison between expected and actual student achievement. Generally, teachers are asked to indicate the performance level they expect students to achieve based on their classroom experience with the students. This level is compared with the students' actual performance level. The decision consistency measure is likely to be somewhat biased in NJ, since APA teachers are directly involved in creating the portfolio evidence and scoring the accuracy of student work. However, due to the stakes associated with students' performance level classifications, it is an important analysis to undertake. Decision accuracy studies are planned for the 2010–2011 administrations and beyond.

**Table 5.1 Consistency Between APA Portfolio Scorers**

	GRADE 3			GRADE 4			GRADE 5			GRADE 6		
	% Scorers In Exact Agreement	% Scorers In Adjacent Agreement	% Require Resolution*	% Scorers In Exact Agreement	% Scorers In Adjacent Agreement	% Require Resolution*	% Scorers In Exact Agreement	% Scorers In Adjacent Agreement	% Require Resolution*	% Scorers In Exact Agreement	% Scorers In Adjacent Agreement	% Require Resolution*
<b>Language Arts Literacy</b>												
Complexity Performance	97.0	2.1	0.9	97.5	1.9	0.6	96.8	1.9	1.3	97.6	1.7	0.7
Independence	98.2	1.0	1.8	98.7	0.5	1.3	98.4	0.9	1.6	98.6	0.8	1.4
	99.0	0.8	1.0	99.1	0.7	0.9	98.9	0.9	1.1	99.0	0.9	1.0
<b>Mathematics</b>												
Complexity Performance	96.8	2.4	0.8	97.3	2.0	0.6	97.0	1.8	1.2	97.0	1.7	1.3
Independence	97.9	1.1	2.1	98.7	0.5	1.3	98.6	0.6	1.4	98.5	0.5	1.5
	98.8	0.9	1.2	99.1	0.6	0.9	98.6	0.9	1.4	99.2	0.6	0.8

	GRADE 7			GRADE 8			GRADE 11			GRADE 12		
	% Scorers In Exact Agreement	% Scorers In Adjacent Agreement	% Require Resolution*	% Scorers In Exact Agreement	% Scorers In Adjacent Agreement	% Require Resolution*	% Scorers In Exact Agreement	% Scorers In Adjacent Agreement	% Require Resolution*	% Scorers In Exact Agreement	% Scorers In Adjacent Agreement	% Require Resolution*
<b>Language Arts Literacy</b>												
Complexity Performance	97.5	1.5	1.0	97.7	1.4	0.9	96.6	2.0	1.4	96.5	3.1	0.3
Independence	98.9	0.6	1.1	98.7	0.8	1.3	98.8	0.7	1.2	96.2	3.1	3.8
	99.0	0.9	1.0	98.5	1.0	1.5	99.2	0.7	0.8	97.2	2.1	2.8
<b>Mathematics</b>												
Complexity Performance	97.3	1.6	1.1	97.6	1.6	0.8	97.4	1.4	1.2	98.3	1.0	0.7
Independence	98.7	0.7	1.3	98.6	1.0	1.4	99.1	0.6	0.9	99.7	0.0	0.3
	99.1	0.5	0.9	99.1	0.7	0.9	99.3	0.6	0.7	100.0	0.0	0.0

\*Complexity Dimension – If the first two scores are not equal or adjacent, then a third reader must score the dimension.  
 Performance and Independence Dimensions – If the first two scores are not equal, then a third reader must score the dimension.

**Table 5.1 (Continued)**

	GRADE 4			GRADE 8			GRADE 9		
	% Scorers In Exact Agreement	% Scorers In Adjacent Agreement	% Require Resolution*	% Scorers In Exact Agreement	% Scorers In Adjacent Agreement	% Require Resolution*	% Scorers In Exact Agreement	% Scorers In Adjacent Agreement	% Require Resolution*
<b>Science</b>									
Complexity	98.1	1.5	0.4	98.5	1.2	0.3	97.3	0.5	2.3
Performance	98.6	0.6	1.4	99.3	0.6	0.7	97.7	2.3	2.3
Independence	99.1	0.7	0.9	99.2	0.6	0.8	100.0	0.0	0.0

	GRADE 10			GRADE 11		
	% Scorers In Exact Agreement	% Scorers In Adjacent Agreement	% Require Resolution*	% Scorers In Exact Agreement	% Scorers In Adjacent Agreement	% Require Resolution*
Complexity	97.0	1.8	1.1	99.0	0.9	0.1
Performance	98.0	1.4	2.0	99.2	0.4	0.8
Independence	99.8	0.2	0.2	99.6	0.3	0.4

\*Complexity Dimension – If the first two scores are not equal or adjacent, then a third reader must score the dimension.  
 Performance and Independence Dimensions – If the first two scores are not equal, then a third reader must score the dimension.

## 5.2 Validity

The *Standards for Educational and Psychological Testing* states, “Ultimately, the validity of an intended interpretation of test scores relies on all the available evidence relevant to the technical quality of a testing system. This includes evidence of careful test construction; adequate score reliability; appropriate test administration and scoring; accurate score scaling, equating, and standard setting; and careful attention to fairness for all examinees,” (p. 17). This section presents efforts to document and gather evidence to support the interpretation of APA performance scores. Efforts focus on documenting content aspects of evidence and gathering consequential aspects of evidence. While this section summarizes evidence supporting claims as to the validity of the APA performance scores, many parts of this technical report provide appropriate evidence for validity. Given the procedural and empirical evidence available and rationale presented below, valid performance standards-based interpretations and uses of the scores are generally supported.

The process implemented by the New Jersey Department of Education for developing and implementing the APA is an example of the content aspect of validity. The content aspect includes evidence of construct relevance, representativeness, and technical quality. Baker and Linn (2002) suggest that “Two questions are central in the evaluation of content aspects of validity. Is the definition of the content domain to be assessed adequate and appropriate? Does the test provide an adequate representation of the content domain the test is intended to measure?” (p. 6) The following sections help answer these two very important questions and also address Standard 1.6 of *the Standards for Educational Psychological Testing*.

Standard 1.6 When the validation rests in part on the appropriateness of test content, the procedures followed in specifying and generating test content should be described and justified in reference to the construct the test is intended to measure or the domain it is intended to represent. If the definition of the content sampled incorporates criteria such as importance, frequency, or criticality, these criteria should also be clearly explained and justified.

### **Appropriateness of Content Definition**

In 1996, the New Jersey State Board of Education adopted the New Jersey Core Curriculum Content Standards, an ambitious framework for educational reform in the State’s public schools. New Jersey’s standards were created to improve student achievement by clearly defining what all students should know and be able to do at the end of thirteen years of public education. The DOE was conscientious in involving content specialists, alternate assessment specialists, policy experts and measurement experts to ensure that the program was designed and implemented appropriately given the population of students being assessed and the federal requirements that the program must meet. New Jersey educators, DOE staff, special education directors, and other state stakeholders were involved in the process throughout and provided feedback and

guidance on all stages of APA development. Such stakeholder involvement helps to ensure that the results of the APA assessments are viewed as meaningful and important to teachers and parents.

Since the adoption of those standards, the New Jersey Department of Education has continuously engaged in discussion with educators, business representatives, and national experts about the impact of the standards on classroom practices. To assist teachers and curriculum specialists in aligning curriculum with the standards, the department provided local school districts with a curriculum framework for each content area. The frameworks provided classroom teachers and curriculum specialists with sample teaching strategies, adaptations, and background information relevant to each of the content areas. In addition, the statewide assessments were aligned to the Core Curriculum Content Standards. This alignment of standards, instruction, and assessment was unprecedented.

The State Board wisely required that the standards be reviewed and revised every five years. The review process, begun in May 2001, involved teachers, school administrators, students, parents, and representatives from business, higher education, and the community. In addition, several content areas were reviewed by Achieve, Inc., and the Council of Chief State School Officers (CCSSO). In response to this unprecedented review, the 2004 New Jersey Core Curriculum Content Standards provide the level of specificity and depth of content that will better prepare students for post secondary education and employment. The standards are based on the latest research in each of the content areas and identify the essential core of learning for all students.

The language arts literacy, mathematics, and science standards were adopted by the State Board of Education in July 2002. In April 2004, the language arts literacy standards were revised to comply with the requirements of the No Child Left Behind Act of 2001 (NCLB) and readopted by the Board. Five content areas including the visual and performing arts, comprehensive health and physical education, world languages, career education and consumer, family, and life skills, and technological literacy were also adopted by the Board in April 2004. To complete the revision process, the social studies standards were adopted in October 2004. The 2004 standards in all nine content areas replace the 1996 standards. Local school districts must align their curriculum and instructional program with the 2004 New Jersey Core Curriculum Content Standards. As required by regulation, the next five-year revision process began during the 2008–2009 school year for all nine content areas.

Since the adoption of the original 1996 New Jersey Core Curriculum Content Standards (CCCS), the State Board approved administrative code that implements all aspects of standards-based reform. N.J.A.C. 6A:8 requires districts to: align all curriculum to the standards; ensure that teachers provide instruction according to the standards; ensure student performance is assessed in each content area; and provide teachers with opportunities for professional development that focuses on the standards.

In January 2008, the NJDOE Office of Academic Standards released Phase One of a standards clarification project. The purpose of this project is to provide materials in each

of the nine content areas that convey an understanding of the priorities in the current New Jersey Core Curriculum Content Standards and how to capture those priorities in designing local curriculum and assessments, as well as in managing local instruction across content areas.

Phase One contained guidance framed as Areas of Focus for state assessment of Language Arts Literacy, Mathematics, and Science in Grades 5–8. Developed by the Office of Academic Standards working with teams of field-based educators, the Areas of Focus included exemplars of how cumulative progress indicators may be assessed on state assessments.

In January 2008, the Core Curriculum Content Standards in Mathematics were readopted with the following revisions:

- The new standards are more specific and clearer than the previous standards;
- The new standards are organized into a smaller number of standards that correspond to the content clusters of the statewide assessments;
- The new standards are intended to serve as clear guides to the assessment development committees so that there should be no gaps between the standards and the test specifications; and
- The new standards include expectations at grades 2,3,5,6, and 7, as well as at grades 4, 8, and 11.

In preparing its recommendations, the mathematics panel considered the *Principles and Standards for School Mathematics* published by National Council of Teachers of Mathematics (NCTM, 2000); the review of New Jersey’s 1996 standards by Achieve, Inc.; and other states’ standards.

Similarly, the Core Curriculum Content Standards in Language Arts Literacy were influenced by the national standards developed by the National Council of Teachers of English and the International Reading Association, the Achieve review of the 1996 standards, and research by the National Reading Panel. Standards for the end of Grade 12 were adopted in January 2008.

The Core Curriculum Content Standards in Science were adopted in 2002 and published in 2004. Revised standards were adopted in June 2009. The projects and publications of the American Association for the Advancement of Science, the National Research Council, the National Science Teachers Association, and the National Assessment of Educational Progress were considered by the science panel during the development of the standards.

## **Adequacy of Content Representation**

Adequacy of the content representation of the APA is critically important because the test must provide an indication of student progress toward achieving the knowledge and skills identified in the CCCS, and the test must fulfill the requirements under NCLB.

In December 2007, January 2008, and February 2008, the APA Advisory Committee met with a number of special education and content specialists to develop the APA test specifications. The APA test specifications delineate the standards and strands that must be assessed for each grade level and content area. ILSSA content specialists, NJDOE special education and content specialists, and special and general education teachers selected the Cumulative Progress Indicators (CPIs) available for the APA assessment. Then, skill statements that directly link the critical essence of the CPIs were developed. Documents used during this process included the CCCS, Scope and Sequence for each content area, and the Areas of Focus from the Standards Clarification Project.

The work of the APA committees was influenced by the “Links for Academic Learning” developed and validated by Flowers, Wakeman, Browder, and Karvonen (2009). Initially, the “Criteria for Instruction and Assessment that Links to Grade Level Content” by Browder, Wakeman, Flowers, Rickelman, Pugalee, Karvonen (2007) and shown in Part 2 of this technical report consisted of eight criteria developed from the recommendations of a panel of alignment experts.

Flowers et al. (2009) described modifications to reflect both current federal policy and needs identified by special educators, measurement experts, and general education experts. The criteria were field tested in three states using varied alternate assessment formats, revised following review by measurement and special education experts and 20 state directors of alternate assessments, and field tested a second time with three additional states.

The revised eight criteria are shown in Table 5.2. Three of the earlier eight criteria are numbered 1, 2, and 3 in Table 5.2. During the work of the APA test development committees and the additional APA committees that followed, the eight criteria and these Standards were addressed:

Standard 3.11 Test developers should document the extent to which the content domain of a test represents the defined domain and test specifications.

Standard 10.1 In testing individuals with disabilities, test developers, test administrators, and test users should take steps to ensure that the test score inferences accurately reflect the intended construct rather than any disabilities and their associated characteristics extraneous to the intent of the measurement.

Evidence to support the APA alignment is given in this technical report in the test development and design sections of Part 2, the portfolio construction section of Part 3,

the scoring rubric and procedures sections of Part 4, and the proficiency level descriptor and standard setting sections of Part 6 and the Appendices. APA committee groups included curriculum, rangefinding, performance level descriptor, and standard setting committees.

Inherent in the portfolio design of the APA is instruction. Parts 2 and 3 describe the teachers' scoring and instruction that occurs between the initial and final collection for the portfolios. Sample activities developed by teachers are available on the APA website. Score reporting for instructional purposes is explained in Part 7.

**Table 5.2 Links for Academic Learning (LAL) Alignment Criteria**

<ol style="list-style-type: none"><li>1. The content is academic and includes the major domains/strands of the content area as reflected in state and national standards (e.g., reading, math, science).</li><li>2. The content is referenced to the student’s assigned grade level (based on chronological age).</li><li>3. The focus of achievement maintains fidelity with the content of the original grade level standards (content centrality) and when possible, the specified performance.</li><li>4. The content differs from grade level in range, balance, and DOK, but matches high expectations set for students with significant cognitive disabilities.</li><li>5. There is some differentiation in content across grade levels or grade bands.</li><li>6. The expected achievement for students is for the students to show learning of grade referenced academic content.</li><li>7. The potential barriers to demonstrating what students know and can do are minimized in the assessment.</li><li>8. The instructional program promotes learning in the general curriculum.</li></ol>
Flowers, C., Wakeman, S.Y., Browder, D.M., & Karvonen, M. (2009). Links for academic learning (LAL): A conceptual model for investigating alignment of alternate assessments based on alternate achievement standards. <i>Educational Measurement: Issues and Practice</i> . 28(1), 25–37.

With information from teachers and scorers from the 2008–2009 APA administration, the following modifications will be made for future administrations:

- Some CPI Links will be revised and a few will be added.
- CPI Links related to assessment of spelling words will be deleted since these did not link to the other assessment specifications.
- Teachers must mark every item/question with an “I” when an item is performed independently, even if 100% of the test items were completed in this manner.
- When a teacher assesses a writing skill that requires a rubric for scoring, the student’s writing sample must have editing/scoring notations that correspond with the rubric scores.

### **Consequential Validity**

Additional important validity evidence comes from the positive and negative, the intended and unintended consequences of an assessment. The consequences of a high stakes test for an at-risk, and often marginalized, population are especially important. To determine whether some of the state’s intended purposes are being met, such as increased exposure to academic content for significantly cognitively disabled students and increased involvement of special education teachers in the academic work of schools, measuring consequences can be achieved by surveying teachers about their teaching

methods, content, and school experiences. Additional surveys of other stakeholders can provide even greater insight into the consequences of the APA. New Jersey plans to undertake development of such a survey in 2011-2012.

The consequences of test use can also be investigated by looking at distributions of scores across sub-groups in the tested population. We have calculated the number and percent of students from various sub groups who achieve each of the three proficiency levels, separately by grade and subject. The subgroups addressed are disability category and public versus private school attendance.

For the disability category analysis frequencies were computed to investigate the number of students from each disability category categorized into each of the three proficiency levels. These frequencies were looked at separately for each subject with all grades combined as well as within each subject at each grade.

In the body of the report only the combined grades frequencies of disability category by proficiency level are presented. Table 5.3 presents the frequency tables for language arts, math, and science. The tables for each grade separately are included in Appendix K.

The frequencies provide an indication of whether there are differences with respect to disability category and/or proficiency level. The frequency tables provide an indication that in almost all grades there is some relationship between the indicated disability category and the proficiency level into which a student is categorized. However, the relationship seems weak and is not a consistent enough pattern across grades to indicate bias. Additionally, while all students with significant cognitive disabilities are likely able to make progress on academic content, and all deserve the opportunity to be exposed to academic content, there is also likely some relationship between the types and significance of students' disabilities and their ability to reach proficiency as defined for AYP (adequately yearly progress) report under the No Child Left Behind regulations.

The relationship between proficiency level private and public school attendance was also investigated by subject; sample sizes were too small to interpret when looked at by grade. The combined grades frequencies for proficiency levels by public or private school are in Table 5.4. Similar to the results of proficiency level by disability categories analyses, there is a relationship between students' placements in public or private school and their proficiency level. However, it is difficult to interpret these numbers or to conclude bias due to the nature of private school placements of students with significant cognitive disabilities in New Jersey.

**Table 5.3 Combined Grades Disability Category by Proficiency Level**

Disability Category	LAL				Math				Science			
	Advanced Proficient	Proficient	Partially Proficient	Total	Advanced Proficient	Proficient	Partially Proficient	Total	Advanced Proficient	Proficient	Partially Proficient	Total
<b>Auditorily Impaired</b>	3	17	25	45	3	11	31	45	0	2	43	45
<b>Other Health Impaired</b>	49	99	89	237	61	79	97	237	11	20	206	237
<b>Communication Impaired</b>	88	164	124	376	115	120	141	376	25	41	310	376
<b>Emotionally Disturbed</b>	4	14	17	35	9	9	17	35	2	4	29	35
<b>Cognitively Impaired</b>	137	466	543	1,146	157	403	586	1,146	34	171	941	1,146
<b>Multiply Disabled</b>	397	1,505	1,566	3,468	475	1,269	1,724	3,468	102	518	2,848	3,468
<b>Orthopedically Impaired</b>	4	6	3	13	3	4	6	13	1	4	8	13
<b>Specific Learning Disability</b>	117	158	178	453	134	147	172	453	18	25	410	453
<b>Autistic</b>	329	1,238	853	2,420	427	1,020	973	2,420	55	443	1,922	2,420
<b>Blank or Double Grid</b>	7	25	50	82	8	21	53	82	2	11	69	82
<b>Traumatic Brain Injury</b>	14	21	37	72	11	29	32	72	2	11	59	72
<b>Visually Impaired</b>	0	4	3	7	0	2	5	7	0	1	6	7
<b>Total</b>	1,149	3,717	3,488	8,354	1,403	3,114	3,837	8,354	252	1,251	6,851	8,354

**Table 5.4 Combined Grades School Type by Proficiency Level**

	LAL				Math				Science			
	Advanced Proficient	Proficient	Partially Proficient	Total	Advanced Proficient	Proficient	Partially Proficient	Total	Advanced Proficient	Proficient	Partially Proficient	Total
<b>Public School</b>	1,139	3,709	3,465	8,313	1,396	3,101	3,816	8,313	249	1,248	6,816	8,313
<b>Private School</b>	10	8	23	41	7	13	21	41	3	3	35	41
<b>Total</b>	1,149	3,717	3,488	8,354	1,403	3,114	3,837	8,354	252	1,251	6,851	8,354

## **Part 6: STANDARD SETTING**

### **6.1 Overview of the Process**

New performance level descriptors should be created and new standards should be set whenever a testing procedure is adopted that is judged to be meaningfully different than previous testing procedures or whenever the assessed content meaningfully changes due to new test specifications or new content standards. The APA underwent significant changes between the 2007–2008 academic year and the 2008–2009 year, including changes to the test specifications, assessable content, and scoring dimensions. As a result both new performance level descriptors and a new standard setting were required.

In February 2009, the standard setting process began with the development of specific performance level descriptors for each grade and content area for the APA administered in 2008–2009. Performance level descriptors (PLDs) are behavioral descriptions of what students should know and be able to do to achieve a given performance level given the range of skills assessed. The PLDs outline expectations for student performance at each performance level given the assessed components of the curriculum and PLDs are a required component of all assessments under Title I of the Elementary and Secondary Education Act (Federal Register, Volume 67, Number 129, 34CFR, Part 200, August, 2002).

A standard setting was conducted June 9-12, 2009, to describe and delineate the thresholds of performance that are indicative of APA Partially Proficient, Proficient, and Advanced Proficient performance for Language Arts Literacy and Mathematics in grades 3-8 and 11, and for Science in grades 4, 8, and high school. Results of these studies were used to formulate recommendations to the Commissioner of Education and the New Jersey State Board of Education for the adoption of the cut scores (i.e., proficiency levels). In late June and early July, the standard setting panels' recommendations were reviewed by senior staff in the Office of State Assessments and the Office of Special Education Programs, the Assistant Commissioner for the Division of Student Services, the Deputy Commissioner, and the Commissioner. The review led to some modifications to the panels' recommended cut scores, chiefly affecting the advanced proficient cut points. These cut scores were presented to the State Board of Education on July 15, 2009, and approved unanimously by resolution.

Both the PLD development meeting and the standard setting meeting were conducted by the staff from the NJDOE, Pearson, and ILSSA. See Appendix G for a report describing the PLD development and listing the PLDs. Appendix H provides the standard setting technical report, which explains the methodology, describes the procedures, and presents resulting tables and documentation.

The full standard setting report, available from the NJDOE, provides complete descriptions of the standard setting planning, presentation documents and scripts, demographic information of the panelists, panelists' ratings from one round to the next,

and their responses on the evaluation forms. The final cut scores approval by the State Board of Education is also presented.

Educators with extensive knowledge and experience in special education served as panelists for both the PLD and the standard setting meetings. The expert judgments of panelists are most important for developing the PLDs and determining the standard setting cut scores. Nominations were solicited from school districts for teachers and administrators representing excellence in the teaching profession in terms of knowledge and experience in special education. Qualifications considered for the selection of panelists included:

- Current Position Description
- Years Teaching Special Education in New Jersey
- Years Teaching Regular Students in New Jersey
- APA Experience
- Type of Program
- Grade Level/Age of Current Students
- Type of Certification
- Highest Degree

## **6.2 Procedures**

### **Performance Level Descriptors (PLDs)**

In February 2009, 24 PLD panelists met for the purpose of writing the performance level descriptors (PLDs) for Partially Proficient, Proficient, and Advanced Proficient performance. The PLDs are statements of what a student should know and be able to do at each performance level given the content standards assessed.

Dr. Kelly Burling served as primary meeting facilitator and she facilitated the Language Arts Literacy group. Dr. Jason Meyers facilitated the Mathematics group and Dr. Paul Nichols facilitated the Science group. Additional expertise in each subject was contributed by a content specialist in mathematics and science from the NJDOE as well as specialists from the Office of Special Education.

Tables 1-5 in the report present the panelists' gender and ethnicity, the geographic location of their districts, and the panelists' instructional experience by grade ranges. Panelists attended from 18 different districts in New Jersey and several private school settings. The panelists' years of experience ranged from 1 to 33 years with a median of 7.5 years. Seventeen of the 24 participants worked in special education. Their positions included social workers, teachers in self-contained classrooms, curriculum directors for students with disabilities, assessment coordinators, academic teachers, and administrators.

Panelists received training to ensure a common understanding of the APA, the target population, and the scoring dimensions. Extensive training and discussion was provided

about the purpose and development of PLDs including activities designed to familiarize the participants with elements of successful PLDs. Panelists were given copies of PLDs from the New Jersey Assessment of Knowledge and Skills (NJ ASK) Grade 4 Mathematics. Pearson facilitators led discussions of these questions:

1. What language in the NJ ASK PLDs distinguishes each level from the others?
2. How are the definitions of student performance different from one another?
3. How is language used to convey meaning?
4. Would that language be useful to describe student performance on the APA?

The process was then repeated with the NJ ASK Grade 8 Mathematics PLDs. The following discussions included:

1. What language is the same or similar?
2. Is the content (knowledge and skills) different from grade 4? How?
3. Do the PLDs reflect qualitative differences in student expectations from one level to the next and one grade to the next?
4. Do they show progression with respect to specific skills students should know and be able to do and not just list the same skills at different levels with the only defining factor being the degree of consistency with which the skills is displayed?
5. Are there times when the degree of consistency is an appropriate defining difference?

Notes taken by the facilitators during this discussion were given to all panelists as a resource for the PLD development within their subject area groups.

The PLD analysis activities also established a basic format for the content area groups to use. Panelists identified the format used in the NJ ASK Grade 8 Mathematics as one they would like to follow for creating the APA PLDs. This format included an introductory statement followed with a bulleted list of knowledge and skills from the NJ Core Curriculum Content Standards (CCCS).

Additional training was provided about the purpose and development of CPI Links. The CPI Links were developed to provide the test specification structure for the APA. Panelists were given (1) a copy of the NJ APA Procedures Manual with tabs marking CPI Links and scoring rubrics (2) a worksheet designed to help the participants review the CPI Links and identify language, knowledge, and skills to be used in the PLDs; and (3) a list of PLD evaluation criteria.

The subject area groups were initially tasked with reviewing the CPI Links for the lowest assessed grade in their subject and beginning to draft statements and sentences that would comprise draft statements for that grade. Panelists continued working through the grades within their content area. Detailed descriptions of the procedures and discussions for developing the PLDS are included with the PLDs in Appendix G.

## Standard Setting Process

Following the assessment administration and the creation of the PLDs, the standard setting panelists met in June 2009 to recommend cut scores. Approximately two-thirds of the operationally scored portfolios were available for standard setting examples. In addition, distributions of scores from the operational 2008–2009 administration were available to serve as impact data. The use of impact data provided panelists an additional frame of reference for their decision making.

Panelists were asked to recommend cut scores distinguishing between:

- Partially Proficient and Proficient
- Proficient and Advanced Proficient

Panelists recommended cut scores for Language Arts Literacy and Mathematics in grades 3–8 and 11 and for Science in grades 4, 8 and high school.

The panelists for standard-setting consisted of eighty-one committee members including special education teachers, child study team members, general education teachers, and administrators. Committee members worked in seven panels based on content and grade. Pearson research scientists served as facilitators for the groups:

- Mathematics grades 3, 4, and 5
- Mathematics grades 6, 7, and 8
- Mathematics and Science grade 11
- Language Arts Literacy grades 3, 4, and 5
- Language Arts Literacy grades 6, 7, and 8
- Language Arts Literacy grade 11
- Science grades 4 and 8

The demographic background by grade and content panel is presented for current grade taught, position type, and current subject type in Table 6.1. Additional tables for grade and content panel are included in the Appendix H for gender, school location, ethnicity, and region.

Similar to the PLD development meeting, the standard setting meeting began with an introduction and extensive training leading to standard setting. Dr. Paul Nichols from Pearson served as the primary meeting facilitator. Dr. Debbie Traub from ILSSA presented the history of the APA and explained how the APA portfolios were constructed and scored. Dr. Nichols described the Body of Work standard setting method.

Dr. Traub recounted the regulatory history behind the APA and the purpose of the IDEA and NCLB. She defined the population of students that participate in the APA. She defined an alternate assessment and alternate achievement standards. Federal regulations requiring all students to be exposed to grade-level content were explained. Students with the most significant cognitive disabilities must be provided with challenging academic

content that is clearly linked to grade level standards. The content is determined by the student's grade level that is based on assigned grade, not on functional level. Across all grades, students must be assessed on the full breadth and depth of the curriculum.

**Table 6.1 Demographic Background of Standard Setting Panelists**

		Current Grade Taught					
Subject	Grade Band	K-2	3-5	6-8	9-12	Multiple	Missing
LAL	3-5	1	5	0	0	6	1
LAL	6-8	0	0	5	0	3	3
LAL	11	0	0	0	6	5	2
Mathematics	3-5	1	5	1	0	6	0
Mathematics	6-8	0	0	5	3	3	1
Mathematics & Science	11	0	0	0	8	3	1
Science	4 & 8	0	2	3	1	4	2

		Position Type					
Subject	Grade Band	Special Education	Admin.	Curr. Specialist	Regular Education	Other	Missing
LAL	3-5	10	2	1	0	0	0
LAL	6-8	4	2	2	0	2	3
LAL	11	3	2	2	0	2	3
Mathematics	3-5	9	2	1	0	1	0
Mathematics	6-8	9	0	1	2	0	0
Mathematics & Science	11	7	2	1	0	0	2
Science	4 & 8	8	0	0	2	0	2

		Current Subject Taught					
Subject	Grade Band	Mathematics	Science	Language Arts	Multiple	Missing	Not Applicable
LAL	3-5	0	0	0	10	1	2
LAL	6-8	0	0	0	3	3	5
LAL	11	0	0	1	6	4	2
Mathematics	3-5	1	0	1	7	1	3
Mathematics	6-8	2	1	0	6	2	1
Mathematics & Science	11	4	1	1	3	2	1
Science	4 & 8	0	2	0	8	2	0

Not Applicable: The panelist was not currently in the classroom, e.g., administration.

This introduction was followed with a review of the portfolio process. The portfolio design, scoring of the three dimensions – performance, complexity, and independence, links to the Core Curriculum Content Standards (CCCS) and grade-level cumulative progress indicators (CPI) were described. The review included examples of portfolio entries and evidence. An extensive explanation of the role of the CPI links was provided.

A reasoned judgment step was a warm-up task for the subsequent Body of Work procedure. This warm-up task had two goals:

1. Help panelists become familiar with the three scored dimensions, and
2. Encourage panelists to think about how the scored dimensions can be combined into total scores.

Prior to the reasoned judgment task, panelists were introduced to the scoring rubrics for each score dimension and the descriptions of the dimensions. Panelists became familiar with the three scored dimensions (Performance, Independence, and Complexity) and the ways the dimensions can be combined into total scores. Then, panelists were asked to recommend what combinations of scores would be categorized as Partially Proficient, Proficient, and Advanced Proficient. Panelists were asked to consider a sample of score combinations. Panelists were presented the graph shown in Figure 6.1.

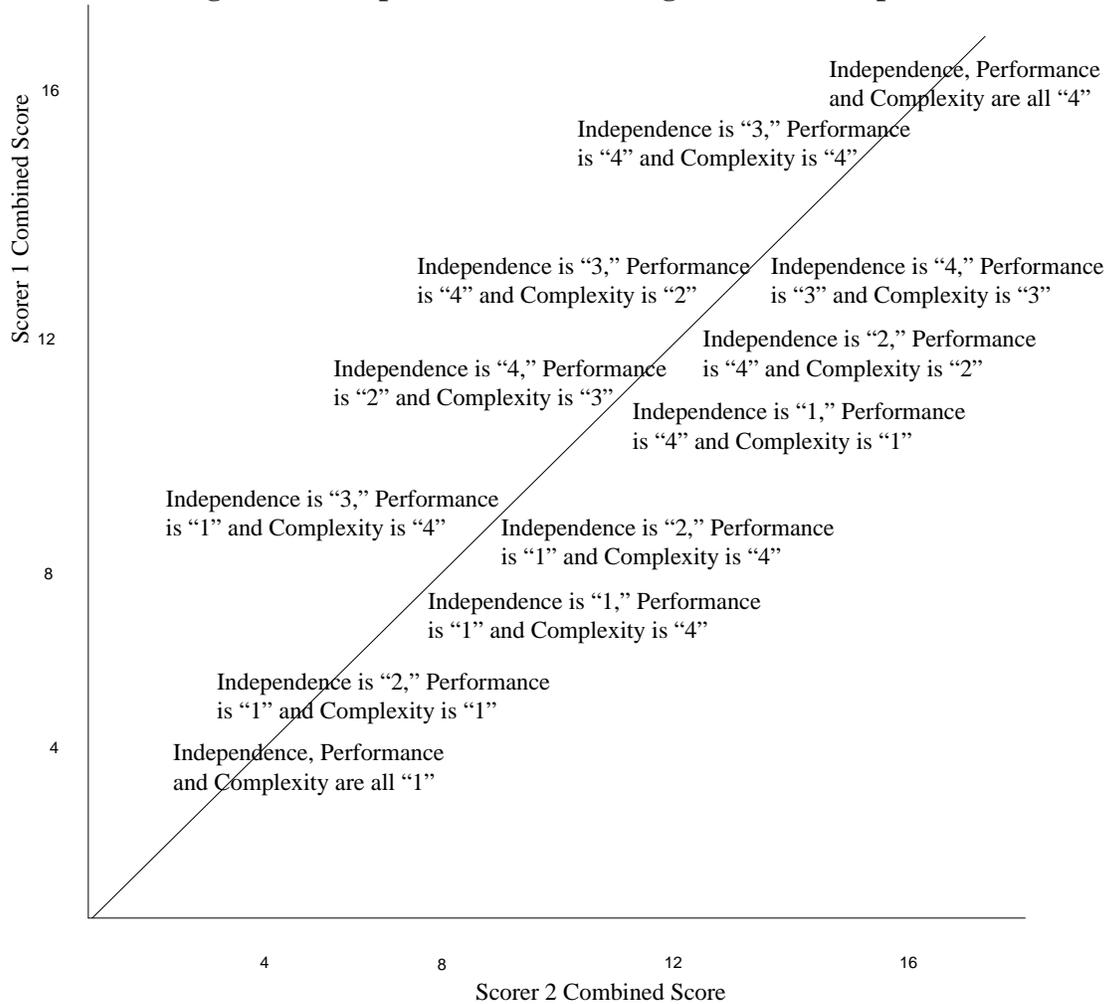
Panelists examined the figure showing the different score combinations. Panelists were reminded that each score was rated 0-4, but that entries which receive a 0 for either performance or complexity receive a 0 for the entire entry. Panelists were given a ratings sheet listing a progression of score combinations from Independence 0, Performance 1, and Complexity 1 to Independence 4, Performance 4, and Complexity 4. Panelists wrote Partially Proficient, Proficient, or Advanced Proficient next to each score combination on the ratings sheet.

The Body of Work method is intended for use with evidence of student learning displayed in a format other than a multiple-choice assessment. For NJ APA, the portfolio submitted comprises a “body of work.”

The Body of Work method uses portfolios in a number of different ways. For a student, a portfolio comprises a complete “body of work.” A student’s portfolio is double scored to increase accuracy. Students whose body of work is of uneven quality were excluded. Only students whose scores were consistent were included. By including only students whose work is consistent, panelists were presented with an easier to understand example of a “Proficient” student or an “Advanced Proficient” student.

Panelists set standards in three steps: training, range-finding, and pinpointing. Refer to the Procedures section of the Standard Setting report for the grade sequence used by each panel, the steps followed by each facilitator as they worked through the standard setting rounds, and the presentation of impact data. The next section in the report, Panelists, shows that 11 to 13 people served on each of the panels.

**Figure 6.1 Graph for Reasoned Judgment Warm-Up Task**



### 6.3 Summary of Results

The results summary in the Standard Setting report is organized into five sections: cut score, evaluations, decision factors, reliability, and vertical articulation.

In the Standard Setting report, Table 24 shows the summary of recommended cut scores and impact data for Language Arts Literacy. Table 25 presents the summary recommended APA cut scores and impact data for mathematics and science.

Cut scores computed following rangefinding round 1, rangefinding round 2, and the pinpointing rounds for LAL, mathematics, and science are shown in Table 6.2. Note that values are multiplied by 100.

**Table 6.2 Cut Scores After Rangefinding and Pinpointing Rounds**

Grade	Subject	Rangefinding Round 1		Rangefinding Round 2		Pinpointing Rounds	
		Cut 1	Cut 2	Cut 1	Cut 2	Cut 1	Cut 2
3	LAL	356	506	356	518	368	518
4	LAL	423	525	409	531	403	542
5	LAL	419	534	410	538	426	546
6	LAL	377	511	366	517	379	520
7	LAL	391	529	386	529	397	532
8	LAL	283	527	398	529	404	531
11	LAL	433	527	424	537	415	529
3	Mathematics	370	499	356	509	374	510
4	Mathematics	422	533	414	534	426	532
5	Mathematics	380	520	377	517	373	502
6	Mathematics	381	502	371	514	384	517
7	Mathematics	401	526	400	532	405	522
8	Mathematics	393	515	389	520	389	520
11	Mathematics	287	528	416	531	416	531
4	Science	295	538	301	547	453	561
8	Science	422	551	429	564	429	564
11	Science	412	516	404	528	422	537

New Jersey’s normal standard setting process for all assessment programs includes two additional steps: (1) a senior staff level review of standard setting panel recommendations to assure articulation with state education policy and priorities – this review may result in modifications to the panelists recommendations; (2) the presentation of the final cut scores to the State Board for formal adoption by resolution.

The APA panelists recommendations were reviewed over several days by directors, managers, and associated staff from both the Office of State Assessments and the Office of Special Education Programs, and then by the Assistant Commissioner responsible for Special Education, the Deputy Commissioner, and the Commissioner. These consultations led to some modifications to the panels’ recommended cut scores, chiefly affecting the advanced proficient cut points. The final set of APA cut scores approved by the State Board is shown in Table 6.3.

**Table 6.3 Approved 2009 Cut Scores\***

		2009 APA Impact Percentages (2008 in Parentheses) <i>All Rounded. May Not =100%</i>				
		Raw Scores 0-64				
Grade	Subject	Proficient Cut Score	Advanced Proficient Cut Score	% Partially Proficient	% Proficient	% Advanced Proficient
3	LAL	36.8	56.2	27 (22)	47 (49)	25 (29)
4	LAL	40.3	60.0	33 (26)	58 (49)	8 (26)
5	LAL	41.6	60.5	37 (29)	55 (47)	8 (24)
6	LAL	37.9	58.1	32 (27)	57 (49)	11 (25)
7	LAL	39.7	58.2	35 (30)	51 (42)	14 (28)
8	LAL	40.4	59.3	35 (39)	52 (40)	12 (22)
11	LAL	41.5	56.2	33 (36)	36 (46)	30 (19)
3	Mathematics	37.4	57.5	35 (17)	42 (52)	23 (31)
4	Mathematics	41.6	56.6	40 (22)	33 (47)	27 (31)
5	Mathematics	37.3	55.0	34 (27)	39 (47)	27 (26)
6	Mathematics	38.4	57.3	40 (29)	46 (45)	15 (26)
7	Mathematics	40.5	58.3	36 (35)	49 (39)	15 (26)
8	Mathematics	38.9	58.9	32 (46)	51 (34)	17 (20)
11	Mathematics	41.6	57.9	40 (56)	36 (30)	24 (14)
4	Science	43.0	62.1	46 (23)	52 (50)	3 (27)
8	Science	42.9	58.3	35 (32)	46 (41)	19 (28)
11	Science	42.2	60.6	40 (26)	51 (56)	10 (18)

\*Cut scores approved by the New Jersey State Board of Education on July 15, 2009.

## PART 7: REPORTING

The scored portfolios are returned to the schools from Pearson after reporting. The portfolios are confidential pupil records. School and district staff must maintain the confidentiality of the portfolio contents. The portfolio contents are to be shared with parents and others in accordance with pupil records regulations.

The NJ APA provides a variety of reports to the school districts. Score reports are designed to display student identification and score information that can help identify student strengths and weaknesses and recognize weaknesses in instructional programs of the curriculum content standards. Information regarding student progress can assist Individualized Education Program (IEP) teams in selecting appropriate goals and objectives and evaluation criteria for individual students.

Both attending and sending districts receive score reports. Table 7.1 lists the distribution of the specific APA reports. On the APA rosters the instruction and assessment status for APA students is indicated to assist districts review and identify the performance of their students:

- Status 1 = students are assessed at the school of residence;
- Status 2 = students are sent outside school of residence for instruction and assessment; and
- Status 3 = students are received from another school for instruction and assessment.

Status 2 and 3 actually describe the same student, therefore, status 3 students are not included in the summary of performance reports so that the same student is not counted twice.

Districts are required to report test results to their boards of education and to the public within 30 days of receiving test results. However, any report which contains data for less than eleven students may not be publicly reported due to the need to protect student confidentiality.

For teachers and administrators who need to discuss score reports with others, the NJDOE publishes the *Alternate Proficiency Assessment (APA) Score Interpretation Manual* available at <http://pem.ncspearson.com/nj/apa/documentation.aspx>. The manual provides a broad range of information to assist in the analysis, interpretation, and use of the different APA reports.

In late fall after reporting is complete, a state summary is produced and posted to the NJDOE Web site at [www.state.nj.us/njded/schools/achievement/index.html](http://www.state.nj.us/njded/schools/achievement/index.html). The state summary is a data file, available in text and Excel formats, containing the same type of results as in the performance by demographics report at the state level.

**Table 7.1 Distribution of the APA Reports**

***District Reports for Students Educated In and Out of the District***

(Receiving Districts will receive only the All Subjects Roster)

- All Subjects Roster (1)
- Summary of Performance - District (1)
- Summary of Performance - School (1)
- Performance by Demographic Groups - District (1)
- Performance by Demographic Groups - School (1)

***School Reports for Students***

***Who Attend a Receiving School (if applicable)***

Receiving School the Student Attends will receive:

- Individual Student Reports (2)
- All Subjects Roster (1)
- Student Roster: Language Arts Literacy (1)
- Student Roster: Mathematics (1)
- Student Roster: Science (1) *Not applicable to grade 3, 5, 6 and 7*

Sending School will receive:

- Student Stickers (1)
- Individual Student Reports (1)
- All Subjects Roster (1)
- Student Roster: Language Arts Literacy (1)
- Student Roster: Mathematics (1)
- Student Roster: Science (1) *Not applicable to grade 3, 5, 6 and 7*
- Summary of Performance - School (1)
- Performance by Demographic Groups - School (1)

***School Reports for Students***

***Who Attend a School in their District of Residence***

School Student Attends will receive:

- Student Stickers (1)
- Individual Student Reports (2)
- All Subjects Roster (1)
- Student Roster: Language Arts Literacy (1)
- Student Roster: Mathematics (1)
- Student Roster: Science (1) *Not applicable to grade 3, 5, 6 and 7*
- Summary of Performance - School (1)
- Performance by Demographic Groups - School (1)

## **7.1 Interpreting Reports**

### **Student Demographic Information**

APA teachers included a scan sheet with student demographic information in the inside front cover pocket of the binder for each APA portfolio. The scan sheet information was used to prepare score reports and attach APA scores to the proper schools and districts. Also, the information was used to produce federal reports, including the Adequate Yearly Progress report.

Beginning with the 2006–2007 APA, New Jersey schools had the opportunity to provide student demographic information on a “student pre-ID” file. If a pre-ID file was provided, each student’s demographic information was preprinted on the front side of the scan sheet. If any information was found to be missing or incorrect, it could be provided/corrected by the districts gridding the appropriate section on the demographic scan sheet.

After the portfolios were submitted and demographic information scanned, Student Information Record Change Rosters were sent to the districts displaying each student’s demographic information collected on the scan sheets. A record change period allows the districts an opportunity to review and correct inaccurate student demographic information that the district provided for the assessment. Record changes are completed before reporting. Corrections to the student information are reflected in the reports. For the APA, the attending school is responsible for making all student data changes. All receiving (attending) schools receive Student Information Record Change Rosters. The attending school is also responsible for making all student data changes requested by a student’s home school (sending school). The sending school also receives a copy of the Student Information Record Change Roster. If the sending school identifies any errors, they must contact the receiving school promptly, allowing time to have the corrections applied. If the attending school is located out-of-state, then the sending school is responsible for completing and submitting the record changes and to keep the attending school informed of the accurate student demographic information.

Terms and definitions used across the APA reports are listed in Appendix I.

### **Score Information**

Scores are reported by content area. A full description of the scoring rubric used for rating the APA dimensions is presented in Part 4 of this technical report. Proficiency level is assigned based on the student’s total earned score; a combination of the Complexity, Performance, and Independence scores for entries within the content area. The scores are based solely on the information provided in the portfolio; therefore, it is inappropriate to compare these results to other APA students and students taking the general assessments.

Each content area assessed receives a proficiency level. Table 7.2 summarizes the dimension scores.

**Table 7.2 2009 APA Dimension Scoring**

<b>Dimension</b>	<b>Score Range of One Reader (Per Entry)</b>	<b>Treatment of Two Reader Scores</b>	<b>Score Range Two Reader Scores (Per Entry)</b>	<b>Number Entries Required Per Subject</b>	<b>Maximum Possible Points By Subject (4 Entries Per Subject)</b>
Performance	0–4	Add	0–8	4	32
Complexity	0–4	Average	0–4	4	16
Independence	0–4	Average	0–4	4	16
<b>Maximum Possible Score per Subject</b>					<b>64</b>

Of the required four entries, only one scorable entry is required to assign a proficiency level. If the “subject portfolio” contains only one scorable entry, the total score and proficiency level are reported based on the dimension scores of that entry.

**Zero Scores for an Entry.** When an entry does not meet the test design requirements, a score of zero is assigned for all dimensions. If any of the criteria listed below are not met on two pieces of evidence, the entry will score a zero for all dimensions:

- Student name
- Complete date (month/day/year) The date must be within the collection periods
- Evidence must be based on a CPI Link for the student’s assigned grade level
- At least 5 items/questions/task elements/rubric dimensions
- Evidence must have a percent score for accuracy. First piece of evidence must have an accuracy score of 39% or lower
- Evidence must have a percent score for independence
- Evidence must include documentation of the prompt level provided for each item/question

**No Proficiency Rating.** An entry is deemed unscorable if:

- no evidence is provided in the portfolio;
- there is security breach due to inappropriate portfolio development;
- the student is assessed in a grade that does not require a state assessment (off-grade testing);
- insufficient evidence is collected due to extended medical leave;
- the student participated in the general assessment (NJ ASK or HSPA) in a content area.

An unscorable entry is assigned a zero score. Proficiency rating in a content area is not assigned when all entries for a student are unscorable. If all entries in a content area are unscorable, then a void is assigned. Instead of a proficiency level, the appropriate void and unscorable (Void & U) codes are reported:

- Medical Emergency = voided due to medical emergency;
- Off Grade = voided due to off-grade testing;
- V4 = voided due to an entry not being provided;
- Took General Assessment = student took the general assessment;
- Security Breach = voided due to breach of security by a school or district.

**Medical Emergency.** If there is less than the required amount of evidence due to extensive sick leave or hospitalization during which time the student is not receiving instruction or the amount of instruction and assessment is based on a limited number of contact hours, and an administrator note was included in the portfolio explaining the lack of evidence, the student receives a U for each dimension and a Medical Emergency for the proficiency level.

**Off Grade Testing.** If a student is assessed at a grade level other than those that require a state assessment, the student receives a U for each dimension and Off Grade for proficiency level.

**Void 4.** When entries are unscorable due to the portfolio components, students receive a V4 for their proficiency level.

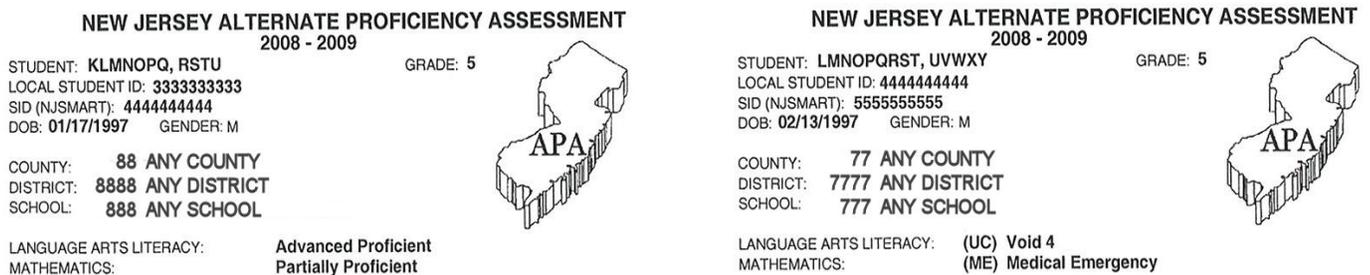
**Security Breach.** Another type of unscorable entry that occurs less frequently is one that is deemed unscorable due to a security breach by a school or district. In this case the student receives a U for each dimension of the entry. Security Breach prints for the proficiency level. If a security breach is detected in one content area, all content areas are treated as a security breach and all results voided.

**Took General Assessment.** A student may not participate in both the APA and the general statewide assessment in the same content area. If this occurs, the APA data is voided. If a student took the general assessment in a content area, the results of the general assessment will be used for AYP reporting.

## Student Sticker and Individual Student Report (ISR)

The Student Sticker (Figure 7.1) displays the student's identification information and proficiency levels. This is a peel-off label designed to be easily attached to the student's permanent record. The Student Sticker is sent to the Sending District or the School/District of Residence only. Receiving Districts do not receive Student Stickers.

**Figure 7.1 Sample Student Stickers**



The Individual Student Report (ISR) is a two-sided report showing specific student score information on the front of the ISR. A description of the APA and an interpretation of the scores are printed on the back. The school the student attends receives two copies of the ISR, whether it is a receiving school (private school for the disabled, special services school district, jointure commission, educational services commission, college-operated program, or state facility), or a school in the district of residence.

It is the responsibility of the school the student attends to send a copy of the ISR to the child's parent/guardian. The sending school, if applicable, receives one copy of the ISR. The district of residence also receives a copy of the ISR for review by the director of special education and the case manager.

Figure 7.2 presents the front of a student's sample report with demographic information and APA results. The proficiency levels in Language Arts Literacy, Mathematics, and Science are shown in the top section. The scores for the Complexity, Performance, and Independence dimensions for every entry of the student's APA portfolio are provided on the lower half of the ISR. In addition, the maximum number of points obtainable per entry, for each dimension, is displayed in the parentheses below the dimension name for reference. The score data included for each rubric dimension assist in the identification of students' strengths and weaknesses.

Figure 7.3 shows the back of the ISR printed for all students. Information provided assists parents and educators with score interpretation.



## Figure 7.3 Sample Individual Student Report (Back)

### New Jersey Statewide Assessment System

The Alternate Proficiency Assessment (APA) was administered in the 2008 - 2009 school year to approximately 8400 students in grades three through eleven. Language Arts Literacy and Mathematics were administered to students at grades 3, 4, 5, 6, 7, 8, and 11. Science was administered at grades 4, 8, 9, 10, and 11. The APA is the alternate assessment for students with the most significant cognitive disabilities and is administered at every grade level at which a general statewide assessment is administered. The APA measures the student's achievement of the Core Curriculum Content Standards (CCCS) in Language Arts Literacy, Mathematics, and Science. It is important to note that APA results should not be used as the sole basis for instructional decisions. The APA is a portfolio assessment that uses student work samples to measure a student's progress related to the CCCS, strands, grade-level cumulative progress indicators (CPI's), and skill statements called CPI Links. For additional score interpretation information, go to <http://pem.ncspearson.com/nj/apa>, click on Documentation, and refer to the Score Interpretation section.

#### HOW TO READ THIS REPORT

This **Individual Student Report** (ISR) on the reverse side represents the score results of the 2008 - 2009 APA. The report is available only to parents, guardians, students, and authorized school personnel. If you have any questions about the report or how to interpret the scores, you should contact the student's teacher, principal, or case manager.

The **Proficiency Level** is based on the student's total score; a combination of the **Complexity**, **Performance**, and **Independence** scores for entries within the content area. Three proficiency levels are assigned based on the total score for each content area: partially proficient, proficient, or advanced proficient. The scores are based solely on the information provided in the portfolio; therefore, it may not be possible to compare these results to other APA students and students taking the general assessments.

**Complexity:** The complexity dimension evaluates how closely the CPI Link assesses the CCCS CPI. The CPI Links vary by complexity and/or difficulty in relation (Matched, Near, or Far) to the CPI.

**Performance:** The performance dimension evaluates the student's accuracy performing the skills represented in the CPI Links. The student's performance is documented by evidence of student working on the CPI Link within the two collection periods (September 2008 - November 21, 2008, and December 15, 2008 - February 20, 2009).

**Independence:** Independence evaluates the extent to which the student completed items/tasks independently.

**Portfolio requirements.** A portfolio contains four entries per content area. Each entry is based on a specified standard and strand from the CCCS, and selected CPI and CPI Links. Requirements by content are:

- Language Arts Literacy: Four entries
  - Two different strands each from standards 3.1 and 3.2
- Mathematics: Four entries
  - One strand each from standards 4.1, 4.2, 4.3, and 4.4
- Science: Four entries
  - Grade 4: One strand each from standards 5.5, 5.6, 5.8, and 5.9
  - Grade 8: One strand each from standards 5.5, 5.6, 5.7, and 5.9
  - High School (Grade 9, 10, or 11): Two different strands each from standards 5.5 and 5.10

The lower half of the ISR provides the scores for Complexity, Performance, and Independence for each entry of the student's APA portfolio. The number in parentheses below the dimension name is the maximum number of points obtainable per entry, for each dimension.

**Zero Scores for Entry:** When an entry does not meet the test design requirements, a score of zero is assigned for all dimensions. Refer to the APA training materials on the PEM web site <http://pem.ncspearson.com/nj/apa> for more information.

A portfolio is deemed unscorable (U) if there is a security breach, off-grade testing occurs, no evidence is provided, insufficient evidence is collected due to student on extended medical leave, or the student took the general assessment. In place of proficiency levels and scores, a special notation will appear. See footnotes on the front of the ISR for more information.

## **All Subjects Roster**

The All Subjects Roster as shown in Figure 7.4 provides a convenient method for reviewing students' complete APA results. Users of this report can quickly determine how a particular student performed in Language Arts Literacy, Mathematics, and Science (when applicable).

Receiving schools receive an All Subjects Rosters listing all APA students who are educated in that school. District schools receive an All Subjects Roster that includes the APA participant students who attend the school, those who live in the area served by the school but attend a school out of district, and those who attend a program within the school but reside in another school district.

## **Student Roster**

Student Rosters are produced for each grade level assessed and separately for content area – Language Arts Literacy, Mathematics, and Science (if applicable). Students' names are listed in descending order by proficiency level. Figure 7.5 shows an example of the Student Roster – Language Arts Literacy for Grade 11. The Student Roster lists the student subscores (dimension scores) followed by total score and proficiency level of a content area. Students with portfolios which were voided are listed alphabetically at the end of each content area. Students with portfolios which were voided are listed alphabetically at the end of each content area roster. This score information enables the program staff to identify strengths and weaknesses across students within the content area.

Sending schools or the Schools of Residence receive Student Rosters that include the students' names of those participating in the APA who attend that school, those who live in area served by the school but attend a school out of district, and those who attend a program within the school but reside in another school district.

## **Summary of School Performance and Summary of District Performance**

Two types of summary performance reports are generated: one at the district level and one at the school level. For each grade, a Summary of District Performance is produced and distributed to each district. Within the district, for each grade level, a Summary of School Performance is generated. These reports provide summary statistics for each content area assessed. Summary reports are produced for public schools and districts only. Summary reports include data for students who were sent out of district, as well as students remaining in the district. Summary reports are not available for receiving districts. The summary performance reports are for the purpose of accountability.

Figure 7.4 Sample All Subjects Roster



New Jersey Statewide Assessment System  
 Alternate Proficiency Assessment  
 2008 - 2009  
 All Subjects Roster  
 Grade 8

CDS: 88-8888-888  
 County: ANY COUNTY  
 District: A DISTRICT  
 School: SCHOOL B  
 Page: 1 OF 1

Students Processed: 6

STUDENT NAME DATE OF BIRTH	SID	Status #	Ethnicity	TITLE I	ED	Migrant	SE	LEP	TIS	TID	Gender	PROFICIENCY LEVEL		
												LANGUAGE ARTS LITERACY	MATHEMATICS	SCIENCE
ALAST, STUDENT1 B. 01/10/1994	1234567899	1	H	LMS	Y		E	5			M	Advanced Proficient	Advanced Proficient	Proficient
BLAST, STUDENT2 06/02/1994	2345678919	1	H	LMS	Y		E				F	Partially Proficient	Proficient	Advanced Proficient
CLAST, STUDENT3 C. 04/15/1994	3456789129	1	H	LMS	Y		F				M	Proficient	Advanced Proficient	Proficient
DLAST, STUDENT4 D. 02/26/1994	4567891239	1	B	LMS	Y		F		Y	Y	F	Partially Proficient	Proficient	Partially Proficient
ELAST, STUDENT5 E. 10/31/1994	5678912349	2	H				F				F	Proficient	Partially Proficient	Partially Proficient
FLAST, STUDENT6 09/04/1994	6789123459	2	H				F				M	Partially Proficient	Partially Proficient	Proficient

- 1 = Student was assessed at school of residence.
- 2 = Student was sent outside school of residence for instruction and assessment.
- 3 = Student was received from another school for instruction and assessment.

- ME = Insufficient evidence due to extended illness.
- V3 = Off-grade testing.
- V4 = No scorable evidence; see unscorable code(s) on ISR for explanation.
- V5 = Security Breach due to inappropriate portfolio development.

**Figure 7.5 Sample Student Roster**



**New Jersey Statewide Assessment System  
Alternate Proficiency Assessment  
2008 - 2009  
Student Roster - Language Arts Literacy  
Grade 11**

CDS: 88-8888-888  
County: ANY COUNTY  
District: A DISTRICT  
School: SCHOOL B  
Page: 1 OF 1

Students Processed: 6

STUDENT NAME DATE OF BIRTH	SID	Status <sup>a</sup>	Title I	SE	LEP	Gender	Complexity (16.0) <sup>b</sup>	Performance (32.0) <sup>b</sup>	Independence (16.0) <sup>b</sup>	Total Score (64.0) <sup>b</sup>	Proficiency Level
ALAST, STUDENT1 B. 01/10/1994	1234567899	1	LMS	E	5	M	12.0	28.0	16.0	56.0	Proficient
BLAST, STUDENT2 06/02/1994	2345678919	2		F		F	8.0	30.0	11.0	49.0	Proficient
CLAST, STUDENT3 C. 04/15/1994	3456789129	1	LMS	F		M	10.0	22.0	12.0	44.0	Proficient
DLAST, STUDENT4 D. 02/26/1994	4567891239	1	LMS	E		F	8.0	20.0	12.0	40.0	Partially Proficient
ELAST, STUDENT5 E. 10/31/1994	5678912349	1	LMS	F		F	5.0	12.0	8.0	25.0	Partially Proficient
FLAST, STUDENT6 09/04/1994	6789123459	2		F		M	0.0	0.0	0.0	0.0	Partially Proficient

<sup>a</sup> 1 = Student was assessed at school of residence.  
2 = Student was sent outside school of residence for instruction and assessment.  
3 = Student was received from another school for instruction and assessment.

ME = Insufficient evidence due to extended illness.  
V3 = Off-grade testing.  
V4 = No scorable evidence; see unscorable code(s) on ISR for explanation.  
V5 = Security Breach due to inappropriate portfolio development.

<sup>b</sup> The number in parentheses is the total number of possible score points.

07072009-0000732

A sample of the Summary of District Performance is shown in Figure 7.6. For each school and district, the summary performance reports display these statistics for each content area assessed.

- Number of portfolios processed
- Number of LEP students exempt from taking LAL.
- Number of students that took the General Assessment (NJASK or HSPA) in the content area
- Number of students not required to submit entries for the content area
- Number of students with Void Codes. This included those students with Security Breach, Off Grade testing, Medical Emergency, and V4 due to a missing content portfolio.
- Number of students with valid scores
- Number of students in each proficiency level (Number is based on students with valid scores.)
- Percent of students at each proficiency level (Number is based on students with valid scores.)
- Mean scores for each dimension by content area (Mean scores are based on students with valid scores.)

### **Performance by Demographic Groups**

The Performance by Demographic Groups report summarizes student performance by total and by student demographic subgroups: Total, LEP Status, Gender, Ethnicity, Economic Status (Disadvantaged vs. Not Disadvantaged), and Migrant Status. These group reports provide additional achievement information that can be used to make adjustments to curricula that may better serve these student subgroups.

Reports are produced by districts and schools that completed the appropriate demographic coding when the APA was administered or during the record change process. These reports are generated for public schools and districts only.

The Performance by Demographic Groups reports are produced at state, district, and school levels by grade. The district level report presents aggregated data for the district. The school level report shows school level data. At the state level, reports are also produced by District Factor Groups, Charter Schools (DFG-R), Non-Special Needs Districts, and Special Needs Districts. They are distinguished by report title.

This one-page report includes performance data for each of the three content areas: Language Arts Literacy, Mathematics, and Science (when applicable). The percentage of students who fall into each of the three proficiency levels is based on the number of valid scores. This report does not disaggregate the data at the dimension level. Figure 7.7 shows a report example of a District Performance by Demographic Groups.

**Figure 7.6 Sample Summary of District Performance**



**New Jersey Statewide Assessment System  
 Alternate Proficiency Assessment  
 2008 - 2009  
 Summary of District Performance  
 Grade 8**

CDS: 88-8888  
 County: ANY COUNTY  
 District: A DISTRICT

PROFICIENCY LEVEL STATISTICS BY SUBJECT												
	Number of Portfolios Processed	LEP LAL Exempt	Took General Assessment	Not Required	Students with Void Code	Number of Students with Valid Scores	Partially Proficient		Proficient		Advanced Proficient	
							Number	Percent	Number	Percent	Number	Percent
<b>Language Arts Literacy</b>	8	0	0	0	0	8	2	25.0	5	62.5	1	12.5
<b>Mathematics</b>	8	NA	0	0	0	8	3	37.5	2	25.0	3	37.5
<b>Science</b>	8	NA	0	0	0	8	5	62.5	2	25.0	1	12.5

MEAN SCORE FOR EACH DIMENSION BY SUBJECT			
	Complexity (16.0) <sup>b</sup>	Performance (32.0) <sup>b</sup>	Independence (16.0) <sup>b</sup>
<b>Language Arts Literacy<sup>a</sup></b>	6.9	22.0	12.1
<b>Mathematics<sup>a</sup></b>	6.1	22.3	12.3
<b>Science<sup>a</sup></b>	6.4	21.5	11.3

<sup>a</sup> Includes only Status 1 and 2 students with valid scores.  
<sup>b</sup> The number in parentheses is the total number of possible score points.

Figure 7.7 Sample District Performance by Demographic Groups



**New Jersey Statewide Assessment System  
Alternate Proficiency Assessment  
2008 - 2009  
District Performance by Demographic Groups  
Grade 8**

CDS: 88-8888  
County: ANY COUNTY  
District: A DISTRICT

	Language Arts Literacy <sup>a</sup>							Mathematics <sup>a</sup>							Science <sup>a</sup>							
	Number of Portfolios Processed	Took General Assessment	Not Required	Students with Void Codes	Number of Students with Valid Scores	% Partially Proficient	% Proficient	% Adv Proficient	Took General Assessment	Not Required	Students with Void Codes	Number of Students with Valid Scores	% Partially Proficient	% Proficient	% Adv Proficient	Took General Assessment	Not Required	Students with Void Codes	Number of Students with Valid Scores	% Partially Proficient	% Proficient	% Adv Proficient
<b>TOTAL</b>	8	0	0	0	8	25.0	62.5	12.5	0	0	0	8	37.5	25.0	37.5	0	0	0	8	62.5	25.0	12.5
<b>LEP Status<sup>b</sup></b>																						
LEP (Current & Former)	0	0	0	0	0	NA	NA	NA	0	0	0	0	NA	NA	NA	0	0	0	0	NA	NA	NA
Current LEP	0	0	0	0	0	NA	NA	NA	0	0	0	0	NA	NA	NA	0	0	0	0	NA	NA	NA
Former LEP	0	0	0	0	0	NA	NA	NA	0	0	0	0	NA	NA	NA	0	0	0	0	NA	NA	NA
Not Current LEP <sup>d</sup>	8	0	0	0	8	25.0	62.5	12.5	0	0	0	8	37.5	25.0	37.5	0	0	0	8	62.5	25.0	12.5
<b>Gender<sup>b</sup></b>																						
Female	5	0	0	0	5	40.0	60.0	0.0	0	0	0	5	40.0	40.0	20.0	0	0	0	5	80.0	20.0	0.0
Male	3	0	0	0	3	0.0	66.7	33.3	0	0	0	3	33.3	0.0	66.7	0	0	0	3	33.3	33.3	33.3
<b>Ethnicity<sup>b</sup></b>																						
White	0	0	0	0	0	NA	NA	NA	0	0	0	0	NA	NA	NA	0	0	0	0	NA	NA	NA
Black	0	0	0	0	0	NA	NA	NA	0	0	0	0	NA	NA	NA	0	0	0	0	NA	NA	NA
Asian	0	0	0	0	0	NA	NA	NA	0	0	0	0	NA	NA	NA	0	0	0	0	NA	NA	NA
Pacific Islander	0	0	0	0	0	NA	NA	NA	0	0	0	0	NA	NA	NA	0	0	0	0	NA	NA	NA
Hispanic	8	0	0	0	8	25.0	62.5	12.5	0	0	0	8	37.5	25.0	37.5	0	0	0	8	62.5	25.0	12.5
American Indian/Alaska Native	0	0	0	0	0	NA	NA	NA	0	0	0	0	NA	NA	NA	0	0	0	0	NA	NA	NA
Other <sup>c</sup>	0	0	0	0	0	NA	NA	NA	0	0	0	0	NA	NA	NA	0	0	0	0	NA	NA	NA
<b>Economic Status<sup>b</sup></b>																						
Disadvantaged	5	0	0	0	5	40.0	40.0	20.0	0	0	0	5	40.0	20.0	40.0	0	0	0	5	60.0	20.0	20.0
Non-Disadvantaged	3	0	0	0	3	0.0	100.0	0.0	0	0	0	3	33.3	33.3	33.3	0	0	0	3	66.7	33.3	0.0
<b>Migrant Status<sup>b</sup></b>																						
Migrant	0	0	0	0	0	NA	NA	NA	0	0	0	0	NA	NA	NA	0	0	0	0	NA	NA	NA
Non-Migrant	8	0	0	0	8	25.0	62.5	12.5	0	0	0	8	37.5	25.0	37.5	0	0	0	8	62.5	25.0	12.5

<sup>a</sup> Excludes Status 3 students.

<sup>b</sup> Differences in totals among demographic categories resulted from gridding errors or missing data in materials received from districts.

<sup>c</sup> Includes students coded with more than one ethnicity or their ethnicity information is missing.

<sup>d</sup> Includes students coded as Non-LEP and Former LEP. Identical to category titled Non-LEP in previous years. Students appear in each applicable category, but they are included in Total only once.

Data displayed show the number of students with valid scores, the number of students with invalid scores, and the percentage of students that fall into each of the three proficiency levels.

### **District Data Disks**

Districts and receiving schools with ten or more students may request a CD-ROM data disk containing the student raw data file of their students.

### **State Summary**

After reporting, a State Summary data file and state level Performance by Demographic Groups reports are produced and posted on the NJDOE website. The summary data file, available in text and Excel formats, contains the same type of test results based on the reporting data and summarized with an executive summary.

<http://www.nj.gov/education/schools/achievement/>. The Executive Summary is included in Appendix J.

### **7.2 Parent Letter**

To help explain to parents and guardians both the purpose of the APA and the information provided on the Individual Student Report (ISR), a sample form letter is included (Figure 7.8) that can be adapted, signed, photocopied, and sent home with each student along with his/her ISR.

## Figure 7.8 Sample Parent/Guardian Letter

Dear Parent/Guardian:

Your child's Individual Student Report for the New Jersey Alternate Proficiency Assessment (APA) is attached. The APA is a portfolio assessment that consists of a collection of student work which was gathered by your child's teachers during instructional activities. Your child participated in the APA between September 2008 and February 20, 2009. Your child's APA portfolio was then submitted to the New Jersey Department of Education and scored by trained readers during the spring of 2009. The attached report provides your child's APA scores in the content areas of Language Arts Literacy, Mathematics, and Science.

The top part of the report tells you the proficiency levels your child achieved on the skills assessed in Language Arts Literacy, Mathematics, and Science. A level of "proficient" or "advanced proficient" is considered meeting the state standard for the APA. The boxes below the proficiency levels show the scores for each "dimension" scored for each content standard assessed by the portfolio. Please refer to the back of the Individual Student Report for further information regarding these boxes.

APA results should not be used as the sole basis for instructional decisions. It is important that districts consider multiple measures on all students before making decisions about the student's instructional placement.

This report is available only to parents, guardians, students, and authorized school officials. If your child attends a school outside of this district, reports are sent to the home school district, your child's neighborhood school, and the school your child attends. All reports are kept confidential. If you have any questions about the report, you should contact your child's case manager, teacher or the principal of the school your child attends.

### **7.3 Quality Control of Reporting**

Quality control procedures at Pearson begin with the use of the Software Engineering Institute's (SEI) Capability Maturity Model (CMM) for software development process management and control. Key process areas of CMM are requirements management, software project planning, software project tracking and oversight, software quality assurance, and software configuration management. Pearson examples of CMM documents include a customer requirements allocation document, a project schedule, functional specifications, a software development project plan, unit test plans, and verification and validation plans. Pearson is certified by an external auditor for CMM Level 4, the second highest level of certification.

After software requirements have been identified, the Pearson software development team prepares project schedules, project plans, functional specifications, and design documents. Pearson begins by creating detailed test plans at both the unit and systems level. A unit test plan is a list of code-unit test cases that are executed and recorded by the software developer. The purpose of the code-unit test process is to ensure that software is developed, maintained, documented, and verified to meet the project requirements for coding and unit testing. As such, the process provides the mechanisms that are necessary to implement the software requirements and design as well as provides code-units quality assurance prior to system test.

After all modules (units) are tested within a system, the CMM process requires a system test. The system test ensures that all the units work together and that outputs from one module match up to the proper inputs for the next module in the system. It also uses expected results to ensure that all requirements have been met. It is important that the system test be performed by a group that is independent of the software development team. This process allows independent verification and interpretation of the requirements. Once the independent testing group has completed the test and given its approval, the system is moved into production mode. It is ready for processing the quality-checking scanned documents and files submitted by a quality-checking team.

#### **Scanning and Scoring**

Before actual documents are machine-scanned, a comprehensive check of the scanning and scoring system is performed. The software development tester creates test decks of gridded scanned documents with specific test criteria. The test decks are designed and gridded to cover all response ranges, ID ranges, blanks, and double grids as well as any other responses used by the APA. A file containing the scanned responses is then compared to the expected test results for each document to ensure the scanner is operating correctly. The test decks are processed through the programs for scanning and editing scanned, and packetizing and printing scoring monitors. The second check involves processing and quality-checking the first actual scanned documents received.

As described in the rangefinding section of Part 4, the NJDOE Office of State Assessments asked districts to return their portfolios early following testing so actual

portfolios could be used for rangefinding. Some early return portfolios and additional portfolios received during the scheduled return served a quality-control purpose beginning with hand checking and following with periodical checking throughout scoring.

For both the rangefinding and quality-control purposes, portfolios were selected to represent the following:

- range of school districts
- different types of schools
- grade level of students (elementary, middle, high school)
- skill level (access skill, modified expectation)
- severity of disability (severe/profound, moderate, mild-moderate)
- possible score levels (low, medium, high)

### **NJDOE Quality Control of Score Reporting**

NJDOE Office of State Assessments conducted a quality control of score reporting in June 2009. The NJDOE hand scored a sample of portfolios from a variety of students across grades and content areas.

Pearson printed all applicable reports for 8-10 districts that met requirements specified by the Office of State Assessments for quality control. Requirements for the selected districts included:

- All grades in at least 2 districts
- Each grade represented at least 4 times across the districts
- 3 urban districts, at least 1 private school
- 4-6 public districts (non-specialized districts)
- 4 private districts such as the Department of Children and Families (DCF) districts
- No more than 50 students in a district (multiple schools)
- Sending/receiving relationship and Status: some related districts through sending/receiving relationship (e.g. at least, Status 2 and Status 3), minimum 3 sets. A minimum of 2 districts should be “independent” (e.g. with Status 1 only)

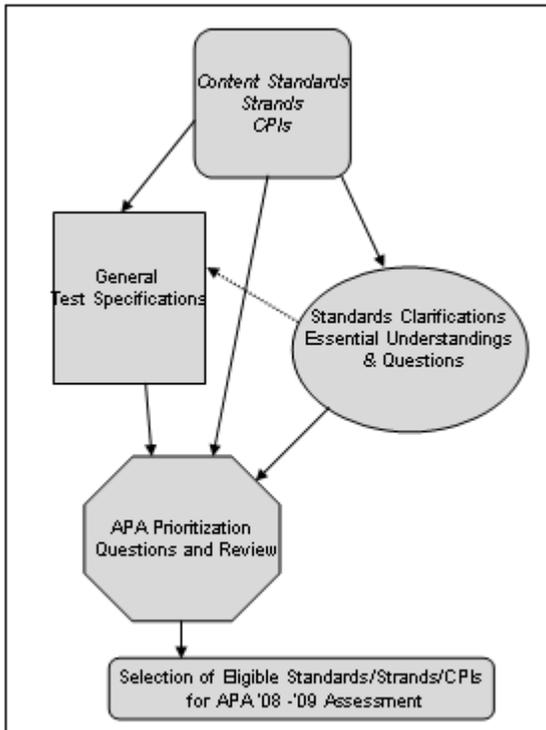
Additionally, the quality-control requirements included these student demographics:

- Migrant: 3-4 students
- SE: As many different codes as possible (including N-unknown or multiple).
- T-I: 3-4 cases each subject (e.g. Language Arts Literacy, Mathematics, Science), and multiple-coded cases (e.g. Language Arts Literacy and Mathematics)
- Economically Disadvantaged: 3-4 students
- LEP: 3-4 cases of each code (<, 1, 2, 3, F1, F2, and Y).
- LEP Exempt LAL: 3 cases

- Home: 3-4 homebound students
- Homeless: 3-4 homeless students
- Ethnicity: 3-4 cases (of all codes, including multiple-codes)
- TIS/TID: 3 cases at minimum of TIS only, TID only, and both TIS and TID.
- Void: At least 3 cases per code (V1,V3,V4,V5); some must have dimension scores for one entry
- Report Footnote: Every case of each footnote (including “U” unscorable codes)
- General Assessment: Several cases of students whose scan sheet indicated they took the general assessment, by subject and by combination of subjects
- 4<sup>th</sup> Rater: Several cases requiring a fourth reader, with resolution information provided.

For the NJDOE quality-control, Pearson provided the demographic scan sheets, scoring monitors, record changes printout, school names with CDS codes, and a summary sheet for each student. The summary sheets displayed the variable demographics and codes for each student as data was transferred from the scan sheets to the Individual Student Reports (ISRs).

## **APPENDIX A: Development of the CPI Links**



Content Standards  
Strands  
CPIs

- Source document for instruction and assessment
- Describes what all students should know and be able to do, including students with disabilities
- A scope and sequence document is available to assist in planning for instruction

January 14, 2008      APA Redesign Flow  
Charland Process      2

APA Prioritization  
Questions and Review

- The process of defining the eligible standards/strands/CPIs for APA assessment requires
  - A review of the intersection of the standards from the test specs and standards clarifications and
  - A prioritization of the remaining available standards based on the APA student population and a series of questions.
    - *The questions should help to define what is most important to assess. This process should not exclude strands based on the belief of what may not need to be or is not currently taught.*

January 14, 2008      APA Redesign Flow  
Charland Process      5

Educators will consider these questions and statements:

1. APA students must receive standards-based instruction that is linked to grade-level and must be held to high expectations.
2. Which of the strands and CPIs are essential for students to master?
3. Which of the strands and CPIs are very desirable for students to master?
4. Which of the strands and CPIs are desirable for students to master?
5. Which strands and CPIs support learning of higher level skills?
6. Which strands and CPIs promote instruction of foundational skills that will prepare students for future learning?

January 14, 2008      APA Redesign Flow  
Charland Process      6

Selection of Eligible Standards/Strands/CPs  
for APA '08 -'09 Assessment

- The ILSSA group has produced a first draft of the eligible standards, strands, and CPs eligible for APA assessment.
- The Advisory committee will review the draft considering the prioritization questions, content standards, scope and sequence, and other reference documents. Committee will revise draft if necessary and document their justification of revisions.
- DOE content experts will review the committee's product and revise if necessary.
- A committee of educators will review the final draft before publication.

January 14, 2008

APA Redesign Flow  
Charland Process

7

## **APPENDIX B: APA Participation Guidelines**

The New Jersey APA was developed for two purposes:

- To measure the achievement of a **small percentage of students with disabilities** who cannot participate in the regular statewide assessments even with accommodations.
- To ensure that the educational results for all students are included in the statewide accountability system at the individual, school, district, and state levels.

The Individualized Education Program (IEP) team makes decisions about state assessment participation. The IEP must determine **for each content area assessed**, whether an individual will participate in the general assessment or the APA. The New Jersey special education rules and regulations specify that:

**Students with disabilities shall participate in the Alternate Proficiency in each content area where the nature of the student’s disability is so severe that the student is not receiving instruction in any of the knowledge and skills measured by the general statewide assessment and the student cannot complete any of the types of questions on the assessment in the content area(s) even with accommodations and modifications (N.J.A.C. 6A:14-4.10(a)2).**

The United States Department of Education (USDOE) nonregulatory guidance regarding achievement standards for students with the most significant cognitive disabilities provides further clarification regarding student eligibility for participation in the alternate assessment based on alternate achievement standards. The guidance states that:

**“only students with the most significant cognitive disabilities may be assessed based on alternate achievement standards...**the Department intended the term “students with the most significant disabilities” to include that small number of students who are (1) within one or more of the existing categories of disability under the IDEA (e.g., autism, multiple disabilities, traumatic brain injury, etc.); and (2) whose cognitive impairments may prevent them from attaining grade-level achievement standards, even with the very best instruction.”

United States Department of Education (USDOE) nonregulatory guidance for alternate assessments can be viewed at <http://www.ed.gov/policy/elsec/guid/altguidance.doc>.

The attached chart provides the individual determinations that must be made to determine student eligibility for participation in the APA.

**Guidelines to Determine Which Students Should Participate in the  
New Jersey Statewide Assessment  
Through the Alternate Proficiency Assessment  
2008–2009**

Student Name: \_\_\_\_\_

General assessment given at the student’s grade level:

NJ ASK3 \_\_\_\_\_ NJ ASK4 \_\_\_\_\_ NJ ASK5 \_\_\_\_\_ NJ ASK6 \_\_\_\_\_  
 NJ ASK7 \_\_\_\_\_ NJ ASK8 \_\_\_\_\_ HSPA \_\_\_\_\_ EOC \_\_\_\_\_

Content Area Question	Language Arts Literacy		Mathematics		Science*	
	Yes	No	Yes	No	Yes	No
1. Is the nature of the student’s cognitive disability severe?						
2. Is the student’s cognitive disability so severe that the student is not receiving instruction in any of the knowledge and skills measured by the general statewide assessment?						
3. Is the student’s cognitive disability so severe that the student cannot complete any of the types of questions on the assessment in the content area, even with accommodations and modifications?						
4. Is the student’s Individualized Education Program (IEP) aligned to grade level New Jersey Core Curriculum Standards through modified expectations?						

\*Grades 4 & 8, and Grade 9, 10, or 11 – the year student receives Biology instruction.

If the IEP team has answered yes to all of the questions above, the student should participate in Statewide Assessment through the Alternate Proficiency Assessment.

*My signature confirms the accuracy of the information noted above.*

\_\_\_\_\_  
 Director or Designee

\_\_\_\_\_  
 Date

**A SIGNED COPY OF THIS FORM MUST BE SUBMITTED WITH THE PORTFOLIO**

## **APPENDIX C: Use of Prompting and the Planning Entry Tool**

## **Task Directions, Prompts, and Instructional Supports**

When providing instruction or scoring student work, it is necessary to understand the differences between providing task directions, prompts, and supports so that you can accurately score student work for the APA. Provided below are clarifying statements to ensure a common understanding of these terms as they relate to the assessment of the CPI Links. Scoring an assessment activity correctly depends on the differentiation of providing directions, supports, and prompts.

A **task direction** is the information provided to the student at the beginning of an activity or test. This information tells the student how to complete the activity, offers expectations about the activity, provides background information needed for the activity, or simply asks the question. The following is an example of a task direction:

“We are going to answer some questions about the forces in motion lab activity we just finished. I want you to look at three pictures; which one of these pictures represents an unbalanced force?”

It is important to understand that the task direction above is not a prompt. The teacher’s statement simply provides the student with some background information and poses a question that the student must respond to in order to demonstrate his or her understanding of a skill or concept.

**Prompts** are the instructional details that teachers provide to students in order to lead or guide the student to the correct response during instructional activities or tests. While the purpose of prompting is to guide the student to the correct answer, the degree of intrusiveness varies depending on the type of prompt given. The typical hierarchy of prompts goes from least to most intrusive in order as verbal (V), gestural (G), model (M), and physical (P). If a student requires a prompt level to respond to items/questions or perform skills, then it is important to determine which prompt level most often gets the student to learn a concept and perform the skill accurately. Teachers must use their knowledge of how the student learns to make that decision.

To accurately document student performance of skills, a distinction must be made between **direct prompts** and **indirect prompts**. An indirect prompt guides/leads the student, but does not give the student the answer. The level of prompt provided to the student will be documented on the evidence and will affect the scoring of the activity. Verbal, gestural, or model prompts that directly give the student the correct answer (considered Direct Prompts) are considered a most intrusive prompt in the prompt hierarchy. Direct verbal, gestural, and model prompts are useful for instruction but cannot be used for assessment.

### **An indirect verbal prompt can**

- Provide the student with a clue to try to spark the student's recollection of the activity or lesson so that he or she can respond to the question (e.g., "remember, the main character had red hair and pigtails. Point to the main character.")

In the least to most prompt hierarchy, the gestural and model prompts come next. These prompts are represented by some type of teacher demonstration or gesture that guides the student to the answer.

### **An indirect gestural prompt can**

- Provide the student with a clue as to the general location of an answer (e.g., when looking up a word in the dictionary, the teacher may tap the page the word can be found on, but not exactly where the word is on the page)

### **An indirect model prompt can**

- Provide the student with a clue through teacher demonstration of the skill that the student should demonstrate (e.g., demonstrate how to carry in an addition problem, using a different problem from the student)
- Provide the student with a clue through acting out a scenario (e.g., when presenting a choice of three pictures and asking the student which picture represents an unbalanced force, the teacher may make a sweeping or moving motion to represent an "unbalanced force").

**The most intrusive prompts that a teacher can provide during assessment are any physical prompts. If a student must be given any type of physical prompt in order to perform the skill, the item/question/task element must be scored as incorrect. A Physical prompt** is any prompt that requires the teacher to touch the student (e.g., physically moving the student's hand, touching the student's wrist). Items completed with full or partial physical prompts must be marked as incorrect.

### **A word about direct prompts...**

Direct prompts are used during instruction (errorless learning) and give the student the correct answer. **Teachers may use direct prompting during the instruction that takes place between the initial and final data collection for APA, but direct verbal, gestural, and model prompts are not allowed for assessment.**

**A direct verbal prompt** provides the student with the specific answer to a question or item (e.g., "remember, the main character was Papi. Point to the picture of the main character.").

**A direct gestural prompt** points out the specific answer to the student (e.g., when presenting a choice of three pictures and asking the student which picture represents an unbalanced force, the teacher may point to or tap the correct picture).

**A direct model prompt** models the exact problem and answer that the student must perform (e.g., when sorting producers and consumers, the teacher says "remember corn is

a producer” and picks up the picture of corn and places it in the producer column of a chart. Then asks, “Which one is a producer?”)

## Supports

**Supports** are the instructional and assistive tools that students use to increase independent performance and facilitate their access to grade-level educational materials and activities. The most important thing to remember is that supports garner independence and facilitate access; they do not lead the student to the correct answer the way a prompt does.

Supports can range from “no-tech” to “high-tech” and can be used to:

- (a) aid the student in maintaining appropriate body position,
- (b) facilitate the student’s communication,
- (c) assist the student in accessing the computer or other technological devices, and
- (d) improve the student’s ability to express and receive information.

Readers and scribes are examples of “**no-tech**” supports that assist students with receiving information and expressing what they know. There are several examples of “**low-tech**” supports such as pictures, symbols or objects to represent words or ideas, pointers (or other devices) to push a keyboard button or activate simple machines, pencil grips, etc. The “**high-tech**” supports are usually those that first come to mind and include Alternate Augmentative Communication (AAC) devices, switches, adaptive software and computer peripherals. Some examples of these “high-tech” devices are computer programs that have speech recognition and word prediction or software programs that read whatever is on the computer screen aloud, AAC (or voice output) devices, and adaptive devices like computer touch screen or adaptive keyboard that facilitate access. The most important thing to remember is that supports garner independence and facilitate access; they do not lead the student to the correct answer the way a prompt does.

As you provide instruction it may be appropriate to provide some supports and prompts that are not acceptable for assessment. For instance, during instruction you may provide hand over hand assistance to a student as an introduction to a skill/concept. However if you provide that prompt level during assessment, it must be scored as an inaccurate response. Table D.1 lists types of supports, prompts, and activity formats that are acceptable for instruction and that are acceptable for assessment.

For more information on Supports and Assistive Technology, please refer to the document, “Links, Information and Resources on Assistive Technology and Universal Design for Learning.” The document is on the Web site:

<http://pem.ncspearson.com/nj/apa>. Click on the Documentation tab.

**Table C.1**  
**Supports, Prompts, and Activity Formats:**  
**Acceptable for Instruction and Acceptable for Assessment**

<b>Type of Support, Prompt, or Activity Format</b>	<b>Acceptable for Instruction</b>	<b>Acceptable for Assessment</b>
Physical Prompting	<b>Yes – with a goal of fading It out</b>	<b>Yes, however item will be marked as incorrect (-)</b>
Color Coding that allows the student to just match colors with no understanding of the concept/skill	<b>Yes – with a goal of fading it out</b>	<b>No – matching colors is not found in the CPI Links</b>
Less than 5 questions/items	<b>Yes</b>	<b>No – there must always be at least 5 items included in an assessment activity</b>
Verbal, model, or gestural prompts	<b>Yes – both direct and indirect. The goal is to fade all prompts.</b>	<b>Only indirect prompts are allowed for assessment</b>
Independent work	<b>Yes</b>	<b>Yes</b>
Repeating or rephrasing directions.	<b>Yes – these are supports</b>	<b>Yes</b>
Scaffolding and differentiated Instruction	<b>Yes</b>	<b>Yes</b>
Communication systems and devices	<b>Yes</b>	<b>Yes</b>
Modified texts (e.g., PEC symbols added, shorten text, student follows along with objects, pictures, or words while teacher reads)	<b>Yes</b>	<b>Yes</b>
Ask questions that are not a part of the selected Link	<b>Yes</b>	<b>No</b>
Providing access for the student (through scribes, sign language, Braille, objects, textures, etc.)	<b>Yes</b>	<b>Yes</b>
Work with general education specialists/classrooms	<b>Yes</b>	<b>Yes</b>

## **Planning Tool**

The following tool may be used to assist in developing standards-based activities that will be conducted to instruct the student on the skills and concepts of the chosen CPI and CPI Link and collect data for the APA portfolio.

- Page one of the tool is to be used for planning instructional lessons/unit of study needed to teach the student the skills and concepts of the CPI and CPI link.
- Page two of the tool is to be used for planning two assessment activities: one which will occur prior to the instructional lessons/unit; and one which will occur at the end of the instructional lessons/unit. Page two includes a column to plan what type of evidence will be collected from the activities to include as evidence in the portfolio.
  - Page two can be used as a reference when completing the entry cover sheet and writing a description of the initial activity and the final activity.



## **APPENDIX D: Writing Prompt Rubrics**

## Scoring Writing

One of the requirements for acceptable evidence is that it must include at least 5 items, such as 5 questions or 5 steps to perform the skill. Paragraph writing is not easily broken into 5 items, therefore certain specified CPI Links must be scored using a rubric. The specified Links will include the word “*rubric*” next to the link when it is necessary to score the link using a rubric. A rubric must include all part of the CPI Link, and must average all possible score points for a percent score

CPI 3.2.12D6 Compile and synthesize information for everyday and workplace purposes, such as job applications, resumes, business letters, and college applications		
Essence of the CPI: Write for workplace and everyday reasons		
<b>Matched Link</b>	<b>Near Link</b>	<b>Far Link</b>
<ul style="list-style-type: none"> <li>◆ Complete a cover letter and resume and judge it against a rubric</li> <li>◆ Write business letters using appropriate format and language <i>rubric</i></li> <li>◆ Complete college applications</li> </ul>	<ul style="list-style-type: none"> <li>◆ Complete cover letters</li> <li>◆ Write resumes (e.g., by matching job history to the appropriate heading)</li> <li>◆ Complete job applications</li> </ul>	<ul style="list-style-type: none"> <li>◆ Produce sentences for an appropriate audience based on word and subject choice (e.g., non-standard English for peers, standard English for boss)</li> <li>◆ Gather data needed to complete a form (d.o.b., address, date of graduation, etc.)</li> </ul>

When scoring student writing with a rubric, the writing must be scored solely on the skills/concepts within the chosen CPI Link. Therefore it is important that the dimensions of the rubric include only the academic skills included in the CPI Link. Behavioral skills should not be included in the writing rubrics.

When Scoring Student Writing for the Portfolio:

<b>Do:</b>	<b>Do Not:</b>
<ul style="list-style-type: none"> <li>• Score only academic skills</li> <li>• Score all skills/concepts within one CPI Link</li> </ul>	<ul style="list-style-type: none"> <li>• Score behavioral skills</li> <li>• Score skills/concepts that are not a part of the CPI Link</li> </ul>

Teachers can create rubrics specifically to address the academic content required in a CPI Link. These rubrics should follow the guidelines outlined above: they should address only academic skills and only those skills/concepts present in the CPI Link.

## Examples of Appropriate Writing Rubric

CPI: 3.2.12D6

CPI Link: “Write business letters using appropriate format and language” *rubric*

Example of a premade rubric

Cover Letter Rubric	Possible Points	Total Points	Prompted Or Independent
Overall Format <ul style="list-style-type: none"> <li>Block Style (10 points)</li> <li>New Times Roman, 12 point font (10 points)</li> </ul>	20	15	
Heading <ul style="list-style-type: none"> <li>Your complete address (6 points)</li> <li>Phone number/email address (1 points)</li> <li>Complete date (2 points)</li> <li>Correct spacing and indentations (5 points)</li> </ul>	14		
Inside Address <ul style="list-style-type: none"> <li>Appropriate prefix/title and name (2 points)</li> <li>Title (2 points)</li> <li>Organization (2 points)</li> <li>Organization’s address (6 points)</li> <li>Correct spacing and indentations (5 points)</li> </ul>	17		
Greeting <ul style="list-style-type: none"> <li>Appropriate salutation choice (2 points)</li> <li>Appropriate prefix/title and name (2 points)</li> <li>Correct spacing and indentations (2 points)</li> </ul>	6		
Body <ul style="list-style-type: none"> <li>Uses Standard English (no contractions, slang, etc.) (10 points)</li> <li>Clearly outlines purpose and qualifications in the letter (12 points)</li> <li>Uses clear, concise sentences (10 points)</li> <li>Correct spacing and indentations (5 points)</li> </ul>	37		
Closing and Signature <ul style="list-style-type: none"> <li>Appropriate closing choice (2 points)</li> <li>Correct spacing and indentations (4 points)</li> </ul>	6		
Total Possible Points	100	% accurate	% independent

**Example of a teacher-made rubric**

	<b>Independent or Prompted</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>Score</b>
<b>Heading</b>		Missing	Incomplete, incorrectly formatted, <i>and</i> poor word choices	Incomplete, incorrectly formatted, <i>or</i> poor word choices	Complete, appropriate word choices, formatted correctly	
<b>Greeting</b>		Missing	Incomplete, incorrectly formatted, <i>and</i> poor word choices	Incomplete, incorrectly formatted, <i>or</i> poor word choices	Complete, appropriate word choices, formatted correctly	
<b>Body Identifies Purpose</b>		Missing	Incomplete, incorrectly formatted, <i>and</i> poor word choices	Incomplete, incorrectly formatted, <i>or</i> poor word choices	Complete, appropriate word choices, formatted correctly	
<b>Body Identifies Qualifications</b>		Missing	Incomplete, incorrectly formatted, <i>and</i> poor word choices	Incomplete, incorrectly formatted, <i>or</i> poor word choices	Complete, appropriate word choices, formatted correctly	
<b>Salutations</b>		Missing	Incomplete, incorrectly formatted, <i>and</i> poor word choices	Incomplete, incorrectly formatted, <i>or</i> poor word choices	Complete, appropriate word choices, formatted correctly	
	% independent					% accurate

**Reason:** This rubric is academic, connected to the CPI Link and provides a percent correct score and a percent independent score for the student’s work. Percent scores are calculated by adding up the total points earned by student and dividing by the total possible points (in this example 20 possible total points).

## **APPENDIX E: PSC Scorers' Directions for Scoring Dimensions**

### Complexity

**Complexity:** is used to evaluate the CPI link assessed, and how closely the complexity and difficulty (Matched, Near, Far) links to the Core Curriculum Content Standards (CCCS) and grade-level cumulative progress indicators (CPI).

Score Point	0	1	2	3	4
<b>Complexity</b>	Evidence provided is unscorable; all dimensions will receive a score of zero	CPI link was assessed but there are major flaws in the evidence	CPI link is a far link to the grade-level indicator	CPI link is a near link to the grade-level indicator	CPI link is a matched link to the grade-level indicator

#### Definition of Terms

**Complexity** is the expectation level at which the student should perform the skill (remembering, understanding, applying, analyzing, evaluating and creating).

**CPI Links** provide students with a range of skills/concepts that are aligned to the CCCS and CPIs. *CPI Links* are organized by whether they are a matched, near, or far link to the grade level CPI. For instance, in CPI 4.4.7B4 (see below), the Matched Link has more complexity and difficulty than the Far Link. The Matched Link requires the student to apply probability concepts to answer questions in a real world situation, while most of the Far Links only require students to identify a single concept at a time.

<b>CPI 4.4.7B4</b> Play and analyze probability-based games, and discuss the concepts of fairness and expected value.		
Essence of the CPI: Understand what probability has to do with describing “fairness” and expected outcomes in games.		
Matched Link	Near Link	Far Link
<ul style="list-style-type: none"> <li>◆ <b>Play a probability-based game (anything with a spinner or dice) and use probability to answer questions about fairness</b></li> </ul>	<ul style="list-style-type: none"> <li>◆ <b>Demonstrate understanding of the connection between random and fairness</b></li> <li>◆ <b>Demonstrate understanding of the connection between independent outcomes and fairness</b></li> </ul>	<ul style="list-style-type: none"> <li>◆ <b>Define and identify independent outcomes in probability</b></li> <li>◆ <b>Identify a situation that would cause a bias result (e.g., spinner on a tilt)</b></li> <li>◆ <b>Identify a situation that would cause a random result (spinner on a flat desk)</b></li> <li>◆ <b>Compare situations that would cause bias results versus random results</b></li> </ul>

**You must review all of the Links for the CPI to ensure the correct Complexity score is given.**

When scoring an entry, scorers will evaluate which CPI Link was performed by the student and assign a score accordingly. If a CPI Link is written on the cover sheet but the evidence matches a different CPI Link within the same CPI, use the evidence to

determine the Complexity score, after reviewing this with a table leader. Hence, a student whose work demonstrates a Matched Link will score a 4 in complexity. A student whose work demonstrates a Near Link will score a 3 in complexity. A student whose work demonstrates a Far Link will score a 2 in complexity.

An entry which demonstrates work in a CPI Link but has major flaws will score a 1 in complexity. **A major flaw includes**

- **Assessing only part of the CPI Link (e.g. link specifies compare *and* contrast, but evidence only assesses compare, and there is no Link that states *only* “compare”)**
- **Same activity is used for both pieces of evidence**

These are the only two errors that would cause Complexity to receive a score point of 1. Score Performance and Independence as you normally would.

An *activity* is the context and/or application within which the student demonstrates the skills encompassed in the CPI Link. An activity should demonstrate the student working on one specific CPI Link but differ in application or context of the skill from the first activity to the last activity. For instance:

- **Application (how the student accesses the skill):**
  - A fill in the blanks worksheet requires different application of a skill than a matching game.
  - Performing word problems are different than performing straight calculation problems.
  - Composing an essay on a computer is a different activity than writing an essay with paper and pencil.
  - Using a graphic organizer to organize information is different than answering multiple choice questions.
  - Using a Smart Board to complete a graphic organizer is a different activity than completing the same graphic organizer with paper and pencil.
- **Context (the surrounding situation for why the student completes the skill; purpose; content area):**
  - Identifying figurative language in the study of poetry by answering multiple choice questions is different than identifying figurative language in commercials and advertisements in the study of consumerism by answering multiple choice questions.
  - Completing a job application as practice on a worksheet is different than researching jobs of interest and then completing an application.
  - Graphing ordered pairs on a worksheet is different than creating a map by graphing ordered pairs to show where buildings are located.
  - Completing a math worksheet on adding decimals is different than going to the store and adding up the price of groceries.

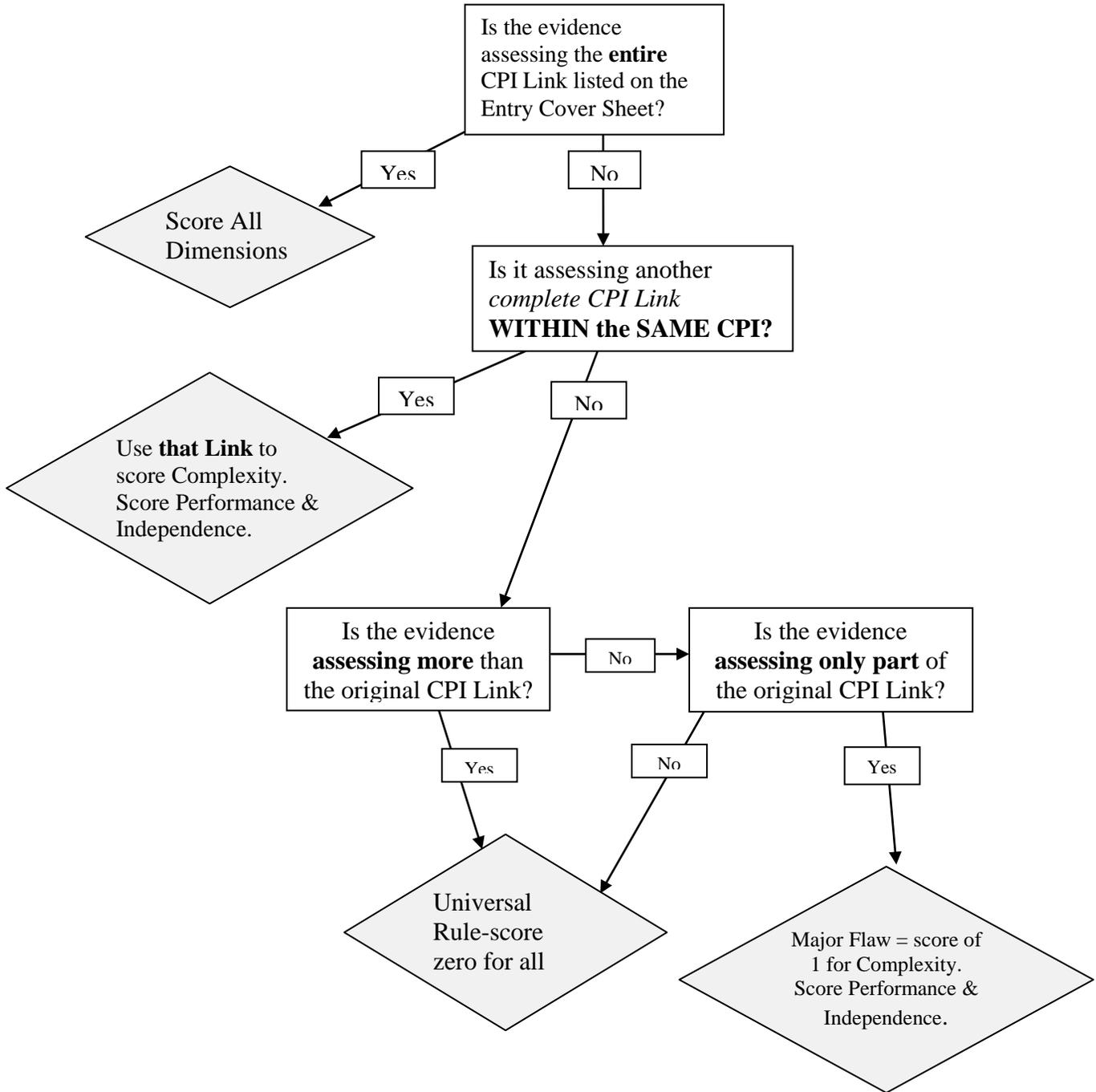
Each of these examples demonstrates ways that activities can be different.

**Merely changing the questions on a task or the subject of a story or piece of writing is not sufficient to indicate that the student has performed the CPI Link in two different activities.** For instance, in CPI 3.1.3G10, Matched Link, bullet point 2, “compare and contrast characters,” answering multiple choice questions comparing and contrasting characters in Catwings is the same as answering multiple choice questions about characters in Fantastic Mr. Fox. However, answering multiple choice questions comparing and contrasting characters in Catwings is different from using a graphic organizer to compare and contrast characters in Fantastic Mr. Fox.

If more than the CPI Link is assessed, check to see if there is another CPI Link for that CPI that matches all of the evidence. If so, score it based on the new link. If not, the entry will score zeros in all dimensions (per Universal Scoring Rule).

## Prior to Scoring Complexity

This flow chart begins at the end of the Universal Scoring Rules and after it has been determined that both pieces of evidence are assessing the same CPI Link and the same skill(s).



## Scoring Rules/Clarifications for Complexity Dimension

1. The CPI Link **addressed and evidenced** determines the score assigned.
2. An entry which does not meet the Universal Scoring Rules as outlined on pages 10 - 11 will score a zero in all dimensions.
  - a. If the evidence does not reflect the skill expectations of the Link chosen, check within that CPI and see if the evidence reflects a different Link.  
**Note: Evidence of the skill performance may be reflected in a rubric or in other evidence such as a student work sample, series of photographs with descriptions, etc. If the evidence reflects a different Link within that CPI, score it according to the Link it matches, after reviewing with a Table Leader.**
  - b. If the **evidence does not assess the entire CPI Link, and no other CPI Link** within that CPI matches the evidence, it is considered a major flaw and will be scored a 1 for complexity.
    - i. For example, Matched Link 4.4.7B4 “*Play a probability-based game (anything with a spinner or dice) and use probability to answer questions about fairness*” **if the evidence only demonstrates the student playing a game then it is a major flaw and will score a 1 for complexity.**
  - c. If the **evidence assesses more** than the skills identified in the CPI Link, and does not match a different CPI Link within the same CPI, **see your table leader.**
  - d. If the **evidence does not reflect** a different Link within that CPI, **see your table leader.**
3. **Two distinct activities are required to show evidence of instruction. If the same activity is used in both pieces of evidence, it is considered a major flaw and will score a 1 in complexity.**

**Scorer Notes:**

## Performance

**Performance** dimension evaluates the student’s accuracy performing the skills represented in the CPI links identified within the portfolio.

Score Point	0	1	2	3	4
<b>Performance</b>	Evidence is not scored, score is not a percentage, or score cannot be replicated. All dimensions will receive a score of zero.	Accuracy of work is 0–39% based on the last activity <b>Or</b> The second piece of evidence has a more intrusive prompt level.	Accuracy of work is 40–59% based on the last activity.	Accuracy of work is 60–80% based on the last activity	Accuracy of work is 81–100% based on the last activity

### Definition of Terms

**Accuracy** is the number of items/questions/tasks/writing rubric elements that the student performed correctly. Any items/questions, etc. that the student answers using a physical prompt must be marked as incorrect. Accuracy must be calculated as a percentage, and each item must be clearly marked as correct or incorrect.

**Physical prompt** is any prompt that requires the teacher to touch the student (e.g., physically moving the student’s hand, touching the student’s wrist). *Items completed with physical prompts must be marked as incorrect.*

**Performance** measures how well the student has demonstrated the skill specified in the CPI Link within the collection period.

Student performance is documented by evidence of the student working on the CPI Link collected within the collection period. The first piece of evidence must be collected between September 1 and November 21, 2008. The second piece of evidence must be collected between December 15, 2008–February 20, 2009. The student must score 39% or below on the initial piece of evidence in order to meet the universal scoring rule for “baseline” data.

- ✓ All student work must be scored using a percent of accurate responses. Any student work that is not scored using a percentage will result in a score of zero for all scoring dimensions.
- ✓ Scorers should be able to recreate the percent accuracy score using reasonable judgment. For instance, if 4/10 questions are marked as incorrect and the percent score is 60%, you may use reasonable judgment to determine that the other 6 questions were correct.

Each question should be marked as correct (+) or incorrect (–) or, in some Writing Links, scored with a rubric. Any student performance that required the use of

physical prompts must be marked as incorrect. Teachers calculated accuracy by dividing the number of correct answers by the total number of items /rubric elements, and then multiplying by 100.

- ✓ Each item must be marked as correct (+) or incorrect (-). If a different system is used, then it should be clear as to what is correct and what is incorrect.

If a rubric was required for assessing a writing CPI Link, then it must meet the criterion for using a rubric. Rubrics must:

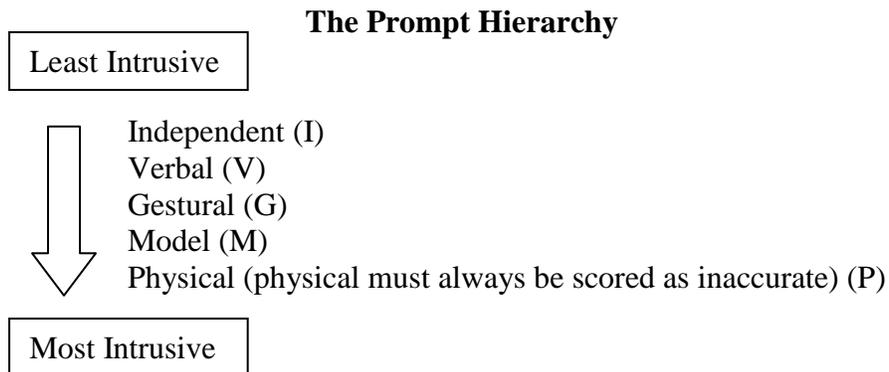
- ✓ be academic
- ✓ have 5 a minimum of five skill elements or dimensions
- ✓ assess the entire CPI Link and *nothing* but the CPI Link
- ✓ provide a percent accuracy score
- ✓ provide a percent independent score

If the rubric does not include these elements the entry scores a zero for all dimensions. (See examples in the training Power Point.)

The final piece of evidence for each entry provides the score point used to score Performance.

- ✓ A student who scores 81–100% accuracy on the final piece of evidence will score a 4 for performance.
- ✓ A student who scores 60–80% accuracy on the final piece of evidence will score a 3 for performance.
- ✓ A student who scores 40–59% accuracy on the final piece of evidence will score a 2 in performance.
- ✓ A student who scores 0–39% accuracy on the final piece of evidence will score a 1 in performance.
- ✓ A score which cannot be replicated, is not scored, or is not in a percentage will receive zeros in all dimensions.

If the second piece of evidence has a more intrusive prompt level than the first piece of evidence, the entry will score a 1 for Performance. Score Complexity and Independence as you normally would.



If a prompt is used in the first piece of evidence, the second piece of evidence must contain the same level or less intrusive prompt.

Example:

- if the student performs all items independently on the first piece of evidence, but requires verbal prompts, or some other prompt levels, on the final piece of evidence, that is considered more intrusive and will cause the entry to score one for Performance.
- if the student performs all items with a combination of verbal prompts and independent responses on the first piece of evidence, but performs some items with model prompts, verbal, and independent responses on the final piece, the model prompts are considered more intrusive and will cause the entry to score one for Performance.

Teachers may indicate their own prompt hierarchy for their classrooms but it must be clearly documented in the portfolio.

Any evidence that is not scored, not scored as a percentage, or if the scorers cannot recreate the score from the evidence, will result in the entry scoring a zero for all dimensions. In order to score Performance, the student work must follow the Universal Scoring Rules outlined on pages 10–11. Any work that does not meet those rules will score a zero for all dimensions.

## **Scoring Rules/Clarifications for Performance Dimension**

1. Ensure that all work follows the Universal Scoring Rules. If the rules are not followed, see your table leader.
2. Writing tasks for certain specified CPI Links must be scored using a rubric. A rubric must include all parts of the CPI Link, at least 5 task elements or dimensions, assess the entire CPI Link and only the CPI Link, and must include scores for accuracy and independence as percentages.
3. All evidence must contain the score or grade for accuracy (as a percent) that was assigned by a teacher. Accuracy reflects percent of items/tasks the student performed correctly without physical prompts. If the accuracy percentage is missing, see your table leader.
4. Student work that requires physical prompting must be scored as incorrect. If physical prompts are marked as correct, the score cannot be replicated. See your table leader.
5. Initial evidence that starts with the student performing the skill at a level higher than 39% will result in the entire entry being scored as zero for all dimensions. See your table leader.
6. Performance must be demonstrated in the actual examples of student work completed during the collection period, with the first piece of evidence coming from the first collection period (September 1 to November 21, 2008) and the second piece of evidence coming from the second collection period (December 15, 2008 to February 20, 2009).
7. Evidence selected for the portfolio should reflect performance of only one CPI Link for each entry.
8. If the second piece of evidence has a more intrusive prompt than the first piece of evidence, score a 1 for Performance.

**Scorer Notes:**

## Independence

**Independence** evaluates the extent to which the student completed items/tasks independently.

Score Point	0	1	2	3	4
<b>Independence</b>	Evidence does not include percentage of time student was independent, is not clear, or percentage cannot be replicated.	Student completed items/tasks independently 0–39% of the time	Student completed items/tasks independently 40–59% of the time	Student completed items/tasks independently 60–80% of the time	Student completed items/tasks independently 81–100% of the time

### Definition of Terms

A **prompt** leads or guides students to the correct answer.

**Prompts leading the student to the correct answer without actually telling the student the correct answer are acceptable.** Prompts may be verbal, gestural, model, or physical prompts.

For instance, the student is supposed to identify the main character of Pippi Longstocking from a choice of 3 pictures. One picture is Pippi, one is her monkey, and one is her horse.

- **Independent performance:** The teacher says, “Which one is the main character?”
- **Verbal prompt:** The teacher says, “Which one is the main character?” and then says “The main character is the one who has red hair?”
- **Gestural prompt:** The teacher says, “Which one is the main character?” and gestures to the three pictures
- **Model prompt:** The teacher says, “Which one is the main character?” and acts out one of Pippi’s actions (skating on the floor with sponges to wash it)
- **Physical prompt:** The teacher says, “Which one is the main character?” and then moves the student’s hand to the correct picture.

***If a physical prompt is required for the student to complete the item/question, it may be used, but the item must be marked as inaccurate and physically prompted.***

If within the description of the activity the teacher mentions that she/he repeated directions or rephrased directions, this is not considered a prompt and has no effect on scoring.

Rephrasing: The teacher says, “Which one is the main character? Who was the story mostly about?”

The final piece of evidence for each entry provides the score point used to score Independence.

- ✓ A student who performs 81–100% of the items/tasks/questions independently will receive a score of 4 for Independence.
- ✓ A student who performs 60–80% of the items/tasks/questions independently will receive a score of 3 for Independence.
- ✓ A student who performs 40–59% of the items/tasks/questions independently will receive a score of 2 for Independence.
- ✓ A student who performs 0–39% of the items/tasks/questions independently will receive a score of 1 for Independence.
- ✓ Evidence that does not include percentage of time the student was independent, is unclear, or cannot be replicated will receive a score of 0 for Independence.

Scorers may use reasonable judgment to recreate the percent independence score. For instance, if 1/10 questions are marked with a verbal prompt and the percent score is 90%, you can reasonably judge that the other 9 questions are independent.

## **Scoring Rules/Clarifications for Independence Dimension**

1. A prompt level must be marked next to each question the student completes.
  - I = independent
  - V = verbal
  - G = gestural
  - M = model
  - P = physical
  - If some other system is used and there is no key, see your table leader.
2. Independence scores should be summarized as a percent. If it is not marked as a percent, see your table leader.
3. If the student requires a prompt for an item/question, the prompt level provided must be documented.
4. If the student requires a physical prompt or is given the answer, the item must be marked as incorrect.
5. When applicable teachers may write “all responses were completed independently” or “100% independence” without marking the individual items on the evidence. If you cannot recreate the score, see your table leader.

**Scorer Notes:**

## **APPENDIX F: PSC Scorers' Directions for Monitoring Codes, Breaches, & Alerts**

### **Instructions for the Use of Monitor Codes**

#### **Code 5      MUST be assigned for all entries and dimensions**

Code 5 is used only when the entry cover sheet clearly indicates that the **grade of the student is not in alignment** with the APA requirements. Only those students in grades 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12 are eligible for the APA.

If the grade that appears on the entry cover sheet is NOT 3, 4, 5, 6, 7, 8, 9, 10, 11, or 12, then bubble in Code 5 for **all** dimensions and content areas. You must confirm this with the table leader before you complete the monitor sheet. (Note to table leader that a scoring director will request additional data from the scan sheet prior to assigning this code.)

#### **Code 6      MUST be assigned for all entries and dimensions**

Code 6 is used when the scorer has determined that the portfolio is considered a **security breach** based on the guidelines provided in this handbook. If **any entry** matches the description of a **security breach**, then bubble in Code 6 for **all dimensions and content areas**.

See your table leader.

#### **Code A      May be used for all content areas**

Code A is used when a portfolio contains a note from the school that states the student has been out of school on an **extended sick leave**. If one entry within a content area receives a condition code A, all entries and dimensions within the content area will receive the same condition code. However, **first confirm** that the entries have **less than the required amount of evidence** for each content area. You may only use this code for an entry that has no evidence, or less than the required amount of evidence.

See your table leader.

#### **Code B      May be used for all entries or individual entries as applicable**

Code B is used when an entry has **no evidence** and there is **no note explaining** that the student was on **sick leave**.

See your table leader.

## Security Breaches – Preponderance of Evidence

There are several different occurrences that result in a security breach of an APA portfolio. This list is meant to be a guideline, but is not meant to be exhaustive. Scorers may indeed see other occurrences that lead them to believe a security breach has occurred. It is the scorer's responsibility to call attention to these portfolios and review the information with a table leader. This list will be updated as new occurrences are identified.

### Use of Pictures:

Pictures included in a portfolio must be dated, and the date (hence when the picture was taken) must match the date of the evidence. This is the instruction given to the educators. When you are reviewing pictures for questionable evidence, review the whole portfolio, not only within an entry.

- Pictures dated the same day that show the student in different clothes, accessories, and sometimes even hairstyles, should be reviewed for a security breach. Occasionally the student may have a smock over their clothes for art class. This would not indicate a security breach.
- Pictures dated different days that show the student in the same clothes AND peers/teacher in same outfits, and/or background materials/objects in same location/position (e.g., same writing on blackboard, same materials on student's desk, same materials in same position on teacher's desk, etc.) should be reviewed for a security breach. If the student is in the same clothes across pictures but there is no other circumstance described above, the portfolio would not be considered a security breach. There must be more evidence than just the student in the same clothes.
- If the pictures appear tampered with (e.g., pictures have been hand colored, etc.), the portfolio should be reviewed for a security breach.
- If the date of the picture seems unlikely (e.g., the date is January and the students are all wearing shorts and T-shirts), then review this for security breach. If the date of the picture is inconsistent with information in the picture (e.g., date is January but the calendar on the wall in the picture says March, the date is January but there are Valentine's on the bulletin board in the picture's background), then review for security breach.

### **Other Evidence:**

- Sometimes evidence has a lot of white-out on the dates and/or names of the students, with writing on top of the white-out. Examine the evidence, and if it appears that the evidence has been changed to suit the portfolio (e.g., changing the student's name, changing dates to match other evidence, etc.), review the portfolio for a security breach.
- There are times when a portfolio looks very familiar, because a scorer has scored other portfolios by that teacher. This sometimes generates the need to pull the other portfolios submitted by that teacher, if the scorer believes that the evidence and data look too similar. If a piece of evidence submitted in one portfolio exactly matches the information on another or multiple student's portfolios, then all of the teacher submitted portfolios should be reviewed for security breaches. It is acceptable to have the same types of evidence in the portfolios, and even evidence of the same classroom assignments. It is not acceptable to have the same performance data within an activity across students (e.g., a worksheet completed by one student is photocopied and used for two or more students).
- If the handwriting in any handwritten material matches the handwriting of a different author, or if the handwriting of one author appears different across evidence submitted, then the evidence should be reviewed for a security breach.

### **Security Alerts**

There are several occurrences that result in a security alert of an APA portfolio. If you suspect one of the following, see your table leader. These situations will be reviewed and escalated to the New Jersey Department of Education.

- The response suggests a situation which warrants investigation such as the possibility of abuse.
- The response suggests that the student intends harm to oneself or others.
- Evidence that appears to be of a private nature, including pictures of self-care tasks like showering, should be brought to your table leader to be reviewed for a security alert.

## **APPENDIX G: Performance Level Descriptors Report**

# **New Jersey Alternate Proficiency Assessment Performance Level Descriptor Development Meeting February 24 & 25, 2009**

## **Introduction**

In February, 2009 a panel of New Jersey educators was convened for a two day meeting; the purpose of which was writing grade and subject specific performance level descriptors for the New Jersey Alternate Proficiency Assessment (NJ APA). Performance level descriptors (PLDs) are behavioral descriptions of what students should know and be able to do to achieve a given performance level given the range of skills assessed. They outline expectations for student performance at each performance level given the assessed components of the curriculum and they are a required component of all assessments under Title I of the Elementary and Secondary Education Act (Federal Register, Volume 67, Number 129, 34CFR, Part 200, August, 2002).

New performance level descriptors should be created whenever a testing procedure is adopted that is judged to be meaningfully different than previous testing procedures or whenever the assessed content meaningfully changes due to new test specifications or new content standards. The APA underwent significant changes between the 2007-2008 academic year and the 2008–2009 year, including changes to the test specifications, assessable content and scoring dimensions. As a result both new performance level descriptors and a new standard setting are required.

A total of 5 vendor staff members were involved in conducting the PLD meeting: Dr. Kelly Burling, Dr. Paul Nichols, Dr. Jason Meyers, Ame Dombrowski and Tom Glorfield. Dr. Burling served as the primary meeting facilitator and she facilitated the English Language Arts group. Dr. Nichols facilitated the Science group and Dr. Meyers the Math group. Ame Dombrowski and Tom Glorfield were present to oversee and coordinate the meeting and accommodate any unforeseen requests. Lou-Ann Land of ILSSA, a Pearson sub-contractor, was available by phone to provide additional guidance with respect to the assessable content. Additional expertise in each subject was contributed by a content specialist in math, and science from the NJDOE, as well as specialists from the New Jersey Office of Special Education. These specialists contributed to discussions within the subject area groups during the creation of PLDs.

## Panelists

A committee of New Jersey educators was convened on February 24<sup>th</sup> and 25<sup>th</sup> at the Mercer County Conference Center in Mercer County, New Jersey to develop PLDs for the New Jersey Reading, Mathematics, and Science APA. A total of 24 educators, administrators, and experts participated for two days to draft the Performance Level Descriptors. The panelists received training in the APA and the PLD development process as a large group, but participated in content specific groups to draft the PLDs according to their expertise. Panelists were assigned to the content specific groups by the New Jersey Department of Education. All panelists provided voluntary demographic information to Pearson.

A summary of panelist gender and ethnicity is provided in **Table 1**.

**Table1: A summary of gender and ethnicity data for the committees**

<b>Gender</b>		<b>Ethnicity</b>				
Male	Female	White	African-American	Asian American	Hispanic/Latino	Other
3	21	18	3	1	1	1

Panelists attended from 18 different districts in New Jersey and several private school settings. **Table 2** provides a summary of panelists' identification of the location of their district.

**Table 2: A summary of district location**

<b>District Location</b>		
Suburban	Urban	Rural
14	2	5

**Table 3** provides a summary of panelists’ identification of the geographic location of their districts.

**Table 3: A summary of geographic location**

<b>District Geographic Location</b>		
North	South	Central
9	6	7

The panelists’ varied professional experience also contributed to the breadth of perspectives that informed the standard setting. Panelists’ years of experience in education ranged from 1 to 33 years, with a mean of 8.94 years and a median of 7.5 years. Seventeen of the twenty-four participants worked in special education; with positions including social workers on child study teams, teachers in self-contained classrooms, curriculum directors for students with disabilities, assessment coordinators, academic teachers, and administrators. Three panelists identified themselves as primarily working with general education students. Their roles included director of mathematics, lead teacher, and general education English teacher. Panelists had experience working with students from pre-school through high school; several panelists had experience with more than one grade range. The number of panelists with experience in various grade ranges is summarized below in Table 4.

**Table 4: A summary of panelists’ instructional experience by grade ranges**

<b>Grade Ranges</b>		
Elementary	Middle School	High School
10	10	12

## Method and Procedure

The two day meeting was structured to initiate panelists into the purpose of the meeting and the purpose of performance level descriptors before providing more in depth coverage of the impetus for the APA assessment, the characteristics of the participant population, the design of the APA and the development of the assessable content. This overview of the legislation, the population, and the assessment was followed by a more in-depth description of the PLD development process and two activities to help participants identify what constitutes a useful PLD. The full agenda can be found in Appendix A.

The preliminary introduction to PLD development included a brief description of PLDs and their purpose. Panelists were instructed that PLDs are used for a variety of purposes. During standard setting they provide a qualitative description of the content and skill-based performance expectations each cut score is intended to represent. They also provide standard setting panelists with a common frame of reference for thinking about students in each performance category. Panelists were also told that PLDs are used to communicate to parents, teachers, students themselves, and other stakeholders what a typical student in a particular performance level knows and can do; they support interpretations of student performance on the assessments for which they are written.

The task, creating subject and grade specific performance level descriptors for science, math and English, was then presented to ensure participants had a clear understanding of the expected outcomes of the meeting. A slide from the presentation, which documents the tasks of the meeting, is shown in Figure 1.

Figure 1: Slide from PLD Meeting Presentation

The slide is titled "What are our specific tasks?". It contains two bullet points and a table. The first bullet point is "Write a performance level descriptor for partially proficient, proficient, and advanced proficient at each grade for LAL, Math and Science". The second bullet point is "Work in subject specific groups, but use common language so the PLDs resemble one another." The table has two columns: "Topic" and "Grades". The rows are: LAL (3-8, 11), Math (3-8, 11), and Science (4, 8, EOC Biology). The Pearson logo is at the bottom left and "Pearson Copyright 2007" is at the bottom center.

Topic	Grades
LAL	3-8, 11
Math	3-8, 11
Science	4, 8, EOC Biology

In order to ensure that all participants had a common understanding of the APA the presentation covered the purpose of the assessment, the history (including the legislative requirements for alternate assessments), an overview of the population and access to grade-level linked academic content, and the design of the assessment. The purpose of the APA was drawn from the procedures manual:

The New Jersey Alternate Proficiency Assessment was developed for two purposes:

- To measure the progress of a small percentage of students with the most significant cognitive disabilities who cannot participate in the regular statewide assessments even with accommodations.
- To ensure that the educational results for all students are included in the statewide accountability system at the individual, school, district, and state levels. Accountability through assessment provides equity in program and educational opportunities for all students. Alternate assessment ensures an inclusive statewide assessment system and student accountability.

The history of the assessment program included a brief overview of the impact of the Individuals with Disabilities Education Act and the Elementary and Secondary Education Act on the development of alternate assessments and the APA in particular. Within this overview the legal imperative for including students with the most significant cognitive disabilities in assessment and accountability programs was discussed along with research on the capabilities of students in this population, particularly with respect to academic content.

A brief history of the iterations of the APA was presented, leading into the current test design. It is crucial that all panelists have a clear understanding of the test design so that the PLDs they develop reflect student performance on the measured dimensions as well as knowledge and skill-based competencies from the assessed curriculum. To support their understanding panelists were given a handout that explained the structure of the APA and the scoring process to complement the training they received during the presentation. This supplement is included as Appendix B. The presentation provided information about the structure of the APA, the rubrics against which the student work is scored, and how the rubric scores are combined into a total score. The concept of CPI Links (Curriculum Progress Indicator Links) was introduced to provide all panelists background on the assessable content. Additional training on CPI links was provided immediately before panelists broke into their subject area groups. It was communicated that CPI Links are skills and concepts that address the essence of a CPI and that the links are presented at 3 different levels to adjust the complexity and/or difficulty of the skills and concepts to make them more accessible to students with the most significant cognitive disabilities. The essences and the CPI Links were created by groups of New Jersey educators with facilitation from ILSSA.

After the participants received training to ensure a common understanding of the APA, the target population, and the scoring dimensions, more training on the purpose and development of PLDs was provided, including activities designed to familiarize the participants with elements of successful PLDs. Participants were provided copies of existing PLDs for the New Jersey Assessment of Knowledge and Skills Grade 4 Mathematics. After reviewing the PLDs individually, participants were asked to consider the following questions:

1. What language in the ASK PLDs distinguishes each level from the others?
2. How are the definitions of student performance different from one another?

3. How is language used to convey meaning?
4. Would that language be useful to describe student performance on the APA?

The participants' reflections on the questions were discussed as a group. Pearson facilitators kept track of the language used to distinguish levels from one another. The process was then repeated with the Grade 8 Mathematics PLDs with the following additional questions:

1. What language is the same or similar?
2. Is the content (knowledge and skills) different from grade 4, how?
3. Do the PLDS reflect qualitative differences in student expectations from one level to the next and one grade to the next?
4. Do they should show a progression with respect to specific skills students should know and be able to do and not just list the same skills at different levels with the only defining factor being the degree of consistency with which the skill is displayed?
5. Are there times when the degree of consistency is an appropriate defining difference?

The notes taken by the facilitators were provided to all panelists as a resource for PLD development in the subject area groups. The handout is included as Appendix C. The PLD analysis activities also established a basic format for the content area groups to use. The panelists identified the format used in the Grade 8 ASK PLDs are the one they would like to follow when creating the APA PLDs. This format included an introductory statement, followed by a bulleted list of knowledge and skills from the NJ Core Curriculum Content Standards. A Grade 8 Math NJ ASK PLD is shown in Figure 2 to illustrate the format selected.

Figure2: NJ ASK Grade 8 Math PLD for Proficient Students

<p><b><u>Proficient</u></b></p> <p>Eighth grade students performing at the proficient level demonstrate evidence of conceptual and analytical understanding of mathematical knowledge, procedures, skills and processes across and within the four content standards.</p> <ul style="list-style-type: none"> <li>▪ Proficient students identify, recognize and compare different representations of numbers and demonstrate an understanding of the meanings and uses of numerical operations and number systems.</li> <li>▪ Proficient students apply geometrical concepts; identify, describe, and classify two- and three-dimensional shapes; and solve problems involving geometry, spatial sense and measurement.</li> <li>▪ Proficient students will represent and analyze relationships among variable quantities and solve problems involving patterns, functions, and algebraic concepts and processes. Students will model situations algebraically, symbolically and graphically.</li> <li>▪ Proficient students analyze, interpret, and make predictions based on appropriate representations for sets of data. They apply and interpret the concepts of probability and discrete mathematics to solve problems.</li> </ul>
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Proficient students are mathematically literate in their ability to comprehend vocabulary, understand appropriate context and communicate their reasoning within and among the mathematical content areas.

After the PLD activities, panelists were given more training in the purpose and development of the CPI links. They were instructed that the CPI links were developed by committees of NJ educators with the facilitation of ILSSA. The process used by ILSSA was based on the “Links for Academic Learning” Alignment Manual developed by the National Alternate Assessment Center, which uses concepts of content and performance centrality to ensure that the content developed for students with the most significant cognitive disabilities maintains a strong link to constructs in grade-level content. The CPI links were developed to provide greater structure to the APA Assessment and the assessed curriculum and to facilitate teachers’ abilities to appropriately measure mastery of academic content by students with the most significant cognitive disabilities. The development process included reviewing the NJ Core Curriculum Content Standards and the NJ Assessment of Knowledge and Skills (NJ ASK) test blueprints. Special and general education teachers narrowed and prioritized CPIs from the NJ ASK blueprint, in correspondence with the federal guidance on alternate assessments with alternate achievement standards which states that the assessments for students with the most significant cognitive disabilities can be based on a narrower and less difficult range of content that is linked to the grade-level curriculum than the assessments with general achievement standards. The concepts of less difficult and grade-level linked were addressed in the development process by using content and performance centrality to identify the intent, or essence, of the grade-level CPIs, establishing the concepts that need to be assessed, then determining the complexity, or level of difficulty, of the skill statements.

Once common understanding of the CPI Links and their development process was established, participants had sufficient background to begin the process of writing grade and subject specific PLDs in their subject area groups. In the subject area groups, participants were presented a brief review of the activities and the purpose of the small group work. Several documents were distributed and an explanation of each was provided. The documents were 1) a copy of the NJ APA Procedures Manual with tabs indicating where the rubrics and CPI links were located; 2) a worksheet designed to help the participants review the CPI Links and identify language, knowledge and skills to be used in the PLDs; and 3) a list of PLD evaluation criteria.

The Procedures Manual was the primary resource document used for creation of the PLDs. The Manual contains the CPI Links for all subjects and grades, as well as the rubrics used for scoring. The panelists were instructed that this document provided the assessed curriculum and that the rubric conveyed information about how the different scored dimensions contributed to a student’s total score, and therefore to students’ proficiency levels. Panelists were reminded that the PLDs should not use the rubric information to proscribe where cut scores should be set, but that the rubrics may contain language useful to describe students who are performing at the high, middle and low ends of the APA spectrum. The worksheets provided to panelists were designed to help them review each CPI link and to identify knowledge, skills and behaviors associated with the

different performance levels. The worksheets were designed to be used during individual reviews of the assessed curriculum, and to serve as notes for the subject area group discussions and development of PLDs. The facilitator in each room reviewed the format and function of the worksheets and answered questions about its use. An excerpt of the Science worksheet is provided in Figure 3; the three subject's worksheets are attached as Appendix D.

Figure 3: Excerpt of Science PLD Development Worksheet

Grade 4 Science			
	CPI & Essence	Identify Knowledge, Skills, and Performance Associated with Students at Each Performance Level	
		Advanced Proficient	Proficient
Strand A: Matter, Energy and Organization in Living Systems	<b>CPI 5.5.4A1</b> Identify the roles that organism may serve in a food chain <b>Essence:</b> Understand the role organisms play in moving matter and energy in a food web		
	<b>CPI 5.5.4A2</b> Differentiate between the needs of plants and those of animals. <b>Essence:</b> Understand that plants and animals have different needs		
	<b>CPI 5.5.4A4</b> Describe the basic functions of the major systems of the human body including, but not limited to: <ul style="list-style-type: none"> <li>• Digestive system</li> <li>• Circulatory system</li> <li>• Respiratory system</li> <li>• Nervous system</li> <li>• Skeletal system</li> <li>• Muscular system</li> <li>• Reproductive system</li> </ul> <b>Essence:</b> Understand the basic functions of the systems of the human body		

The third document provided to panelists contained PLD review and evaluation criteria. These criteria were to be used after completing the PLDs for each grade to ensure alignment and articulation across grades, and as a reminder of the qualities of good PLDs during PLD development within each grade. The text of the PLD review and evaluation criteria is provided in Figure 4.

Figure 4: PLD Review and Evaluation Criteria

- Are the performance level descriptors understandable and useful for all stakeholders?
  - Evaluate the capability of different stakeholders to understand what is expected and what kind of work is required of students who perform at different levels.
- Do the performance standards clearly differentiate among levels?
  - Assess how easily the PLDs can be applied to collections of student work. Stakeholders should clearly see why some sets of student work are assigned to one performance level and not another.
- Are the performance standards focused on learning?
  - PLDs should provide a clear sense of increased knowledge and sophistication of skills. The PLDs should be clearly defined or described to show a progression of learning.

Based on Hansche, 1998

Copies of the NJ ASK PLDs for each subject were also available as a reference, and each facilitator had a blank template to use as the basis of their group's PLD development. The template was based on the NJ ASK Grade 8 Math PLDs that were identified as the preferred format during the large group PLD activities.

The subject area groups were initially tasked with reviewing the CPI Links for the lowest assessed grade in their subject and beginning to draft statements and sentences that would comprise draft PLDs for that grade. Panelists worked individually to complete the worksheets, then the facilitators engaged the panelists in group discussion to determine consensus on the knowledge, skills, and behaviors that were associated with each performance level. After these initial activities the subject area groups reconvened as a large group to share their experiences with reviewing the CPI Links and initial drafting of knowledge, skill and behavior statements. This meeting ensured that all subject area groups were progressing in the same direction, that the groups still agreed upon a basic format for the PLDs, and allowed panelists to ask questions and express concerns. All panelists were able to see that each group was facing similar challenges and had made a similar degree of progress. At the end of the first day, panelists returned to their subject area groups to finish a first draft of the PLDs for their subject's lowest assessed grade. Facilitators directed that PLDs for proficient would be completed first, followed by advanced proficient, and finally by partially proficient.

On the second day of the meeting Panelists convened as a large group and the draft PLDs were reviewed. This meeting ensured that a common format was established and being followed across groups. It also provided an opportunity for the purpose and tasks of the meeting to be reviewed. When panelists and facilitators broke into their subject area groups on the second day, they were charged with progressing through PLD development for the assessed grades from the lowest to the highest; beginning, in each grade, with the PLD for proficient students, followed by advanced proficient and partially proficient. After each grade was completed the facilitator led the panelists in an evaluation of the PLDs just completed and the articulation of the PLDs across grades through a discussion of the three questions on the PLD review and evaluation criteria handout (see Figure 4).

Science and Math completed the PLDs for all their assessed grades by the close of the meeting on the second day. The Language Arts group only completed PLDs for grades 3 through 6. The PLDs for Science are included as Appendix E, those for Math are Appendix F and Language Arts are Appendix G. Due to the strong process established for PLD development during the meeting, Pearson proposed the Language Arts facilitator would draft PLDs for the remaining grades (7, 8 and high school) based on the procedures used during the meeting. These drafts would be circulated to the PLD meeting Language Arts group participants for review and returned to Pearson for revision. This process was carried out subsequent to the PLD meeting; it is described in a following section.

The PLDs developed during the meeting are very similar across content areas due to the strong processes in place during the meeting to facilitate development, including the common background in the assessment and the content provided by the large group presentations, the PLD activities, the commonly identified format, and the meetings during which subject area groups were reconvened to review their work as a large group. The one difference identified during Pearson’s review of the PLDs after the two-day meeting was the use of a summary statement at the end of each PLD by the Science group. The Science PLD group also used a summary statement for Advanced Proficient that referred to the Proficient description, mirroring the format used in the ASK PLDs. These differences are more format-based than substantive. If the New Jersey Department of Education would like the PLDs to more exactly follow the same format, the summary statement used at the end of the Science PLDs could be incorporated into the introductory statement used by all the subject area groups, and the Advanced Proficient PLDs for science could be revised to include the competencies referred to in the Proficient PLD. These revisions will be made by Pearson at the request of the NJ DOE and submitted with the final PLDs for Language Arts when the process established for their drafting has been completed.

At the close of the PLD meeting all participants were asked to complete an evaluation of the PLD meeting, its process, and its products. The evaluation was comprised of seven statements with a Likert Scale response. The Likert Scale ranged from one to five with one representing “**totally disagree**” and five representing “**totally agree**”.

The evaluation questions and total results are presented in Table 5.

Table 5: PLD Meeting Evaluations

<b>Question</b>	<b>Mean</b>	<b>Median</b>	<b>Standard Deviation</b>
The process used to write PLDs was conceptually clear	3.86	4	0.77
I had a good understanding of the test design	4.64	5	0.58
I understood the purpose of the APA assessment	4.86	5	0.47
I understood the intended population and the appropriateness of the assessment for them	4.86	5	0.35
I understood the connection between CPIs and CPI Links	4.68	5	0.48
I was able to identify skills and knowledge associated with students in different performance categories and grades	4.32	4	0.72
I feel that the PLDs we created provide a useful description of student knowledge and skills in each performance category as demonstrated on the APA	4.36	4.5	0.73

### **Language Arts Continuation**

Subsequent to the PLD meeting, the Pearson language arts facilitator finished the grade 7 draft PLD and created drafts of the grade 8 and HS PLDs. These drafts were circulated to all language arts meeting participants on March 18<sup>th</sup>. Comments were asked for with a return deadline of March 25<sup>th</sup>. On March 31<sup>st</sup> a web-based meeting was held during which the draft PLDs were presented to the attending committee members and discussed, following the discussion process established during the PLD meeting. As a result of the web-based meeting, new drafts of the PLDs for grades 7, 8 and HS were circulated to all the language arts participants with requests for comment or approval. All respondents conveyed their approval of the PLDs. The grades 7, 8 and HS PLDs are included in Appendix G with the other Language Arts PLDs.

Appendix A: NJ APA Performance Level Descriptor Meeting Agenda

February 24–25, 2009

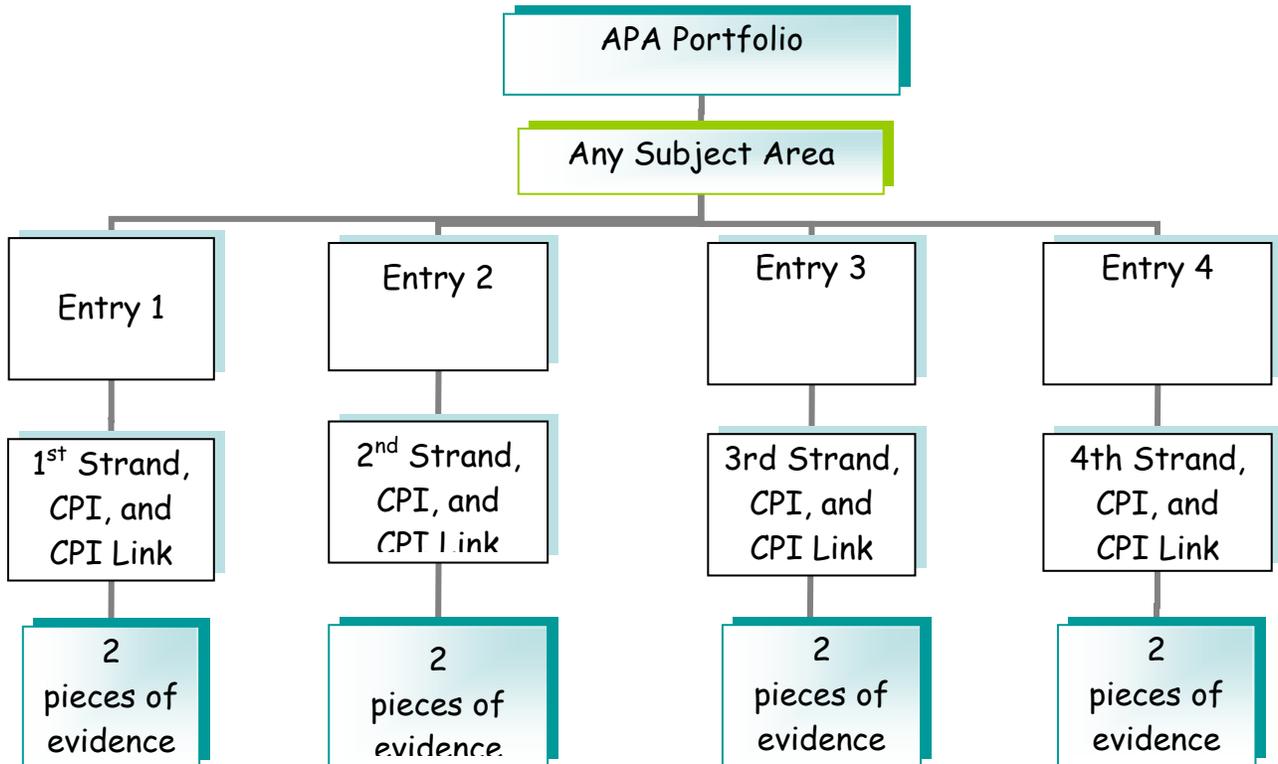
DAY 1

Registration	8:00–8:30
Opening Remarks	8:30–9:15
Welcome and Why You Are Here	
Review of Agenda	
Security Forms	
Reimbursement	
Overview of Performance Level Descriptors	9:15–9:30
Purpose	
Overview of the Tests	9:30–10:00
History	
Purposes	
Test Specifications	
BREAK	10:00–10:15
Introduce Performance Level Descriptors	10:15–12:00
Review existing PLDs	
Identify language that separates APA and ASK	
Identify language in ASK that separates levels	
Identify language in APA that separates levels	
LUNCH	12:00–1:00
Content analysis	1:00–1:30
Review:	
1. Content specifications	
2. CCCS Extracts & CPI Links Documents	
Break into subject area groups	1:30–2:45
Review CPI Links Documents and Rubrics	
1. Independently	
2. As a subject area group	
Write First Draft	
BREAK	2:45–3:00
Meet as large group	3:00–3:30
Identify similarities and differences	
Consensus on language and format	
Return to content groups and revise, review and evaluate	3:30–4:00

DAY 2

Review and Reconnect	8:00–8:30
Break into content groups and review 1 <sup>st</sup> set of PLDs	8:30–9:00
Continue to write PLDs for additional grades, break as needed.	
Grades 4, 5 & 6 (Math and LA)	9–11:30
Grade 8 & HS (Science)	
Review for articulation of content	11:30–12:00
Lunch	12:00–1:00
Grades 7, 8 & HS (Math and LA)	1:00–3:30
Review for articulation of content	3:30–4:00
Checkout Materials & Closing	4:00–4:30

# APA Scoring Reference Sheet



- Each entry is scored on 3 dimensions: **Performance**, **Complexity** and **Independence** by two scorers
- **Performance** is worth twice as many points as Complexity or Independence
- **Performance** is the largest contributor to total score
- Total Score = Entry 1 + Entry 2 + Entry 3 + Entry 4
- An Entry =  $(\text{Performance}_{\text{scorer1}} + \text{Performance}_{\text{scorer2}}) + \text{Complexity}_{\text{average}} + \text{Independence}_{\text{average}}$

## ASK Grade 4 Math

<b>Distinguishing</b>	<b>Proficient</b>	<b>Advanced Proficient</b>
Explain Consistent Thorough Abstract Clear Greater range or variety of content Reasoning Advanced	Know basics Understand and apply Communicate and make math connections Properties and relationships Theoretical and real world	Consistently clear and thorough Inductive and deductive reasoning Abstract or advanced Connections across areas Explain (clear, thorough, consistent) Develop abstract notions

## ASK Grade 8 Math

<b>Partially Proficient</b>	<b>Proficient</b>	<b>Advanced Proficient</b>
Limited and inconsistent Difficulty modeling situations Emerging/developing skills Some comprehension of vocabulary Communicate ineffectually	Mathematically literate Making connections across and within Represent and apply Communicate reasoning Modeling Analyze, interpret and make predictions Consistency Understand appropriate context	Clear and thorough concepts Math fluency Inductive/deductive reasoning Extrapolate information Support conclusions Self assess

Distinguishing: increase in ability for higher order thinking

Appendix D: PLD Development Worksheets (for the technical manual only a single grade is shown as an example)

## CPI Analysis Worksheets

Grade 4 Science

Strand A: Matter, Energy and Organization in Living Systems	Identify Knowledge, Skills, and Performance Associated with Students at Each Performance Level	
	Advanced Proficient	Proficient
<b>CPI &amp; Essence</b> <b>CPI 5.5.4A1</b> Identify the roles that organism may serve in a food chain <b>Essence:</b> Understand the role organisms play in moving matter and energy in a food web		
<b>CPI 5.5.4A2</b> Differentiate between the needs of plants and those of animals. <b>Essence:</b> Understand that plants and animals have different needs		
<b>CPI 5.5.4A4</b> Describe the basic functions of the major systems of the human body including, but not limited to: <ul style="list-style-type: none"> <li>• Digestive system</li> <li>• Circulatory system</li> <li>• Respiratory system</li> <li>• Nervous system</li> <li>• Skeletal system</li> <li>• Muscular system</li> <li>• Reproductive system</li> </ul> <b>Essence:</b> Understand the basic functions of the systems of the human body		

Strand A: Structure and Properties of Matter		Identify Knowledge, Skills, and Performance Associated with Students at Each Performance Level	
	CPI & Essence	Advanced Proficient	Proficient
	<b>CPI 5.6.4A1</b> Sort materials based on physical characteristics that can be seen by using magnification <b>Essence:</b> Understand that some characteristics can only be observed with magnification		
	<b>CPI 5.6.4A3</b> Recognize that water as an example of matter, can exist as a solid, liquid, or gas and can be transformed from one state to another by heating or cooling. <b>Essence:</b> Understand matter can exist as a solid, liquid or a gas		
<b>CPI 5.6.4A4</b> Show that not all materials respond in the same way when exposed to similar conditions. <b>Essence:</b> Understand that not all materials respond the same to heat or other materials			

	CPI & Essence	Identify Knowledge, Skills, and Performance Associated with Students at Each Performance Level	
		Advanced Proficient	Proficient
Strand B: Atmosphere and Water	<p><b>CPI 5.8.4B2</b> Recognize that most of Earth’s surface is covered by water and be able to identify the characteristics of those sources of water.</p> <ul style="list-style-type: none"> <li>• Oceans</li> <li>• Rivers</li> <li>• Lakes</li> <li>• Underground sources</li> <li>• Glaciers</li> </ul> <p><b>Essence:</b> Recognize that most of the Earth’s surface is water and that water moves through a predictable cycle</p>		
	<p><b>CPI 5.8.4B3</b> Observe weather changes and patterns by measurable quantities such as temperature, wind direction and speed, and amounts of precipitation.</p> <p><b>Essence:</b> Understand that weather can be observed and recorded (temperature, wind direction and speed, cloud type and precipitation).</p>		
	<p><b>CPI 5.8.4B4</b> Observe that when liquid water disappears, it turns into a gas (vapor) in the air and can reappear as a liquid when cooled, or as a solid if cooled below its freezing point.</p> <p><b>Essence:</b> Understand that liquid water can be changed by adding or removing heat, therefore driving the water cycle</p>		

Strand A: Earth, Moon and Sun System		Identify Knowledge, Skills, and Performance Associated with Students at Each Performance Level	
	CPI & Essence	Advanced Proficient	Proficient
	<p><b>CPI 5.9.4A1</b> Observe patterns that result from the Earth’s position relative to the sun and rotation of the Earth on its axis.  <b>Essence:</b> Understand the reasons for day, night and year</p>		
<p><b>CPI 5.9.4A2</b> Recognize and describe the phases of the moon.  <b>Essence:</b> Identify the basic pattern of the moon’s appearance and classify as new, first quarter, full, or third quarter</p>			

## CPI Analysis Worksheets

### Grade 3 Math

		Identify Knowledge, Skills, and Performance Associated with Students at Each Performance Level	
		Advanced Proficient	Proficient
Strand A: Number Sense	CPI & Essence		
	<b>CPI 4.1.3A2:</b> Demonstrate an understanding of whole number place value concepts <b>Essence:</b> Understand the concept of whole number place value		
	<b>CPI 4.1.3A5:</b> Understand the various uses of numbers. • Counting, measuring, labeling (e.g., numbers on baseball uniforms) <b>Essence:</b> Understand that numbers have many uses		
	<b>CPI 4.1.3A6:</b> Compare and order numbers <b>Essence:</b> Demonstrate an understanding of numbers by comparing and ordering numbers		

	CPI & Essence	Identify Knowledge, Skills, and Performance Associated with Students at Each Performance Level	
		Advanced Proficient	Proficient
Strand A: Geometric Properties	<p><b>CPI 4.2.3A1:</b> Identify and describe spatial relationships of two or more objects in space.</p> <ul style="list-style-type: none"> <li>• Direction, orientation, and perspectives (e.g., which object is on your left when you are standing here?)</li> <li>• Relative shapes and sizes</li> </ul> <p><b>Essence:</b> Understand spatial relationships of objects</p>		
	<p><b>CPI 4.2.3A2:</b> Use properties of standard three-dimensional and two-dimensional shapes to identify, classify, and describe them.</p> <ul style="list-style-type: none"> <li>• Vertex, edge, face, side, angle</li> <li>• 3D figures – cube, rectangular prism, sphere, cone, cylinder, and pyramid</li> <li>• 2D figures – square, rectangle, circle, triangle, pentagon, hexagon, octagon</li> </ul> <p><b>Essence:</b> Apply properties of 2D and 3D shapes to identify, classify and describe them</p>		
	<p><b>CPI 4.2.3A3:</b> Identify and describe relationships among two-dimensional shapes.</p> <ul style="list-style-type: none"> <li>• Same size, same shape</li> <li>• Lines of symmetry</li> </ul> <p><b>Essence:</b> Understand the relationships between 2D shapes</p>		

Strand A: Patterns	Identify Knowledge, Skills, and Performance Associated with Students at Each Performance Level		
	CPI & Essence	Advanced Proficient	Proficient
	<p><b>CPI 4.3.3A1:</b> Recognize, describe, extend, and create patterns.</p> <ul style="list-style-type: none"> <li>• Descriptions using words, number sentences/expressions</li> <li>• Whole number patterns that grow or shrink as a result of repeatedly adding, subtracting, multiplying by, or dividing by a fixed number (e.g., 5, 8, 11, . . . or 800, 400, 200, . . .)</li> </ul> <p><b>Essence:</b> Recognize, describe, extend and create patterns</p>		

		Identify Knowledge, Skills, and Performance Associated with Students at Each Performance Level	
CPI & Essence		Advanced Proficient	Proficient
Strand A: Data Analysis	<p><b>CPI 4.3.3A1:</b> Recognize, describe, extend, and create patterns.</p> <ul style="list-style-type: none"> <li>• Descriptions using words, number sentences/expressions</li> <li>• Whole number patterns that grow or shrink as a result of repeatedly adding, subtracting, multiplying by, or dividing by a fixed number (e.g., 5, 8, 11, . . . or 800, 400, 200, . . .)</li> </ul> <p><b>Essence:</b> Recognize, describe, extend and create patterns</p>		
	<p><b>CPI 4.4.3A2:</b> Read, interpret, construct, analyze, generate questions about, and draw inferences from displays of data</p> <ul style="list-style-type: none"> <li>• Pictograph, bar graph, table</li> </ul> <p><b>Essence:</b> Understand, use and analyze displays of data and be able to create questions about that data</p>		

## CPI Analysis Worksheets

Grade 3 LAL

Strand E: Reading Strategies		Identify Knowledge, Skills, and Performance Associated with Students at Each Performance Level	
	CPI & Essence	Advanced Proficient	Proficient
	<b>CPI 3.1.3E1</b> Set purpose for reading and check to verify or change predictions during/after reading <b>Essence:</b> Set and read for a particular purpose and check to verify/change predictions		
	<b>CPI 3.1.3E3</b> Use pictures and context clues to assist with decoding of new words <b>Essence:</b> Use pictures and context clues to decode and understand new words		
	<b>CPI 3.1.3E4</b> Develop and use graphic organizers to build on experiences and extend learning <b>Essence:</b> Create and use graphic organizers to help understand text		

Strand G: Comprehension Skills and Response to Text		Identify Knowledge, Skills, and Performance Associated with Students at Each Performance Level	
	CPI & Essence	Advanced Proficient	Proficient
	<b>CPI 3.1.3G2:</b> Distinguish cause/effect, fact/opinion, and main idea/supporting details in interpreting texts. <b>Essence:</b> Understand cause/effect, fact/opinion, and main idea/supporting details after reading a text		
	<b>CPI 3.1.3G3:</b> Interpret information in graphs, charts, and diagrams <b>Essence:</b> Use text features (such as graphs, charts, and diagrams) to gain meaning from a text		
	<b>CPI 3.1.3G10:</b> Compare and contrast story plots, characters, settings, and themes. <b>Essence:</b> Compare and contrast plot, characters, settings, and themes		

Strand B: Writing as a Product		Identify Knowledge, Skills, and Performance Associated with Students at Each Performance Level	
	CPI & Essence	Advanced Proficient	Proficient
	<b>CPI 3.2.3B1:</b> Write a descriptive piece, such as a description of a person, place, or object. <b>Essence:</b> Write a descriptive text		
	<b>CPI 3.2.3B2:</b> Write a narrative piece based on personal experiences. <b>Essence:</b> Write a personal narrative		
	<b>CPI 3.2.3B3:</b> Write a nonfiction piece and/or simple informational report across the curriculum. <b>Essence:</b> Write a nonfiction text, such as a report		

Strand C: Mechanics, Spelling and Handwriting		Identify Knowledge, Skills, and Performance Associated with Students at Each Performance Level	
	CPI & Essence	Advanced Proficient	Proficient
	<b>CPI 3.2.3C1</b> Use Standard English conventions that are developmentally appropriate to the grade level: sentences, punctuation, capitalization and spelling <b>Essence:</b> Write using Standard English		
	<b>CPI 3.2.3C2</b> Use grade-appropriate knowledge of English grammar and usage to craft writing, such as singular and plural nouns, subject/verb agreement , and appropriate parts of speech <b>Essence:</b> Write using appropriate grammar and usage		
<b>CPI 3.2.3C4</b> Develop knowledge of English spelling through the use of patterns, structural analysis, and high frequency words <b>Essence:</b> Spell words correctly			



## Appendix E: Science PLDs

### Grade 4 Science

#### **Partially Proficient**

Fourth grade students performing at the partially proficient level may require prompting, modifications and/or additional supports while recalling knowledge and demonstrate emerging skills in characteristics of life, chemistry, earth science and astronomy with inconsistent performance. Partially proficient students will typically use fewer categories to:

- Identify matter, energy and organization in living systems
- Identify physical properties and changes of matter
- Identify components of the water cycle and states of water in the Earth's system
- Identify components and their sequence within the Earth, Moon and Sun system

Partially proficient students will sometimes demonstrate the ability to identify vocabulary, collect and record data and make a few connections to their real-life experiences.

#### **Proficient**

Fourth grade students performing at the proficient level may require some prompting, modifications and/or additional supports while recalling knowledge and demonstrating skills in characteristics of life, chemistry, earth science and astronomy with increased performance. Proficient students will typically be able to:

- Classify and/or sequence matter, energy and organization in living systems
- Classify, compare, and/or describe physical properties and changes of matter
- Sequence and/or order the water cycle, describe states of water in the Earth's system
- Describe, illustrate and/or demonstrate an understanding of the sequence and order within the Earth, Moon and Sun system

Proficient students will frequently demonstrate the ability to comprehend vocabulary, use data to draw conclusions and make connections to the real-world.

#### **Advanced Proficient**

Fourth grade students performing at the advanced proficient level will demonstrate the qualities outlined for the proficient student. They may require minimal prompting, modifications and/or additional supports while applying vocabulary, knowledge and skills to explain the characteristics of life, chemistry, earth science and astronomy with a high-level of performance. Advanced proficient students will typically be able to perform skills such as: make predictions, observe, collect data, draw conclusions and make inferences relating to the real-world.

### Grade 8 Science

#### **Partially Proficient**

Eighth grade students performing at the partially proficient level may require prompting, modifications and/or additional supports while recalling knowledge and demonstrate emerging skills in

characteristics of life, chemistry, physics and astronomy with inconsistent performance. Partially proficient students will typically use fewer categories to:

- Identify organisms based upon the diversity of their characteristics. Identify characteristics best suited for survival in a particular environment.
- Identify physical changes and chemical reactions
- Identify types of energy and types of energy transformations
- Identify objects and/or the physical characteristics of the planets and other objects within the Solar system

Partially proficient students will sometimes demonstrate the ability to identify vocabulary, collect and record data and make a few connections to their real-life experiences.

### **Proficient**

Eighth grade students performing at the proficient level may require some prompting, modifications and/or additional supports while recalling knowledge and demonstrating skills in characteristics of life, chemistry, physics and astronomy with increased performance. Proficient students will typically be able to:

- Classify organisms based upon the diversity of their characteristics. Describe the biological evolution of organisms.
- Classify, compare, and/or describe examples of physical changes and chemical reactions
- Classify, illustrate and/or describe types of energy and types of energy transformations
- Compare and/or classify the physical characteristics of the planets and other objects within the Solar system

Proficient students will frequently demonstrate the ability to comprehend vocabulary, use data to draw conclusions and make connections to the real-world.

### **Advanced Proficient**

Eighth grade students performing at the advanced proficient level will demonstrate the qualities outlined for the proficient student. They may require minimal prompting, modifications and/or additional supports while applying vocabulary, knowledge and skills to explain the characteristics of life, chemistry, physics and astronomy with a high-level of performance. Advanced proficient students will typically be able to perform skills such as: make predictions, observe, collect and analyze data, draw conclusions and make inferences relating to the real-world.

## **High School EOC Biology**

### **Partially Proficient**

High School Biology students performing at the partially proficient level may require prompting, modifications and/or additional supports while recalling knowledge and demonstrate emerging skills in characteristics of life and environmental studies with inconsistent performance. Partially proficient students will typically use fewer categories to:

- Identify the components involved in photosynthesis and their role in the energy cycle of life.

- Identify the process of evolution by natural selection. Identify the impact of inherited traits and the environment on natural selection.
- Identify the impact of human actions and/or naturally occurring processes on the environment
- Identify the ways human actions impact the ecosystems

Partially proficient students will sometimes demonstrate the ability to identify vocabulary, collect and record data and make a few connections to their real-life experiences.

### **Proficient**

High School Biology students performing at the proficient level may require some prompting, modifications and/or additional supports while recalling knowledge and demonstrating skills in characteristics of life and environmental studies with increased performance. Proficient students will typically be able to:

- Describe the process of photosynthesis and its role in the energy cycle of life.
- Describe the process of evolution by natural selection. Describe the impact of inherited traits and the environment on natural selection.
- Describe, compare and/or contrast the impact of human actions versus naturally occurring processes on the environment
- Use data to assess the impact of human actions on the ecosystems

Proficient students will frequently demonstrate the ability to comprehend vocabulary, use data to draw conclusions and make connections to the real-world.

### **Advanced Proficient**

High school Biology students performing at the advanced proficient level will demonstrate the qualities outlined for the proficient student. They may require minimal prompting, modifications and/or additional supports while applying vocabulary, knowledge and skills to explain the characteristics of life and topics in environmental studies with a high-level of performance. Advanced proficient students will typically be able to perform skills such as: make predictions, observe, collect and analyze data, support conclusions and make inferences relating to the real-world.

## Appendix F: Math PLDs

### Grade 3 Math

#### **Partially Proficient**

Students performing at the partially proficient level generally require prompting to demonstrate a basic knowledge of number sense, geometric properties, patterns, and data analysis at a limited level of performance.

In general, partially proficient students:

- Recognize whole numbers in real world situations
- Recognize and/or identify place value in whole numbers
- Identify two dimensional objects
- Recognize patterns
- Identify data displays

#### **Proficient**

Students performing at the proficient level may require prompting to demonstrate a basic knowledge of number sense, geometric properties, patterns, and data analysis at a moderate level of performance.

In general, proficient students:

- demonstrate an understanding of whole number place value
- apply whole numbers to real world situations
- order numbers
- demonstrate an understanding of properties of two and three dimensional objects
- demonstrate comprehension of the mathematical vocabulary describing spatial relationships of objects
- demonstrate an understanding of, and extend, patterns
- read and interpret existing data displays

#### **Advanced Proficient**

Students performing at the advanced proficient level generally require minimal prompting to demonstrate knowledge of number sense, geometric properties, patterns, and data analysis at a high level of performance.

Advanced proficient students :

- demonstrate an understanding of place value of 5 digit numbers
- explain the use of whole numbers in real world situations
- compare numbers
- describe and/or classify properties of two and three dimensional objects
- apply mathematical vocabulary describing spatial relationships of objects
- create patterns
- analyze, create questions about, and draw inferences from data displays
- collect data to create data displays

# Grade 4 Math

## **Partially Proficient**

Students performing at the partially proficient level generally require prompting to demonstrate a knowledge of number sense, coordinate geometry, properties of operations and use of symbols, and systematic listing and counting, at a limited level of performance.

In general, partially proficient students:

- identify numbers as being large or small
- recognize that numbers apply to their daily life
- match corresponding whole numbers, decimals, and fractions to models
- use a number line to count and order numbers
- identify the commutative property of addition and multiplication
- identify  $<$ ,  $>$ , or  $=$  symbols
- sort objects by attributes
- list some possibilities for a counting situation

## **Proficient**

Students performing at the proficient level may require prompting to demonstrate a basic knowledge of number sense, coordinate geometry, properties of operations and use of symbols, and systematic listing and counting at a moderate level of performance.

In general, proficient students:

- order and compare fractions and decimals
- apply numbers to real world situations
- model fraction/decimal/whole number equivalents
- use coordinates to locate and label points in the first quadrant
- identify the commutative, associative, identity and zero properties
- use symbols ( $<$ ,  $>$ ,  $=$ ) to compare numbers
- organize objects in a Venn diagram according to attributes
- list all possibilities for a counting situation

## **Advanced Proficient**

Students performing at the advanced proficient level generally require minimal prompting to demonstrate knowledge of number sense, coordinate geometry, properties of operations and use of symbols, and systematic listing and counting at a high level of performance.

In general, advanced proficient students:

- explain how numbers represent specific information in the real world
- illustrate equivalent forms of whole numbers, decimals, and fractions
- count the horizontal and vertical units moved between two points in the first quadrant
- demonstrate an understanding of the commutative, associative, identity and zero properties
- create sentences using symbols
- analyze information using a Venn diagram
- represents in an organized way all possibilities of a counting situation

# Grade 5 Math

## **Partially Proficient**

Students performing at the partially proficient level generally require prompting to demonstrate a basic knowledge of numerical operations, geometric properties, functions and data analysis at a limited level of performance.

In general, partially proficient students:

- Use manipulatives for adding and subtracting decimals and fractions with common denominators
- Identify dividend and divisor, sum, difference, product and quotient
- Identify triangles and quadrilaterals
- Recognize congruent shapes
- Recognize that an input/output table relies upon a pattern
- Conduct a survey
- Identify bar, line, and circle graphs and tables

## **Proficient**

Students performing at the proficient level may require prompting to demonstrate a basic knowledge of numerical operations, geometric properties, functions and data analysis at a moderate level of performance.

In general, proficient students:

- Use procedures for adding and subtracting decimals and fractions with common denominators
- Use manipulatives to demonstrate basic division problems
- Use estimation skills to check reasonableness of an answer
- Identify polygons and describe them by their angles and sides
- Recognize congruent and similar shapes
- Complete a simple input/output table
- Collect and organize data from a survey
- Answer questions about graphs and tables

## **Advanced Proficient**

Students performing at the advanced proficient level generally require minimal prompting to demonstrate knowledge of numerical operations, geometric properties, functions and data analysis at a high level of performance.

In general, advanced proficient students:

- Use and explain procedures for adding and subtracting decimals and fractions with common denominators
- Perform division with single or double digit divisors
- Check answers using inverse operations
- Compare and classify polygons
- Illustrate and explain congruent and similar shapes and lines of symmetry
- Explain the rule used and graph coordinate points using an input/output table
- Create a survey, collect and display the data
- Create questions and make inferences and predictions based on a graph or table

# Grade 6 Math

## **Partially Proficient**

Students performing at the partially proficient level generally require prompting to demonstrate a basic knowledge of numerical operations, units of measurement, modeling functions and relationships and systematic listing and counting at a limited level of performance.

In general, partially proficient students:

- Match operations to the corresponding key words
- Add and subtract fractions with the same denominator
- identify the commutative, associative, identity and zero properties
- Demonstrate understanding of the concepts of area, surface area, and volume
- Identify scale on a map or scale drawing
- Estimate distance using non-standard units of measurement
- Complete a simple input/output table
- Recognize that a graph can represent the relationship between two variables
- list possibilities for a counting situation given a diagram
- identify all members of a set

## **Proficient**

Students performing at the proficient level may require prompting to demonstrate a basic knowledge of numerical operations, units of measurement, modeling functions and relationships and systematic listing and counting at a moderate level of performance.

In general, proficient students:

- Match operational symbols to corresponding key words
- Perform all operations with fractions and/or decimals using manipulatives
- Use inverse operations to check answers in multiplication and division problems
- Identify appropriate measurement units for area, surface area, and volume
- Calculate distance using a scale drawing
- Estimate distance using standard units of measurement
- Create an input/output table modeling a real life situation
- Complete a graph showing a relationship between two variables
- complete a tree or Venn diagram to illustrate a counting problem
- list possible combinations of two elements from a set

## **Advanced Proficient**

Students performing at the advanced proficient level generally require minimal prompting to demonstrate knowledge of numerical operations, units of measurement, modeling functions and relationships and systematic listing and counting at a high level of performance.

In general, advanced proficient students:

- Identify the appropriate operation to solve a given problem involving a real world situation
- Perform all operations with fractions and/or decimals using pencil and paper
- identify the use of the distributive property
- Use appropriate measurement units for problems involving area, surface area, and volume

- Calculate actual distance using a scale drawing
- Solve real world problems using estimated measurements
- Translate an input/output table into a mathematical equation
- Create a graph showing a relationship between two variables
- create an organized list of all possibilities in a counting problem without duplication
- apply the multiplication principle of counting

## **Grade 7 Math**

### **Partially Proficient**

Students performing at the partially proficient level generally require prompting to demonstrate a basic knowledge of number sense, measuring geometric objects, algebraic procedures, and probability at a limited level of performance.

In general, partially proficient students:

- Recognize that percents are a special case of ratios
- Use manipulatives to represent equivalent forms of fractions and decimals
- Distinguish between the use of area and perimeter
- Use manipulatives to compare volume of three dimensional objects
- identify integers on a number line
- use manipulatives to solve linear equations
- identify the order of operations
- complete a chart to represent experimental probability
- identify a situation that would cause a bias or random result in probability based games

### **Proficient**

Students performing at the proficient level may require prompting to demonstrate a basic knowledge of number sense, measuring geometric objects, algebraic procedures, and probability at a moderate level of performance.

In general, proficient students:

- Match a percent to an equivalent ratio
- Match equivalent forms of fractions, decimals, and percents
- Calculate perimeter and area for basic figures or shapes
- Use manipulatives to compare volumes of pyramids to prisms and cylinders to cones
- use a number line to show absolute value as distance
- use a T chart to solve linear equations
- simplify an algebraic expression using order of operations
- collect probability data and answer questions using that data
- demonstrate an understanding of the connection between probability outcomes and fairness

### **Advanced Proficient**

Students performing at the advanced proficient level generally require minimal prompting to demonstrate knowledge of number sense, measuring geometric objects, algebraic procedures, and probability at a high level of performance.

In general, advanced proficient students:

- Use ratios, proportions, and percents in given situations
- Convert fractions, decimals, and percents to their equivalent forms
- Find the area and perimeter of combined shapes
- compare volumes of figures with the same base and height
- use a number line to graph absolute value or simple expressions
- solve and graph simple linear equations
- evaluate an expression using order of operations
- compare theoretical and experimental probabilities
- play a probability-based game and answer questions about fairness

## Grade 8 Math

### Partially Proficient

Students performing at the partially proficient level generally require prompting to demonstrate a basic knowledge of number sense, measuring geometric objects, number patterns, and vertex edge graphs at a limited level of performance.

In general, partially proficient students:

- recognize scientific notation and match numbers in scientific notation to their standard notation counterparts
- Calculate perimeter and area for basic figures or shapes
- classify prisms and pyramids according to their bases
- identify a sphere and its diameter and radius
- recognize and describe a number pattern

### Proficient

Students performing at the proficient level may require prompting to demonstrate a basic knowledge of number sense, measuring geometric objects, number patterns, and vertex edge graphs at a moderate level of performance.

In general, proficient students:

- convert numbers to scientific notation
- order rational numbers (fraction, decimals, integers)
- Find the area and perimeter of combined shapes
- find the surface area of various prisms and pyramids
- match surface area and volume to the appropriate model
- describe and extend a number pattern
- identify a vertex edge graph and its parts

### Advanced Proficient

Students performing at the advanced proficient level generally require minimal prompting to demonstrate a knowledge of number sense, measuring geometric objects, number patterns, and vertex edge graphs at a high level of performance.

In general, advanced proficient students:

- demonstrate the relative magnitude of rational numbers based on their distance from zero
- compare and order rational numbers
- Find and compare the perimeter or area of a figure and its dilation
- calculate the volume of three dimensional objects and their dilations and compare the two
- find the surface area and volume of a sphere
- create a pattern involving integers
- follow a path on a vertex edge graph

## Grade 11 Math

### **Partially Proficient**

Students performing at the partially proficient level generally require prompting to demonstrate a basic knowledge of numerical operations, coordinate geometry, functions and relationships and data analysis at a limited level of performance.

In general, partially proficient students:

- identify square roots with the same radicand
- determine if two matrices can be added and/or subtracted
- identify positive and negative slopes
- identify parallel, perpendicular, and intersecting lines on a coordinate plane
- identify the direction of a vector
- locate the minimum and maximum points on a graph of a parabola
- identify a reflection, dilation, and translation
- identify different ways to collect data

### **Proficient**

Students performing at the proficient level may require prompting to demonstrate a basic knowledge of numerical operations, coordinate geometry, functions and relationships and data analysis at a moderate level of performance.

In general, proficient students:

- identify whether radical expressions can be combined using addition and/or subtraction
- add or subtract two matrices
- find the midpoint of a line segment on a coordinate plane
- describe the length and direction of a given vector
- given a graph of a line, identify the x and y intercepts
- match the graph of a function to its reflection or translation
- make predictions using sampling data
- identify a sample bias in real world situations

### **Advanced Proficient**

Students performing at the advanced proficient level generally require minimal prompting to demonstrate knowledge of numerical operations, coordinate geometry, functions and relationships and data analysis at a high level of performance.

In general, advanced proficient students:

- add or subtract square roots
- multiply a matrix by a constant
- find the slope of a line on a coordinate plane
- add and subtract vectors
- graph a simple linear function
- match an algebraic rule to a graph of the function
- draw conclusions using sampling data
- draw mathematical conclusions about sample bias

## Appendix G: Language Arts PLDs

### Grade 3 Language Arts

#### **Partially Proficient**

Students at the partially proficient level generally require prompting to demonstrate emerging knowledge and skills of reading strategies, comprehension skills, response to text, writing as a product, and mechanics with an inconsistent level of performance using modified and supported materials.

Partially proficient students are emerging in:

- making predictions about a story when given a purpose
- Identifying context clues for decoding words
- Choosing appropriate graphic organizers
- Identifying cause and effect, fact and opinion, main idea
- Matching information in graphs, charts or diagrams
- Identifying theme, character, plot and setting
- Recalling information for descriptive, narrative and non-fiction text
- Identifying nouns, pronouns, verbs or adjectives
- Letter/sound recognition

#### **Proficient**

Students at the proficient level may require prompting to demonstrate basic knowledge and skills of reading strategies, comprehension skills, response to text, writing as a product, and mechanics with a moderate level of performance using modified and supported materials.

Proficient students typically:

- Answer questions about the purpose of reading
- Make predictions with supports
- Identify and use context clues for decoding words
- Complete graphic organizers
- Utilize graphic organizers to answer questions
- Recognize cause and effect, fact and opinion, main ideas and supporting details in text
- Locating and matching information in graphs, charts or diagrams
- Identify and describe theme, character, plot and setting
- Outline and organize information to write descriptive, narrative and non-fiction sentences and/or lists
- Write using correct capitalization, punctuation
- Identifying nouns, pronouns, verbs and/or adjectives
- Identify correct spelling of high frequency words
- Identify words with similar patterns

#### **Advanced Proficient**

Students at the advanced proficient level generally demonstrate knowledge and skills of reading strategies, comprehension skills, response to text, writing as a product, and mechanics independently with a high level of performance using modified and supported materials.

Advanced proficient students typically:

- Assess the purpose of reading
- Make predictions and substantiate conclusions
- Identify and use context clues for decoding words
- Create and utilize graphic organizers to answer questions
- Analyze cause and effect, fact and opinion, main ideas and supporting details in text
- Interpret information in graphs, charts or diagrams
- Compare and contrast theme, character, plot and setting
- Outline and organize information to write descriptive, narrative and non-fiction sentences and/or paragraphs
- Write using correct spelling, capitalization, punctuation, and subject verb agreement

## **Grade 4 Language Arts**

### **Partially Proficient**

Students at the partially proficient level generally require prompting to demonstrate emerging knowledge and skills of vocabulary and concept development, comprehension skills, response to text, writing as a product, and mechanics with an inconsistent level of performance using modified and supported materials.

Partially proficient students are emerging in:

- Match words to their meanings
- Determine if words make sense in context
- Dictionary skills such as identifying and using guide words
- Answer basic comprehension questions about text
- Follow single step directions containing direction words
- Identify different types of literature
- Connect details to a topic
- Write a topic sentence when provided with details
- Identify correct sequencing of ideas
- Identify subjects and verbs
- Identify a sentence

### **Proficient**

Students at the proficient level may require prompting to demonstrate basic knowledge and skills of vocabulary and concept development, comprehension skills, response to text, writing as a product, and mechanics with a moderate level of performance using modified and supported materials.

Proficient students typically:

- Identify the meaning of words given choices
- Identify contextual clues for word meaning
- Locate words in a dictionary
- Answer questions about text, such as drawing conclusions or identifying evidence to support given conclusions
- Sequence multi-step directions
- Match traits to types of literature
- Generate details about a topic
- Write a topic sentence
- Edit and revise sentences to include one or more of the following: dialogue, details, order of ideas, opening and closing statements, ending punctuation, commas, quotation marks, and capitalization

### **Advanced Proficient**

Students at the advanced proficient level generally demonstrate knowledge and skills of vocabulary and concept development, comprehension skills and response to text, writing as a product, and mechanics independently with a high level of performance using modified and supported materials.

Advanced proficient students typically:

- Use contextual clues to determine meaning of unfamiliar words
- Use a dictionary
- Draw and support conclusions
- Sequence and follow multi-step directions to complete a task
- Compare and contrast different forms of literature
- Write a topic report including topic sentences and supporting details
- Write a short piece that includes one or more of the following: dialogue, details, order of ideas, and opening and closing statements
- Edit text for ending punctuation, commas, quotation marks, and capitalization

## **Grade 5 Language Arts**

### **Partially Proficient**

Students at the partially proficient level generally require prompting to demonstrate emerging knowledge and skills in comprehension and response to text, inquiry and research, writing as a process, and writing as a product with an inconsistent level of performance using modified and supported materials.

Partially proficient students are emerging in:

- Identify propaganda vocabulary
- Identify topics and transition words in text and/or outlines
- Identify figurative language vocabulary
- Match sources with topics
- Identify main idea
- Identify basic characteristics of a paragraph
- When given details, write a topic sentence
- Identify spelling mistakes
- Identifying different types of writing (e.g. persuasive, descriptive, essays, advertisements, etc.)
- Compare and contrast different types of basic prose
- Show variety in sentences by changing the subject

### **Proficient**

Students at the proficient level may require prompting to demonstrate basic knowledge and skills of comprehension and response to text, inquiry and research, writing as a process, and writing as a product with a moderate level of performance using modified and supported materials.

Proficient students typically:

- Identify propaganda techniques and their purpose in text
- Identify topic and major/minor ideas in text and/or outlines
- Match and label types of figurative language
- Answer questions about a topic using a single source
- Write or outline a description of a setting or a plot
- Write or outline an informational paragraph when provided main idea and details

- Identify and correct spelling mistakes
- Utilize a graphic organizer to plan an essay and write a variety of prose
- Revise, expand, and classify simple sentences

### **Advanced Proficient**

Students at the advanced proficient level generally demonstrate knowledge and skills of comprehension and response to text, inquiry and research, writing as a process, and writing as a product independently with a high level of performance using modified and supported materials.

Advanced proficient students typically:

- Identify propaganda techniques and reasons to support their purpose
- Identify and outline a topic including major/minor ideas
- Identify types of figurative language
- Answer questions about a topic or outline a report using multiple sources
- Summarize text
- Write a story with beginning, middle and end
- Identify and correct spelling mistakes in their own writing
- Utilize a graphic organizer to plan and write a variety of prose
- Write simple and compound sentences

## **Grade 6 Language Arts**

### **Partially Proficient**

Students at the partially proficient level generally require prompting to demonstrate emerging knowledge and skills in comprehension and response to text; inquiry and research; writing as a process; and writing forms, audiences, and purposes with an inconsistent level of performance using modified and supported materials.

Partially proficient students are emerging in:

- Identify genres
- Identifying similarities between text and real life
- Identify and give examples of cultural bias
- Answering questions from given information
- Identify graphic sources in text
- Match details and main ideas
- Identify appropriate adjectives, verbs and adverbs to complete a sentence
- Revise writing for spelling, word choice, punctuation.
- Match words to the appropriate audience and purpose
- Identify simple narrative elements

### **Proficient**

Students at the proficient level may require prompting to demonstrate basic knowledge and skills in comprehension and response to text; inquiry and research; writing as a process; and writing forms, audiences, and purposes with a moderate level of performance using modified and supported materials.

Proficient students typically:

- Identify elements and characteristics of a genre
- Make connections between story elements and self
- Match elements in text to historical events or cultures
- Draw conclusions when given information from two different texts
- Identify relationships between text and a graphic source
- Summarize an informational text in writing or by completing a graphic organizer
- Write descriptive sentences and justify word choices
- Revise writing for spelling, word choice, punctuation.
- Revise writing to include compound or complex sentences.
- Demonstrate understanding of simple narrative elements and techniques through writing, describing, sorting or using a graphic organizer.
- Identify and use words appropriately for a variety of purposes and audiences in simple text

### **Advanced Proficient**

Students at the advanced proficient level generally demonstrate knowledge and skills in comprehension and response to text; inquiry and research; writing as a process; and writing forms, audiences, and purposes independently with a high level of performance using modified and supported materials.

Advanced proficient students typically:

- Identify elements and characteristics of multiple genres
- Compare and contrast story elements across texts
- Compare and contrast points of view from two texts about different cultures or time periods
- Draw conclusions from multiple sources, including graphics and texts
- Write an informational essay
- Write a descriptive paragraph using details and sensory vocabulary
- Revise writing for correct word choice, sentence construction, clarity and spelling
- Revise writing to include compound and complex sentences.
- Demonstrate understanding of narrative elements and techniques through writing
- Select and use appropriate words based on audience and purpose

## **Grade 7 Language Arts**

### **Partially Proficient**

Students at the partially proficient level generally require prompting to demonstrate emerging knowledge and skills in vocabulary and concept development; comprehension skills and response to text; writing as a process; and writing forms, audiences, and purposes with an inconsistent level of performance using modified and supported materials.

Partially proficient students are emerging in:

- Matching words to their meanings
- Determining if words make sense in context
- Dictionary skills such as identifying and using guide words
- Answering literal comprehension questions about text
- Following single step directions containing direction words
- Identifying different types of literature given choices

- Connecting details to a topic
- Writing a topic sentence when provided with details
- Identifying correct sequencing of ideas
- Identifying subjects and verbs
- Identifying a sentence

### **Proficient**

Students at the proficient level may require prompting to demonstrate basic knowledge and skills in vocabulary and concept development; comprehension skills and response to text; writing as a process; and writing forms, audiences, and purposes with a moderate level of performance using modified and supported materials.

Proficient students typically:

- Identify the meaning of words given choices
- Identify contextual clues for word meaning
- Locate words in a dictionary
- Answer questions about text, such as drawing conclusions or identifying evidence to support given conclusions
- Sequence multi-step directions
- Match traits to types of literature
- Generate details about a topic
- Write a topic sentence
- Edit and revise sentences to include at least one of the following: dialogue, details, order of ideas, opening and closing statements, ending punctuation, commas, quotation marks, and capitalization

### **Advanced Proficient**

Students at the advanced proficient level generally demonstrate knowledge and skills in vocabulary and concept development; comprehension skills and response to text; writing as a process; and writing forms, audiences, and purposes independently with a high level of performance using modified and supported materials.

Advanced proficient students typically:

- Use contextual clues to determine meaning of unfamiliar words
- Use a dictionary
- Draw and support conclusions
- Sequence and follow multi-step directions to complete a task
- Compare and contrast different forms of literature
- Write a topic report including topic sentences and supporting details
- Write a short piece that includes at least one of the following: dialogue, details, order of ideas, and opening and closing statements
- Edit text for ending punctuation, commas, quotation marks, and/or capitalization

## **Grade 8 Language Arts**

### **Partially Proficient**

Students at the partially proficient level generally require prompting to demonstrate emerging knowledge and skills in vocabulary and concept development; comprehension skills and response to text; writing as a product; and mechanics with an inconsistent level of performance using modified and supported materials.

Partially proficient students are emerging in:

- Using pictures or a dictionary to define new words in text through matching
- Identifying connotative and denotative word meanings, and/or synonyms and antonyms

- Identifying types of propaganda or examples of its use given choices
- Comparing and contrasting plots, characters, settings, and/or themes in text after reading given choices
- Identifying mood, rising action, climax, and resolution in fiction
- Writing a personal narrative, or identify elements of different types of writing such as flashback and/or point of view
- Engaging in pre-writing using graphic organizers or outlining
- Writing sentences with appropriate capitalization and punctuation, including commas and colons in lists.

### **Proficient**

Students at the proficient level may require prompting to demonstrate basic knowledge and skills in vocabulary and concept development; comprehension skills and response to text; writing as a product; and mechanics with a moderate level of performance using modified and supported materials.

Proficient students typically:

- Choose dictionary definitions that best define new words in text, given choices
- Make connections between new words and known vocabulary based on context clues
- Identify connotative and denotative meanings of words
- Identify propaganda in advertisements and its type or purpose
- Identify and analyze the use of fiction elements such as characters, character traits, plot sequence and mood in text
- Write prose with appropriate textual elements, such as
  - a) setting, plot and characters for fiction,
  - b) biographical details in chronological order for a biography or autobiography, *or*
  - c) essays with a clear purpose and supporting details.
- Write using some mechanics appropriately such as paragraphs, grammar, transitional words, punctuation, and capitalization

### **Advanced Proficient**

Students at the advanced proficient level generally demonstrate knowledge and skills in vocabulary and concept development; comprehension skills and response to text; writing as a product; and mechanics independently with a high level of performance using modified and supported materials.

Advanced proficient students typically:

- Use a dictionary to define new words and refine comprehension based on context clues
- Identify context clues such as restatement and/or contrast that enhance comprehension of new words
- Demonstrate understanding of complex words and relationships between words by
  - a) identifying the correct use of words with multiple meanings,
  - b) matching synonyms, antonyms, connotations and denotations
  - c) identifying correct use, and/or
  - d) comparing complex words
- Identify propaganda in multiple sources, the type of propaganda used and its purpose
- Identify fiction elements such as character traits, plot sequence, setting and mood
- Explain how fiction elements in text influence the progression and/or resolution of plot
- Write prose with appropriate textual elements, including themes, literary elements, structures, and supporting details
- Write using mechanics appropriately; including paragraphs with a variety of sentences, grammar, transitional words, punctuation, and capitalization

## **Grade 11 Language Arts**

### **Partially Proficient**

Students at the partially proficient level generally require prompting to demonstrate emerging knowledge and skills in comprehension and response to text; inquiry and research; mechanics; and writing forms, audiences and purposes with an inconsistent level of performance using modified and supported materials.

Partially proficient students are emerging in:

- Identifying literary devices given choices
- Identifying information in everyday texts and forms
- Matching electronic resources with a research purpose
- Identifying skills needed for particular careers
- Identifying text clues or prior information that could be used to support a given conclusion
- Ordering sentences using transitions, or revising writing by adding transitions
- Editing writing for initial capitalization, ending punctuation, and spelling using common reference materials such as dictionaries
- Ordering information within writing structures
- Using simple structures such as sequencing in own writing
- Pre-writing and producing simple writing, such as sentences, for everyday purposes such as filling out forms, and for different audiences

### **Proficient**

Students at the proficient level may require prompting to demonstrate basic knowledge and skills comprehension and response to text; inquiry and research; mechanics; and writing forms, audiences and purposes with a moderate level of performance using modified and supported materials.

Proficient students typically:

- Identify literary devices used in text and match them with intended emotional responses
- Identify and explain the use of literary devices such as onomatopoeia, idioms, alliteration, metaphors, similes, and/or personification
- Identify purposes of everyday texts and forms
- Read and answer questions about technical manuals or instructions
- Evaluate the value of electronic resources for a research purpose
- Identify skills needed for particular careers; or compare personal interests with the skills needed for a particular career
- Identify text clues or prior information from multiple sources that could be used to support a given conclusion
- Use transition chains or transitions to change the direction of an argument in writing
- Use reference books and resources to make simple editing choices in own writing, e.g. thesaurus for synonyms, dictionary for capitalization
- Write using structures to enhance meaning, e.g. problem/solution, headings and subtitles, order of importance and/or cause and effect
- Complete forms and write within given templates for specific purposes, such as job applications, resumes, and cover letters

### **Advanced Proficient**

Students at the advanced proficient level generally demonstrate knowledge and skills in comprehension and response to text; inquiry and research; mechanics; and writing forms, audiences and purposes independently with a high level of performance using modified and supported materials.

Advanced proficient students typically:

- Identify literary devices used in text and identify an appropriate personal emotional response related to the device
- Identify and explain the use of literary devices such as onomatopoeia, idioms, alliteration, metaphors, similes, and/or personification
- Answer questions about everyday texts and completed forms
- Evaluate the appropriateness of instructions for particular tasks
- Follow instructions to complete a task or use an instructional manual
- Critique the value of electronic resources for particular research purposes
- Evaluate own work, school and life experiences for its applicability to career portfolios for particular careers
- Draw conclusions using information from multiple sources or points of view
- Use complex transitions in writing, e.g. transition chains, transitions to change the direction of an argument; cause and effect transitions, and/or compare and contrast transitions
- Edit writing, including own writing, for spelling, capitalization, punctuation; use proofreading marks and/or reference books and materials when appropriate
- Write within specific templates for specific purposes, e.g. reports with titles, subtitles, and headings; sequencing and/or setting within a problem/solution essay, diagrams within a text
- Write for everyday purposes such as completing forms, applications, and business letters

## **APPENDIX H: Standard Setting Technical Report**

# New Jersey Alternate Proficiency Assessment Standard Setting Technical Report

Prepared by:  
Pearson  
August 13, 2009

\*Amended August 22, 2011

\*Subsequent edits have been made for purposes of this 2009  
technical report.

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## **Executive Summary**

Panelists attended a standard setting meeting to recommend cut scores for the New Jersey Alternate Proficiency Assessment. The standard setting meeting convened on the morning of Tuesday, June 9, 2009. Panelists were asked to recommend cut scores distinguishing between partially proficient and proficient and between proficient and advanced proficient. Panelists recommended cut scores for Language Arts Literacy (LAL) and mathematics in grades 3-8 and 11 and for science in grades 4, 8 and high school. The panelists used the Body of Work standard setting method to recommend cut scores.

In this technical report, panelists, materials, methodologies and results are presented for the standard setting activity for the New Jersey Alternate Proficiency Assessment. A separate preliminary report was provided to the state following the standard setting activity outlining the methodologies and major findings. More details are provided in the current technical report.

## **Introduction**

Over the last three years, the New Jersey Alternate Proficiency Assessment (APA) has been in transition. For the 2008–2009 administration, the APA is significantly different from the version on which a standard setting was last performed, and from the version on which an interim standard setting was performed. These changes include limiting teacher choices in the content assessed, new definitions of the dimensions scored and a reduction in the number of dimensions scored, and new scoring rubrics.

Whenever there is a curriculum transition and a change in the assessment, it is best psychometric practice that a new standard setting meeting be convened and new standards be set for the new assessment aligned to the new curriculum. The New Jersey Department of Education (NJDOE) convened a standard setting meeting for the APA on June 9-12, 2009, following the 2008–2009 administration. The meeting activities resulted in subject and grade specific cut scores.

This document describes the procedure and results for this meeting recommending cut scores for the APA. This report is divided into three sections. The first section, the procedure section, describes the activities in which the panelists participated as part of the standard setting meeting. The second section, the panelist section, provides a summary of the panelist demographic information for each panel. The third section, the results section, describes the results of the standard setting meeting, including cut scores, evaluations, and reliability.

## **Procedure**

Panelists were asked to recommend cut scores distinguishing between partially proficient and proficient and between proficient and advanced proficient. Panelists recommended cut scores for Language Arts Literacy (LAL) and mathematics in grades 3–8 and 11 and for science in grades 4, 8 and high school. The panelists used the Body of Work standard setting method to recommend cut scores.

The standard setting meeting convened on the morning of Tuesday, June 9, 2009. An agenda for the meeting is shown in Appendix A. The panelists met as a single group in a large meeting room. After introducing the meeting participants, a description of the reimbursement process was presented. Panelists were next asked to sign confidentiality forms. Following the collection of signed confidentiality forms, Dr. Traub, from ILSSA, presented the history of the APA and explained how the APA portfolios were constructed and scored. Next, Dr. Nichols, from Pearson, explained the Body of Work standard setting method.

Following these initial presentations to all panelists, the panelists broke into seven panels. The following Pearson research scientists served as facilitators:

- Dr. Laurie Davis for mathematics grades 6, 7 and 8;
- Dr. Phyllis Garrett for LAL grades 3, 4 and 5;

- Dr. Julie Miles for mathematics grades 3, 4 and 5
- Dr. David Mittelholtz for grade 11 mathematics and science;
- Dr. Natasha Williams for LAL grades 6, 7 and 8;
- Dr. Tracy Gardner for science grades 4 and 8;
- Dr. Paul Nichols for grade 11 LAL and vertical articulation.

As shown in the Figure 1, the first panel met to recommend cut scores for mathematics in grade band 3–5, the second panel met to recommend cut scores for mathematics in grade band 6–8, the third panel met to recommend cut scores for LAL for grade band 3–5, the fourth panel met to recommend cut scores for LAL for grade band 6–8, the fifth panel met to recommend cut scores for Science in grades 4 and 8, the sixth panel met to recommend cut scores for mathematics and science in grade 11, and the seventh panel met to recommend cut scores for LAL in grade 11.

7 committees

Grade	Math	LAL	Science
3	▬▬▬▬▬▬	▮▮▮▮▮▮	
4	▬▬▬▬▬▬	▮▮▮▮▮▮	▨▨▨▨▨▨
5	▬▬▬▬▬▬	▮▮▮▮▮▮	
6	▬▬▬▬▬▬	▮▮▮▮▮▮	
7	▬▬▬▬▬▬	▮▮▮▮▮▮	
8	▬▬▬▬▬▬	▮▮▮▮▮▮	▨▨▨▨▨▨
HS	▩▩▩▩▩▩	▮▮▮▮▮▮	▩▩▩▩▩▩

Figure 1. The organization of panels in the APA standard setting meeting.

After individual panels convened, the panelists began to consider the first grade level in their assigned grade band. The order in which grade levels were considered was determined by the need to share portfolios across subject areas. A single portfolio included student evidence for mathematics, LAL, and sometimes science. The portfolios were shared across panels because of the small number of portfolios available. For example, the grade band 3-5 mathematics panel, the grade band 3–5 LAL panel, and the grades 4 and 8 science panel must share portfolios.

Portfolios were shared using the following plan. For the first set of cut scores, the following panels addressed the following subjects:

- the 3–5 mathematics panel started with grade 3 portfolios;
- the 4 and 8 science panel started with grade 4 portfolios;

- the 3–5 LAL panel started with grade 5 portfolios;
- the 6–8 mathematics panel started with grade 6 portfolios;
- the 4 and 8 science panel started with grade 4 portfolios;
- the 6–8 LAL panel started with grade 8 portfolios.

For the second set of cut scores, the following panels addressed the following subjects:

- the 3–5 mathematics panel changed to grade 4 portfolios;
- the 4 and 8 science panel changed to grade 8 portfolios;
- the 3–5 LAL panel changed to grade 3 portfolios;
- the 6–8 mathematics panel changed to grade 7 portfolios;
- the 4 and 8 science panel changed to grade 8 portfolios;
- the 6–8 LAL panel changed to grade 6 portfolios.

For the third set of cut scores, the following panels addressed the following subjects:

- the 3–5 mathematics panel ended with grade 5 portfolios;
- the 3–5 LAL panel ended with grade 4 portfolios;
- the 6–8 mathematics panel ended with grade 8 portfolios;
- the 6–8 LAL panel ended with grade 7 portfolios.

The grade 11 mathematics and science panel and the grade 11 LAL panel each had their own set of portfolios. The grade 11 mathematics and science panel started with mathematics and ended with science.

For each set of cut scores, the panel facilitators began by leading the panel in reviewing the performance level descriptors (PLDs). Initially, the panelists were given 15 minutes to read through the PLDs. See Appendix D of this technical report for the full texts of the PLDs. The PLDs were presented in the following order: Advanced Proficient, Proficient, and Partially Proficient. Panelists were reminded that the PLDs are statements of what a student should know and be able to do at each performance level, given the content standards to be assessed. Initially, panelists were asked to think about the features that most distinguish Proficient students from Advanced Proficient students. Next, panelists were asked to think about the features that most distinguish Proficient students from Partially Proficient students. Panelists were reminded that they may or may not agree with some of the PLDs for various performance levels, but these PLDs may not be changed. The PLDs serve as a guide to make sure everyone is on the same page when they are discussing what students know and should be able to do at each performance level.

The panel then divided into subgroups of 4 or 5. Within each subgroup, panelists were asked to review the PLDs and to discuss the definitions. In their discussion, panelists focused on differences between adjacent definitions until the PLD could be clearly distinguished from adjacent PLDs. The panelists were asked to identify three major features that distinguish each PLD from the adjacent PLD. The total panel then reconvened and compared the suggestions from the subgroups. The panel as a whole finally drafted a set of three features that distinguished between the Proficient level and

the Advanced Proficient level and another set of three features that distinguished between the Proficient level and the Partially Proficient level.

For only the first set of cut scores, the panel next moved to the reasoned judgment warm-up task. The reasoned judgment warm-up task had two goals:

1. Help panelists become familiar with the three scored dimensions, and
2. Encourage panelists to think about how the three scored dimensions can be combined into total scores.

For a sample of dimension score combinations, panelists were asked to recommend what combinations of scores would be categorized as Partially Proficient, Proficient, and Advanced Proficient. Panelists reviewed the concept of performance levels based on different combinations of scores (Performance, Independence, and Complexity). Panelists were reminded that each score was rated 0–4, but that entries which receive a 0 for either performance or complexity receive a 0 for the entire entry. Prior to beginning the warm-up task, panelists will be introduced to three sets of materials used to make reasoned judgments:

- Scoring rubrics for each score dimension
- Performance level descriptions
- Descriptions of dimensions

Using the rubrics and PLDs, panelists were asked to consider a sample of score combinations. Panelists were presented with the graph shown in Figure 2. Panelists were asked to determine the minimum score they thought a student should receive on each of the three dimensions to be considered Proficient and Advanced Proficient.

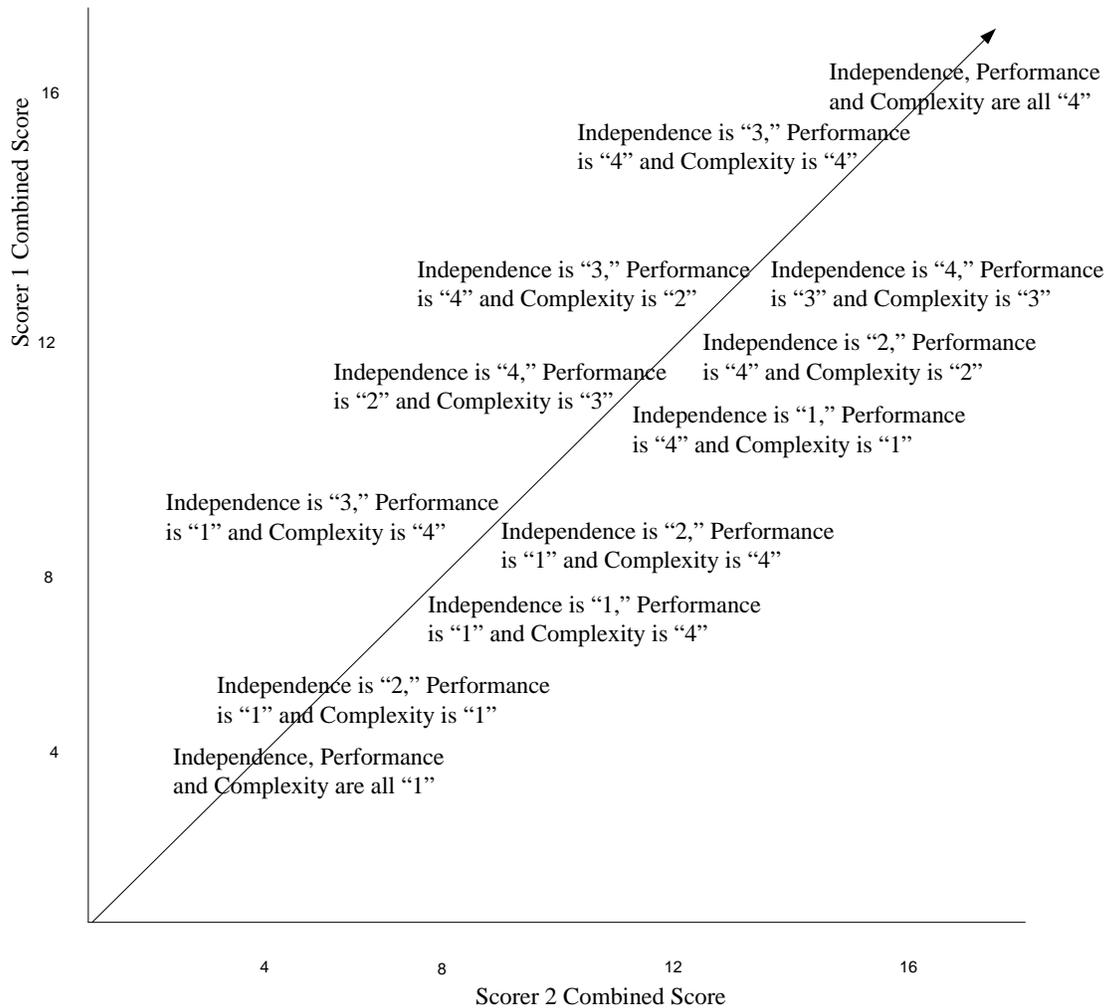


Figure 2. The graph presented to panelists as part of the reasoned judgment warm-up task.

The panels used the Body of Work standard setting method to recommend cut scores. Before starting the Body of Work procedure, panelists were asked to reflect on the qualities of student work that separate performance levels by responding to an initial reflection opportunity.

Panelists set standards in three steps: training, range-finding, and pinpointing. During training, panelists were asked to rank independently the six sets of student work from the training folder. Panelists were instructed to rank the sets of student work on overall quality, keeping in mind the PLDs. Because only six portfolios were available, panelists worked in pairs. Panelists recorded the ranks on a rating form but panelists' rankings will be initially recorded using a show of hands.

Following completion of the rank ordering of training portfolios, the facilitator tallied the rankings using a show of hands. Panelists received feedback on the extent of agreement

in rank ordering across panelists. Facilitators then led a discussion of the characteristics of the student work that contributed to differences in rank order.

Following this discussion, panelists categorized each of the training portfolios into one of the performance levels. Panelists recorded the categories on a record sheet but the facilitator initially recorded panelists' responses using a show of hands. The facilitator then initiated a discussion among the panelists on the reason for disagreement or lack of disagreement on the performance level to assign to a portfolio. Panelists were then allowed to change the categorization of portfolios using the round 2 column on the rating sheet.

Finally, panelists reflected on the qualities of student work that separated performance levels by responding to the follow-up reflection opportunity.

Next, Pearson facilitators distributed the rangefinding portfolios and a range-finding ratings sheet to the panelists. Initially, each panelist received a different portfolio. Panelists then "checked-out" a new portfolio and returned the old portfolio as they worked through the set of rangefinding portfolios. On the ratings sheet, the IDs for the portfolios were presented in random, fixed order. For the portfolios in the rangefinding set, panelists categorized each of the portfolios into one of the achievement levels. Panelists then recorded the results on the rangefinding record sheet.

The facilitator then collected the ratings sheets, and the panelists' ratings were entered into an Excel worksheet and analyzed using SAS. The frequency with which each portfolio was assigned to a performance level was computed and displayed in a table. A copy of this table was generated for each panelist and distributed. The facilitator then pointed out three things to the panelists:

- the extent of disagreement across panelists,
- the portfolio with the greatest disagreement,
- the portfolio with the least disagreement.

The facilitator then led a discussion of the characteristics of the student work that contributed to differences in categorization of the rangefinding portfolios into achievement levels. The facilitator attempted to have panelists connect their decisions on portfolios to characteristics found in the PLDs.

Finally, panelists were given an opportunity to change their categorizations of the range-finding portfolios. Panelists were instructed to make any changes to the performance level assigned a portfolio using the "Round 2" column on the range-finding ratings sheet. Range-finding was then complete and panelists began the pinpointing step.

Recall that the range-finding folder was constructed by pulling three sets of student work from the pinpointing folders. A pinpointing folder was included in the pinpointing step if panelists' range-finding ratings of the three sets of work from that pinpointing folder were widely discrepant. During the break following the rangefinding round, Pearson staff reviewed the Round 2 Rangefinding results and determined which score points

required the Pinpointing phase. Using the table of results from Round 2 Range Finding, a Pinpointing folder was identified if, for the portfolios in a score range, the frequency distribution across performance levels showed the following criteria:

- For a given performance level, at least approximately 33% of the panelists assigned one of the portfolios to that achievement level;
- For that same performance level, at least approximately 66% of the panelists assigned the remaining portfolios to other achievement levels.

For each score range that was identified, a pinpointing set of portfolios from that score range was distributed to the panelists. A pinpointing set consisted of at least 10 portfolios. Panelists considered one set of pinpointing folders at a time. Panelists were instructed to examine the portfolios from a pinpointing set and, for each portfolio, determine if the portfolio belongs in one of two adjacent performance levels. For example, does the portfolio belong in the Proficient or Advanced Proficient level? Panelists were told that if they felt strongly that a portfolio belonged in a performance level other than the two specified, they could assign the portfolio to that other performance level. Panelists used the pinpointing ratings form to capture the assignment of each paper to a single performance level.

The panelists were allowed to break while Pearson staff computed recommended cut scores. After reconvening, the facilitator distributed the individual results from Round 1 of the Pinpointing stage and walked the panelists through the output explaining how the cuts were derived and addressing their questions. Panelists were allowed a few minutes to review the cut scores that were computed from their own ratings.

Next, the facilitator passed out the group level results from Round 1 of the pinpointing stage and walked the panelists through the output explaining how the group cuts were computed. The facilitator led the committee in a discussion of the score points/portfolios for which there is still disagreement among the committee members.

Following the presentation of the individual and panel results, panelists were presented with data that showed the percent of students that fell into each performance level based on the cut scores recommended in the last round. The data was presented using a bar graph. Panelists were asked if that was the distribution of students they expected to see based on the PLDs, scoring rubrics, and their own knowledge of the students.

Next, panelists were allowed to change their ratings. Panelists will be instructed to record this change in the “round 2” column of their pinpointing ratings forms. Following a break, the panelists were presented the final cut score recommendations.

The panelists were then asked to complete a short questionnaire asking about the decision factors panelists used to rate portfolios. Finally, panelists were asked to complete the evaluation of the standard setting process.

After completing these activities for the initial grade level, the panelists repeated these activities for the next grade level.

On the morning of Day 3, it was discovered that the data set used to compute impact data included 0 scores that were awarded for two reasons. The data set was intended to include 0 scores that were awarded because the construction of the portfolio did not follow the rules of construction. But the data set also included 0 scores that were awarded because that subject section of the portfolio was left blank. This inflated the percentage of 0 scores in the impact data. This occurred for all subjects and all grades.

When this was discovered, revised impact data was immediately computed. The panels had completed reviewing the PLDs and were receiving instructions for rating of the next subject or grade when the meeting was stopped. The panelists were informed that the impact data presented following the pinpointing round had included more 0 scores than intended. Anecdotally, panelists received this information with relief because they were concerned about the number of 0 scores. Panelists were returned their ratings sheet from the last round, presented the revised impact data, and asked to make any changes in their ratings. Few changes were made.

The grade 11 LAL panel had been released and so their ratings could not be revisited. The revised impact data for grade 5 LAL was not available that morning and so the revised impact data for grade 5 LAL was presented to the LAL grade band 3–5 panel at the end of day 3.

Following the conclusion of the standard setting meeting, Pearson provided a preliminary report of the standard setting results. The cut score recommendations were reviewed over several days by directors, managers, and associated staff from both the Office of State Assessments and the Office of Special Education Programs, and then by the Assistant Commissioner responsible for Special Education, the Deputy Commissioner, and the Commissioner. These consultations led to some modifications to the panels’ recommended cut scores, chiefly affecting the advanced proficient cut points. The final set of LAL cut scores were presented to the State Board of Education.

### **Panelists**

The number of panelists in each panel is shown in Table 1. In addition, the names of the panelists in each committee are shown in Appendix B.

Panel	N
Grade Band 3–5 LAL	13
Grade Band 6–8 LAL	11
Grade Band 3–5 Mathematics	13
Grade Band 6–8 Mathematics	12
Grades 4 & 8 Science	12
Grade 11 LAL	13
Grade 11 Mathematics & Science	12

Table 1. Number of panelists for each panel.

Demographic information is shown in the following tables. The information on the gender of the panelists in each panel is shown in Table 2.

Subject	Grade Band	Gender		
		Female	Male	Missing
LAL	3–5	12	1	0
LAL	6–8	10	1	0
LAL	11	11	2	0
Mathematics	3–5	12	1	0
Mathematics	6–8	8	4	0
Mathematics & Science	11	8	4	0
Science	4 & 8	9	3	0

Table 2. Gender of the panelists in each panel.

The information on the location of the school at which panelists worked is shown in Table 3 for each panel.

Subject	Grade Band	School Location			
		Rural	Suburban	Urban	Missing
LAL	3–5	1	7	5	0
LAL	6–8	1	5	4	1
LAL	11	2	4	6	1
Mathematics	3–5	0	9	4	0
Mathematics	6–8	2	8	1	1
Mathematics & Science	11	1	8	1	2
Science	4 & 8	3	5	3	1

Table 3. The location of the school at which panelists worked.

The information on the ethnicity of the panelists in each panel is shown in Table 4.

Subject	Grade Band	Ethnicity					
		African-American	Asian	Hispanic	Native American	White	Missing
LAL	3-5	2	0	0	1	10	0
LAL	6-8	1	0	1	0	8	1
LAL	11	2	0	1	1	8	1
Mathematics	3-5	1	0	1	0	11	0
Mathematics	6-8	1	0	1	0	9	1
Mathematics & Science	11	0	1	0	0	10	1
Science	4 & 8	2	0	0	0	9	1

Table 4. Ethnicity of the panelists.

The information on the region of the state in which panelists worked is shown in Table 5 for each panel.

Subject	Grade Band	Region			
		Central	North	South	Missing
LAL	3-5	3	5	5	0
LAL	6-8	4	1	3	3
LAL	11	4	4	5	0
Mathematics	3-5	6	2	5	0
Mathematics	6-8	4	3	3	2
Mathematics & Science	11	4	4	2	2
Science	4 & 8	3	5	4	0

Table 5. Region of the state in which panelists worked.

## Results

The results from the APA standard setting meeting will be reported in the following five sections: cut scores, evaluations, decision factors, reliability, and vertical articulation.

### Cut scores

Recommended cut scores were computed using the following method. The scores of the portfolios that were placed into each of the performance categories were averaged. This resulted in three average scores: the average score of the portfolio placed into the Partially Proficient, Proficient, and Advanced Proficient categories. The midpoint between the average score of the Partially Proficient and Proficient performance levels

was used as the Partially Proficient/Proficient cut score, and the midpoint between the average score of the Proficient and the Advanced Proficient performance levels was used as the Proficient/Advanced Proficient cut score. The cut scores resulting from this procedure were rounded to whole numbers.

Cut scores are reported for rounds 1 and 2 of rangefinding and following pinpointing. Cut scores are not reported for the training round because only six portfolios were rated.

Cut scores computed following round 1 of rangefinding for LAL, mathematics, and science are shown in Table 6.

Table 6. Cut scores following rangefinding round 1.

Grade	Subject	Cut1	Cut2
3	LAL	356	506
4	LAL	423	525
5	LAL	419	534
6	LAL	377	511
7	LAL	391	529
8	LAL	527	283
11	LAL	433	527
3	Mathematics	370	499
4	Mathematics	422	533
5	Mathematics	380	520
6	Mathematics	381	502
7	Mathematics	401	526
8	Mathematics	393	515
11	Mathematics	528	287
4	Science	538	295
8	Science	422	551
11	Science	412	516

Cut scores computed following round 2 of rangefinding for LAL, mathematics, and science are shown in Table 7.

Table 7. Cut scores following rangefinding round 2.

Grade	Subject	Cut1	Cut2
3	LAL	356	518
4	LAL	409	531
5	LAL	410	538
6	LAL	366	517

7	LAL	386	529
8	LAL	398	529
11	LAL	424	537
3	Mathematics	356	509
4	Mathematics	414	534
5	Mathematics	377	517
6	Mathematics	371	514
7	Mathematics	400	532
8	Mathematics	389	520
11	Mathematics	416	531
4	Science	547	301
8	Science	429	564
11	Science	404	528

Cut scores were computed following the pinpointing stage, i.e., data after all rounds were completed. Cut scores for LAL, mathematics, and science computed following the pinpointing stage are shown in Table 8.

Table 8. Cut scores following pinpointing rounds.

Grade	Subject	Cut1	Cut2
3	LAL	368	518
4	LAL	403	542
5	LAL	426	546
6	LAL	379	520
7	LAL	397	532
8	LAL	404	531
11	LAL	415	529
3	Mathematics	374	510
4	Mathematics	426	532
5	Mathematics	373	502
6	Mathematics	384	517
7	Mathematics	405	522
8	Mathematics	389	520
11	Mathematics	416	531
4	Science	453	561
8	Science	429	564
11	Science	422	537

The percent of students in each performance level by grade and by subject is shown in Table 9. These percentages were computed using a sample of approximately 500 portfolios at each grade level. These percentages were recomputed following the completion of the standard setting study. The obtained raw score up to, but not including, the cut score was used to compute the cumulative percentage of students in an achievement level. Impact data for all but one set of cut scores was recomputed.

Table 9. The percent of students in each performance level by grade and by subject.

Grade	Subject	Cut1	Cut2	Partially	Proficient	Advanced
3	LAL	368	518	27	30	43
4	LAL	403	542	33	34	32
5	LAL	426	546	39	31	30
6	LAL	379	520	32	34	34
7	LAL	397	532	35	32	33
8	LAL	404	531	35	29	35
11	LAL	415	529	33	27	40
3	Mathematics	374	510	35	26	39
4	Mathematics	426	532	38	26	35
5	Mathematics	373	502	34	28	38
6	Mathematics	384	517	40	28	32
7	Mathematics	405	522	36	30	35
8	Mathematics	389	520	32	25	43
11	Mathematics	416	531	40	24	35
4	Science	453	561	52	28	20
8	Science	429	564	35	35	30
11	Science	422	537	40	22	39

Note: The cut score was used as the lowest score for the next highest achievement level. The obtained raw score up to, but not including, the cut score was used to compute the cumulative percentage of students in an achievement level.

### Evaluations

Panelists completed an evaluation following the final round of standard setting for each subject in each grade. Panelists responded to 7 items. Panelists rated the items on a scale from 1 to 5, 1 being “totally disagree” and 5 being “totally agree.” The items are shown in Table 10.

Table 10. Items in the standard setting evaluation.

1. The method for making recommendations using the Body of Work method was conceptually clear.

2. I had a good understanding of the APA portfolio process, including portfolio entries and portfolio evidence.
3. After the <u>training</u> (first) round of ratings, I felt comfortable with the method for making recommendations.
4. After the <u>rangefinding</u> (second) round of ratings, I felt comfortable with the method for making recommendations.
5. After the <u>pinpointing</u> (third) round of ratings, I felt comfortable with the method for making recommendations.
6. I found the feedback on the recommendations of other panelists useful in making my own recommendations.
7. I feel confident that the final recommendation from the standard setting process reflects the views of the panelists.

The results from administration of the evaluations for LAL are shown in Table 11. The mean panelist response ranges from a minimum of 3.16 to a maximum of 4.75.

Table 11. The mean panelist response to the evaluation items for the LAL standard setting meetings.

Grade	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7
Grade 3	3.38	4.15	4.00	4.00	4.08	4.31	3.31
Grade 4	3.64	4.55	4.27	4.27	4.30	4.45	3.18
Grade 5	3.38	4.23	3.23	3.62	3.45	4.38	3.46
Grade 6	4.08	4.25	4.42	4.50	4.58	4.08	4.75
Grade 7	4.20	4.10	4.20	4.30	4.50	4.40	4.60
Grade 8	3.83	4.08	3.75	4.17	4.08	3.92	3.83
Grade 11	4.50	4.50	4.25	4.67	4.67	4.67	4.42

The results from administration of the evaluations for mathematics are shown in Table 12. The mean panelist response ranges from a minimum of 3.25 to a maximum of 4.90.

Table 12. The mean panelist response to the evaluation items for the mathematics standard setting meetings.

Grade	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7
Grade 3	3.33	4.25	3.25	3.92	4.17	4.33	4.42
Grade 4	4.25	4.75	4.58	4.75	4.58	4.33	4.50
Grade 5	4.50	4.75	4.50	4.67	4.50	4.17	4.50
Grade 6	4.10	4.00	3.80	4.20	4.70	3.70	4.00
Grade 7	4.60	4.80	4.40	4.50	4.70	3.90	4.50
Grade 8	4.90	4.90	4.70	4.90	4.89	4.60	4.90
Grade 11	4.30	4.80	4.20	4.60	4.50	4.20	4.60

The results from administration of the evaluations for mathematics are shown in Table 13. The mean panelist response ranges from a minimum of 3.83 to a maximum of 4.90.

Table 13. The mean panelist response to the evaluation items for the science standard setting meetings.

Grade	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7
Grade 4	4.17	4.58	3.83	4.42	4.75	4.33	4.42
Grade 8	4.44	4.78	4.44	4.89	4.89	4.33	4.56
Grade 11	4.50	4.80	4.80	4.80	4.90	4.70	4.80

#### Decision factors

In addition, panelists completed a decision factors questionnaire following the final round of standard setting for each subject in each grade. Panelists rated 12 factors that may have influenced their decisions on recommendations for the performance levels for each portfolio. Panelists rated each factor from 1, not at all, to 5, very strongly, and indicated how much each of the factors may have influenced their decision making. The items are shown in Table 14.

Table 14. The items in the decision factors questionnaire.

1. Your experience in education
2. Prior to this standard setting meeting, your perceptions about students in each of the three achievement levels
3. Your prior knowledge about standard setting
4. The present orientation on standard setting
5. Your perception of the high stakes vs. low stakes context of the APA examination
6. Your thinking about students in each achievement level with whom you have had experience
7. The consequences of your decisions for NCLB
8. The performance level descriptors presented
9. The impact data presented
10. Your interactions with your fellow panelists during the training round
11. Your interactions with your fellow panelists during the rangefinding round
12. Your interactions with your fellow panelists during the pinpointing round

The results from administration of the decision factors questionnaire for LAL are shown in Table 15.

Table 15. Mean panelist response from administration of the decision factors questionnaire for LAL.

Grade	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8	Item 9	Item 10	Item 11	Item 12
Grade 3	4.15	3.31	2.69	3.69	3.15	3.92	3.00	4.23	4.08	4.08	4.15	4.23
Grade 4	3.73	3.27	2.82	4.00	3.09	3.36	2.45	4.27	3.45	4.09	4.18	4.00
Grade 5	4.31	2.92	2.54	3.46	2.92	3.62	2.38	4.38	3.73	3.69	3.77	4.08
Grade 6	3.83	3.00	2.50	3.75	2.25	3.50	2.50	4.25	3.92	3.75	3.92	3.83
Grade 7	3.90	3.10	3.10	3.90	2.60	3.30	2.50	4.20	3.60	3.80	4.10	4.00
Grade 8	3.92	3.33	2.18	3.64	2.50	3.50	2.50	4.17	3.33	3.42	3.50	3.58
Grade 11	4.25	3.25	2.58	4.25	3.67	4.08	3.17	4.42	4.17	4.58	4.42	4.42

These response means for LAL are graphed in Figure 3. In contrast to the mean responses to the evaluation items, mean responses to the decision factors items should show a pattern of contrasting responses where relevant factors show a high mean and irrelevant factors show a low mean. The mean responses in Figure 3 show such a pattern.

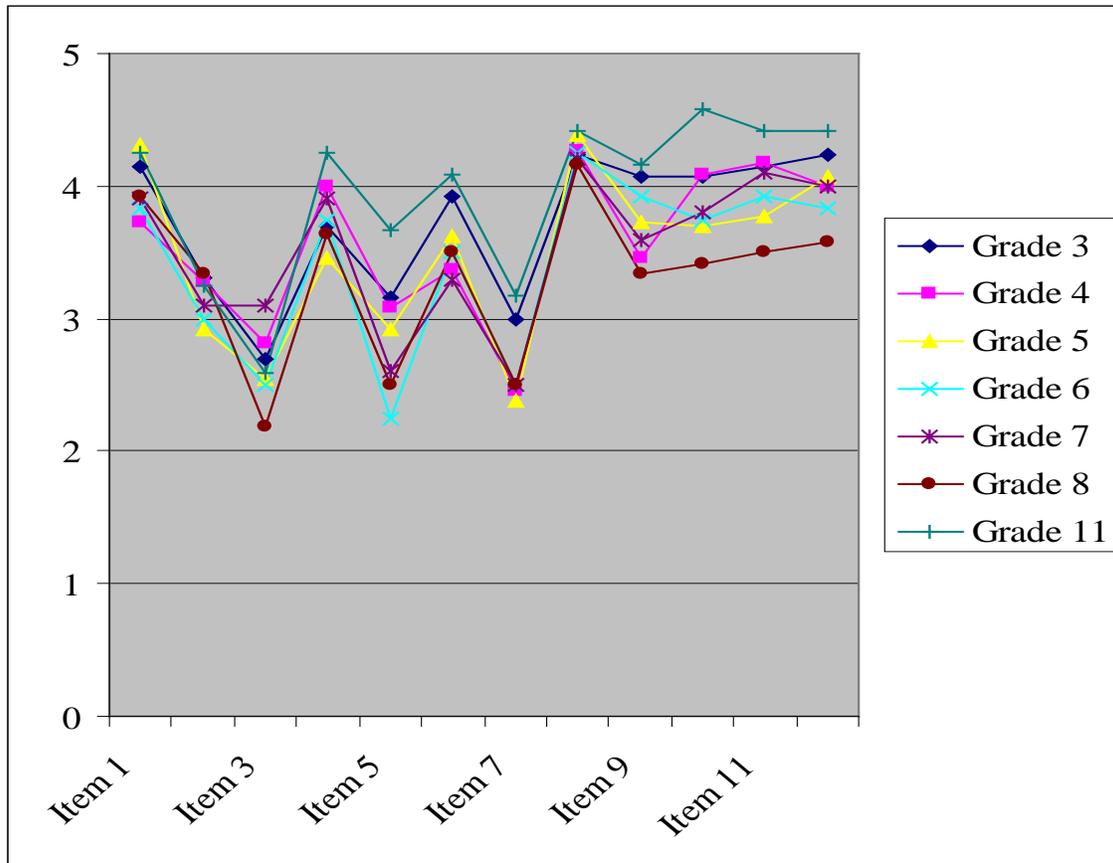


Figure 3. Mean panelist response from administration of the decision factors questionnaire for LAL.

The results from administration of the decision factors questionnaire for mathematics are shown in Table 16.

Table 16. Mean panelist response from administration of the decision factors questionnaire for mathematics.

Grade	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8	Item 9	Item 10	Item 11	Item 12
Grade 3	4.08	3.25	2.17	3.92	2.33	4.00	2.67	3.75	3.75	3.73	3.73	3.64
Grade 4	3.92	3.27	2.50	4.00	2.83	3.82	2.25	3.83	3.17	3.67	3.75	3.67
Grade 5	3.92	3.50	2.58	4.25	3.08	3.75	2.25	4.08	3.58	4.08	4.08	3.58
Grade 6	4.50	2.80	1.60	3.40	3.20	3.20	2.90	3.60	3.50	3.60	3.60	3.30
Grade 7	4.60	3.20	2.40	3.80	3.20	3.30	2.90	4.20	3.20	3.00	3.00	3.20
Grade 8	4.50	3.30	3.00	4.00	3.20	3.20	3.50	4.10	3.67	4.00	3.80	3.90
Grade 11	4.40	3.33	2.44	3.80	3.89	4.20	3.40	3.90	4.10	3.90	4.00	4.00

These response means for mathematics are graphed in Figure 4.

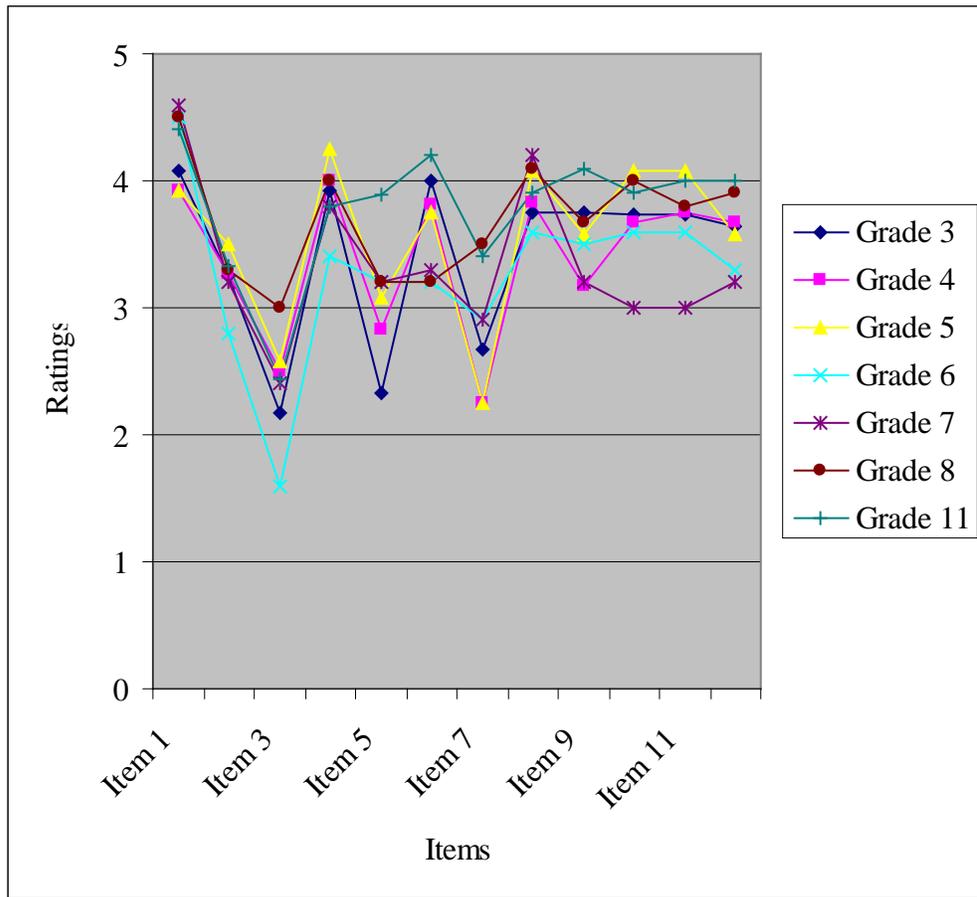


Figure 4. Mean panelist response from administration of the decision factors questionnaire for mathematics.

The results from administration of the decision factors questionnaire for science are shown in Table 17.

Table 17. Mean panelist response from administration of the decision factors questionnaire for science.

Grade	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item 7	Item 8	Item 9	Item 10	Item 11	Item 12
Grade 4	4.08	3.42	2.17	3.83	3.00	3.25	2.00	4.33	3.91	3.58	3.75	3.67
Grade 8	4.17	3.25	2.25	3.75	3.42	3.58	3.00	4.50	3.67	3.83	4.17	4.18
Grade 11	4.60	4.20	3.50	4.50	3.89	4.60	3.90	4.50	4.40	4.60	4.60	4.42

The response means for science are graphed in Figure 5.

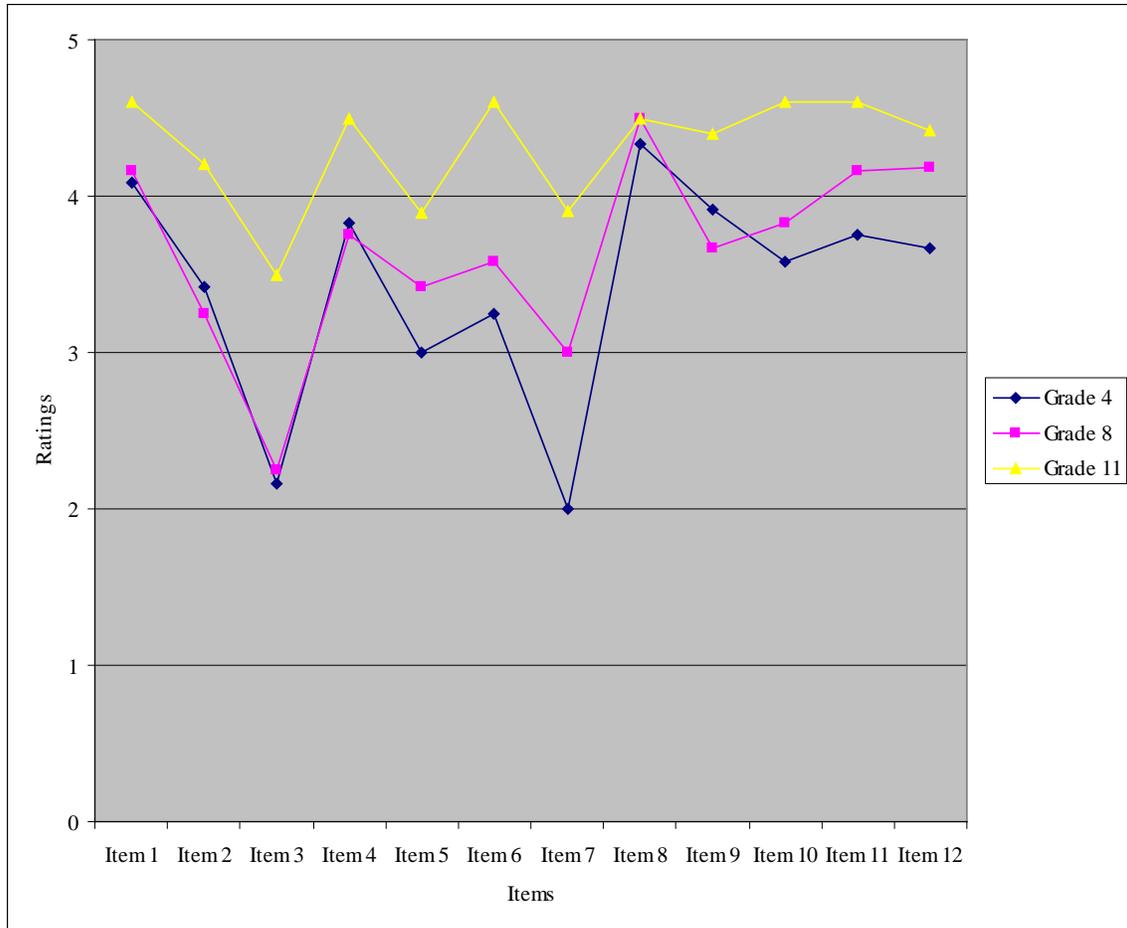


Figure 5. Mean panelist response from administration of the decision factors questionnaire for science.

Reliability

The reliability of the panel results was assessed using an internal consistency design. For each grade level and content panel, the panelists’ responses were recorded as a rating from 1 to 3 corresponding to the three achievement levels. Reliability analyses were done only on data from the first rangefinding round. These responses were the only independent responses from panelists and represent a lower bound on reliability. Panelists’ responses were treated as polytomous data. Panelists were treated like items under classical test theory. Under the internal consistency design, coefficient alpha was computed using the responses of the panelists where panelists were treated as items.

The standardized coefficient alpha values for standard setting results are reported in Table 18 for each grade and content panel. The values are above generally expected reliability levels. The minimal coefficient alpha value was 0.9272 and the maximum coefficient alpha value was 0.9824.

Table 18. Standardized coefficient alpha values for standard setting results.

Grade	Subject	Standardized Coefficient Alpha	Order
3	LAL	0.9733	2
3	Mathematics	0.9586	1
4	LAL	0.9736	3
4	Mathematics	0.9764	2
4	Science	0.9391	1
5	LAL	0.9503	1
5	Mathematics	0.9824	3
6	LAL	0.9601	2
6	Mathematics	0.9360	1
7	LAL	0.9695	3
7	Mathematics	0.9671	2
8	LAL	0.9557	1
8	Mathematics	0.9794	3
8	Science	0.9816	2
11	LAL	0.9364	1
11	Mathematics	0.9478	1
11	Science	0.9272	2

In addition, the standard error of measurement (SEM) for rangefinding round 1 results was computed and reported in Table 19. The SEM was computed for rangefinding round 1 results because that is the last ratings opportunity where panelists made independent ratings. Also the standard deviation values of final cut score recommendations are shown in Table 19.

Table 19. Standard error of measurement (SEM) for rangefinding round 1 and standard deviation of final cut score recommendations.

Grade	Subject	SEM	Standard Deviation
3	LAL	0.1066	4.383
4	LAL	0.1096	5.778
5	LAL	0.1262	5.910
6	LAL	0.1302	6.165
7	LAL	0.1256	4.922
8	LAL	0.1337	6.190
11	LAL	0.1203	3.307

3	Mathematics	0.1269	6.444
4	Mathematics	0.1082	3.376
5	Mathematics	0.1262	4.767
6	Mathematics	0.1545	5.583
7	Mathematics	0.1246	6.057
8	Mathematics	0.11	6.956
11	Mathematics	0.2451	4.831
4	Science	0.1268	6.033
8	Science	0.0946	2.337
11	Science	0.1037	6.884

Vertical articulation

A total of 13 panelists attended the vertical articulation session. The panelists were asked to complete two tasks. In the first task, panelists were asked to indicate what pattern of cut scores at each performance level do you expect to see across grades? Panelists were given three options: increasing, decreasing, or flat.

The results for the first task are shown in Table 20. As the results show, panelists tended to expect a flat pattern of cut scores across grades in LAL and mathematics. In contrast, the majority of panelists expected a decreasing pattern of cut scores across grades in science.

Table 20. The pattern of cut scores at each performance level across grades panelists expected to see.

Pattern	LAL	Mathematics	Science
Increasing	1	0	2
Decreasing	1	2	9
Flat	11	10	2
Not available	0	1	0

In the second task, panelists were asked to recommend the ideal percent of students who should be classified in each performance level on the APA. Panelists made this recommendation in each content area. The ideal percent of students who should be classified in each performance level for LAL is shown in Table 21.

Table 21. The ideal percent of students who should be classified in each performance level for LAL.

	Grade						
	3	4	5	6	7	8	11
Advanced Proficient	34	35	34	34	33	33	33

Proficient	37	37	37	37	37	37	38
Partially Proficient	30	29	30	29	29	30	29

The ideal percent of students who should be classified in each performance level for mathematics is shown in Table 22.

Table 22. The ideal percent of students who should be classified in each performance level for mathematics.

	Grade						
	3	4	5	6	7	8	11
Advanced Proficient	33	33	33	32	32	32	32
Proficient	37	39	38	38	38	38	38
Partially Proficient	30	28	30	30	30	30	31

The ideal percent of students who should be classified in each performance level for science is shown in Table 23.

Table 23. The ideal percent of students who should be classified in each performance level for science.

	Grade		
	4	8	11
Advanced Proficient	32	32	31
Proficient	35	36	35
Partially Proficient	33	32	33

## Review

Under New Jersey regulations, assessment performance standards are established by the Commissioner of Education and must be approved by the State Board of Education by the Commissioner. The relevant regulation is shown below:

### *6A:8-4.1 Statewide assessment system*

*(a) The Commissioner, in accordance with N.J.S.A. 18A:7A-10, may implement assessment of student achievement in the State's public schools, in any grades and by such assessments as he or she deems appropriate, and shall report to the State Board the results of such assessments in accordance with the New Jersey Open Public Records Act (P.L. 2001, c. 404) N.J.S.A. 47:1A-1 et seq.*

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*(b) The Commissioner shall implement a system and related schedule of Statewide assessments to evaluate student achievement of the Core Curriculum Content Standards. 1. The Commissioner, with the approval of the State Board, shall define the scope and level of student performance on Statewide assessments that demonstrate thorough understanding of*

the knowledge and skills delineated by the Core Curriculum Content Standards at grade levels three through 12.

Consequently, New Jersey’s normal standard setting process for all assessment programs includes two additional steps: 1) a senior staff level review of standard setting panel recommendations to assure articulation with state education policy and priorities – this review may result in modifications to the panelists recommendations; 2) the presentation of the final cut scores to the State Board for formal adoption by resolution.

The APA panelists recommendations were reviewed over several days by directors, managers, and associated staff from both the Office of State Assessments and the Office of Special Education Programs, and then by the Assistant Commissioner responsible for Special Education, the Deputy Commissioner, and the Commissioner. These consultations led to some modifications to the panels’ recommended cut scores, chiefly affecting the advanced proficient cut points. The final set of LAL cut scores presented to the State Board, along with impact data, is shown in Table 24.

Table 24. Summary of recommended APA cut scores and impact data for LAL.

		<i>Raw scores: 0-64</i>		<i>APA Impact Percentages 2009 (2008 in parentheses; all rounded, may not =100%)</i>		
Grade	Subject	Proficient Cut 2009	Advanced Proficient Cut 2009	% Partially Proficient	% Proficient	% Advanced Proficient
3	LAL	36.8	56.2	27 (22)	47 (49)	25 (29)
4	LAL	40.3	60.0	33 (26)	58 (49)	8 (26)
5	LAL	41.6	60.5	37 (29)	55 (47)	8 (24)
6	LAL	37.9	58.1	32 (27)	57 (49)	11 (25)
7	LAL	39.7	58.2	35 (30)	51 (42)	14 (28)
8	LAL	40.4	59.3	35 (39)	52 (40)	12 (22)
11	LAL	41.5	56.2	33 (36)	36 (46)	30 (19)

The final set of LAL cut scores presented to the State Board, along with impact data, is shown in Table 25.

Table 25. Summary of recommended APA cut scores and impact data for mathematics and science.

		<i>Raw scores: 0-64</i>		<i>APA Impact Percentages 2009 (2008 in parentheses; all rounded, may not =100%)</i>		
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Grade	Subject	Proficient Cut 2009	Advanced Proficient Cut 2009	% Partially Proficient	% Proficient	% Advanced Proficient
3	Math	37.4	57.5	35 (17)	42 (52)	23 (31)
4	Math	41.6	56.6	40 (22)	33 (47)	27 (31)
5	Math	37.3	55.0	34 (27)	39 (47)	27 (26)
6	Math	38.4	57.3	40 (29)	46 (45)	15 (26)
7	Math	40.5	58.3	36 (35)	49 (39)	15 (26)
8	Math	38.9	58.9	32 (46)	51 (34)	17 (20)
11	Math	41.6	57.9	40 (56)	36 (30)	24 (14)
4	Sci	43.0	62.1	46 (23)	52 (50)	3 (27)
8	Sci	42.9	58.3	35 (32)	46 (41)	19 (28)
11	Sci	42.2	60.6	40 (26)	51 (56)	10 (18)

These cut scores were presented to the State Board of Education on July 15, 2009, and approved unanimously by resolution. The text of that resolution is included here. Score reporting proceeded on the basis of these standards.

Appendix A  
Meeting Agenda

## **NJ APA Standard Setting Meeting Agenda**

### DAY 1

Registration	7:30–8:00
Opening Remarks	8:00–8:30
Overview of the Tests History Purposes Creation	8:15–8:45
Overview of CPI Links	8:45–9:00
Overview of Portfolio Scoring	9:00–9:30
Overview of Standard Setting and training in Body of Work method	9:30–10:00
<b>BREAK</b>	10:00–10:15
Break into committees & introductions	10:15–10:30
Review Performance Level Descriptors (lower grade)	10:30–11:00
Review the Threshold Student Definition	11:00–11:30
Reasoned Judgment Warm-up Task	11:30–12:00
<b>LUNCH</b>	12:00–1:00
Review Body of Work method	1:00–1:30
Initial reflection	1:30–1:45
Training round (ranking)	1:45–2:00
Discussion of rankings	2:00–2:15
<b>BREAK</b>	2:15–2:30
Training round (categorizing)	2:30–3:00
Discussion of categories	3:00–3:15
Follow-up reflection	3:15–3:30

Rangefinding round 1	3:30–5:00
<u>DAY 2</u>	
Review schedule and answer questions (Large group)	8:00–8:30
Feedback	8:30–9:15
Panelist reconsideration of ratings	9:15–9:30
BREAK	9:30–9:45
Review of rangefinding results	9:45–10:00
Pinpointing round 1	10:00–11:15
LUNCH	12:00–1:00
Feedback	1:00–1:30
Pinpointing round 2	1:30–2:00
BREAK	2:00–2:15
Presentation of final recommendations	2:15
Evaluation and decision factors questionnaire	2:15–2:30
Move to next grade	
Review Performance Level Descriptors (next grade)	2:30–3:30
Review the Threshold Student Definition	3:30–4:00
Review schedule for next day	4:15–4:30
<u>DAY 3</u>	
Review schedule and answer questions (in each panel)	8:00–8:15
Review Body of Work method	8:15–8:30
Initial reflection	8:30–8:45

Training round (ranking)	8:45–9:00
Discussion of rankings	9:00–9:15
Training round (categorizing)	9:15–9:45
Discussion of categories	9:45–10:00
Follow-up reflection	10:00–10:15
BREAK	10:15–10:30
Rangefinding round 1	10:30–12:00
LUNCH	12:00–1:00
Feedback	1:00–1:15
Panelist reconsideration of ratings	1:15–1:30
BREAK	1:30–1:45
Review of rangefinding results	1:45–2:00
Pinpointing round 1	2:00–3:00
BREAK	3:00–3:15
Feedback	3:15–3:45
Pinpointing round 2	3:45–4:15
BREAK	4:15–4:30
Presentation of final recommendations	4:30
Evaluation and decision factors questionnaire	4:30–4:45
<u>DAY 4</u>	
Review schedule and answer questions (in panels)	8:00–8:15
Review Performance Level Descriptors (next grade)	8:15–9:00

Review the Threshold Student Definition	9:00–9:15
Review Body of Work method	9:15
Initial reflection	9:15–9:30
Training round (ranking)	9:30–9:45
Discussion of rankings	9:45–10:00
BREAK	10:00–10:15
Training round (categorizing)	10:15–10:30
Discussion of categories	10:30–10:45
Follow-up reflection	10:45–11:00
Rangefinding round 1	11:00–12:00
LUNCH	12:00–1:00
Review of rangefinding results	1:00–1:15
Pinpointing round	1:15–2:00
Evaluation and decision factors questionnaire	2:00
BREAK	2:00–2:15
Convene vertical articulation committee	2:15
Opening Remarks	2:15–2:30
Overview of vertical articulation process	2:30–2:45
Review PLDs	2:45–3:30
Review recommended cut scores	3:30–4:30
Evaluation	4:30

Appendix B  
Standard Setting Panels

\*For purposes of the 2009 technical report, this appendix that identified panelists has been removed.

Appendix C

State Board of Education Resolution

**RESOLUTION TO ESTABLISH SCORE STANDARDS FOR NEW JERSEY  
ALTERNATIVE PROFICIENCY ASSESSMENT (APA)**

**WHEREAS**, the goal of public schools is to provide all students with a thorough and efficient education as defined by the *Core Curriculum Content Standards* so they may function politically, economically, and socially in our democratic society; and

**WHEREAS**, the New Jersey Alternate Proficiency Assessment (APA) is provided for assessing the progress of students with severe cognitive disabilities; and

**WHEREAS**, N.J.A.C. 6A:8-4.1(b) requires State Board of Education approval of student performance levels for statewide assessments in those grades as specified for district certification; and

**WHEREAS**, the established levels of proficiency are partially proficient, proficient and advanced proficient; and

**WHEREAS**, the corresponding raw cut scores recommended by the Commissioner of Education for the APA mathematics, language arts literacy, and science are as follows:

Grade 3 mathematics: 37.4 for the proficient level; 57.5 for the advanced proficient level;  
Grade 4 mathematics: 41.6 for the proficient level; 56.6 for the advanced proficient level;  
Grade 5 mathematics: 37.3 for the proficient level; 55.0 for the advanced proficient level;  
Grade 6 mathematics: 38.4 for the proficient level; 57.3 for the advanced proficient level;  
Grade 7 mathematics: 40.5 for the proficient level; 58.3 for the advanced proficient level;  
Grade 8 mathematics: 38.9 for the proficient level; 58.9 for the advanced proficient level;  
Grade 11 mathematics: 41.6 for the proficient level; 57.9 for the advanced proficient level;  
Grade 3 language arts literacy: 36.8 for the proficient level; 56.2 for the advanced proficient level;  
Grade 4 language arts literacy: 40.3 for the proficient level; 60.0 for the advanced proficient level;  
Grade 5 language arts literacy: 41.6 for the proficient level; 60.5 for the advanced proficient level;  
Grade 6 language arts literacy: 37.9 for the proficient level; 58.1 for the advanced proficient level;  
Grade 7 language arts literacy: 39.7 for the proficient level; 58.2 for the advanced proficient level;  
Grade 8 language arts literacy: 40.4 for the proficient level; 59.3 for the advanced proficient level;

Grade 11 language arts literacy: 41.5 for the proficient level; 56.2 for the advanced proficient level;  
Grade 4 science: 43.0 for the proficient level; 62.1 for the advanced proficient level;  
Grade 8 science: 42.9 for the proficient level; 58.3 for the advanced proficient level; and  
Grade 11 science: 42.2 for the proficient level' 60.6 for the advanced proficient level; now therefore be it

**RESOLVED**, the cut scores recommended by the Commissioner of Education for the New Jersey Alternate Proficiency Assessment shall apply to the 2009 administration and be the basis for reporting scores for future administrations, until such time as the Board shall adopt new performance standards for these assessments.

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Lucille E. Davy, Commissioner  
Secretary, New Jersey State Board of Education

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Josephine Hernandez, President  
New Jersey State Board of Education

## Appendix D

### APA Performance Level Descriptors

(PLDs can be found in the Appendix G of this technical report)

**APPENDIX I: Terms and Definitions Used in APA Score Reporting**

The terms and definitions used across the APA reports are presented below in two sections:

- Student Identification - Descriptions of the student demographic fields noted originated in the instructions in the *Scan Sheet Directions* manual.
- Student Reporting Information - Score information appeared with complete descriptions in the *Score Interpretation Manual*, and often as column headings and footnotes on the reports.

### ***Student Identification***

- **School Student Attends:** School of residence or a receiving school. A receiving school is a school a student with disabilities attends that is outside of the student's school of residence. Receiving schools include: private schools for the disabled, special services school districts, educational services commissions jointure commissions, college-operated programs, state facilities, and other public schools.
- **Sending School:** A sending school is the neighborhood school the student would attend if the student was not receiving special education.
- **Date of Birth: shown in month, day, year (mm/dd/yy)**
- **Gender:** M=Male; F=Female
- **Ethnicity:**  
W=White  
B=Black or African American  
A=Asian  
P=Native Hawaiian or other Pacific Islander  
H=Hispanic or Latino  
I=American Indian or Alaska Native

Multiple codes are allowed

- **Student ID (SID):** A unique student identification (10-digit number) assigned by the state for state assessment reporting. Districts obtained this Student ID through NJSMART at <http://www.state.nj.us/education/njsmart/sid>
- **Local Student ID:** This stands for school- or district-assigned local ID, if one was provided on the APA demographic scan sheet.
- **Medical Emergency (ME):** If there is less than the required amount of evidence due to extensive sick leave or hospitalization during which time the student is not receiving instruction or the amount of instruction and assessment is based on a limited number of contact hours, then an administrator note was included in the portfolio explaining the lack of evidence. The portfolio was voided due to extended illness during the collection period.

- **HB (Homebound):** Y=yes, indicates the student was coded as a homebound student. A Homebound student receives home instruction for the duration of the collection period as reported by the student's school district.
- **LEP (Limited English Proficient):** For the current administration, the following codes are used for students participating in, or recently exited from, a language assistance program (Bilingual, English as a Second Language, or English Language Services).
  - < = LEP student **entered** a language assistance program **ON** or **AFTER July 1, 2008**, and is **currently enrolled in the program**.
  - 1** = LEP student **entered** a language assistance program **BETWEEN July 1, 2007 and June 30, 2008**, and is **currently enrolled in the program**.
  - 2** = LEP student **entered** a language assistance program **BETWEEN July 1, 2006 and June 30, 2007**, and is **currently enrolled in the program**.
  - 3** = LEP student **entered** a language assistance program **BEFORE July 1, 2006**, and is **currently enrolled in the program**.
  - 4** = **F1-Former** LEP student who **exited** a language assistance program **BETWEEN July 1, 2007**, and the last day of the current APA collection period and is **NO longer** enrolled in the program.
  - 5** = **F2-Former** LEP student **exited** a language assistance program **BETWEEN July 1, 2006, and June 30, 2007**, and is **NO longer** enrolled in the program.
- **Limited-English Proficient (LEP) Exempt (LAL Only)**  
An **E** in the LEP Exempt field indicates that the student entered the United States **AFTER** July 1, 2008, and is currently enrolled in a language assistance program. These students were not required to take the LAL portion of the assessment, but **MUST** be assessed in Mathematics and Science.
- **Special Education Classification (SE):** The special education code for each student is indicated on the scannable form by the school. There are 13 codes\* for the special education categories of disability used in state assessment data collection. (The APA will begin using the numeric code equivalency for the 2009-2010 assessment.)
  - A (01) = Auditorily Impaired
  - B (11) = Other Health Impaired
  - C (06) = Communication Impaired
  - D (07) = Emotionally Disturbed
  - E (04) = Cognitively Impaired
  - F (08) = Multiply Disabled
  - G (15) = Traumatic Brain Injury
  - H (10) = Orthopedically Impaired
  - I (14) = Specific Learning Disability
  - J (13) = Social Maladjustment
  - K (16) = Visually Impaired
  - L (17) = Speech-Language Services Only

M (02) = Autistic

N\* (99) = Unknown or multiple coding (assigned during data processing)

- **Title I:** L=Language Arts Literacy; M=Mathematics; S=Science. If a student receives Title I services in any of the assessed content areas, the first letter of the content area(s) is displayed. This student lives in an eligible attendance area, meets the criteria for selection to participate in the federal Title I program, and participates in a Title I program as indicated by the district on the student's scannable form (scan sheet).
  - **Status:**
    - 1 = Student was assessed at the school of residence.
    - 2 = Student was sent outside school of residence for instruction and assessment.
    - 3 = Student was received from another school for instruction and assessment.
  - **TIS (Time in School less than one year):** Y=yes, indicates that the student enrolled in the sending school or school of residence after July 1, 2008.
  - **TID (Time in District less than one year):** Y=yes, indicates that the student enrolled in the district of residence after July 1, 2008.
  - **ED (Economically Disadvantaged):** Y=yes, indicates if the student was coded as economically disadvantaged. A student qualifies as economically disadvantaged if the student is eligible for free or reduced lunch.
  - **Migrant (Migrant Status):** Y=yes. The student was coded as migrant. This is defined as a student:
    - Who is, or whose parent, spouse, or guardian is, a migratory agricultural worker, a migratory dairy worker, or a migratory fisher; and
    - Who is, in the preceding 36 months, in order to obtain, or accompany such parent, spouse, or guardian in order to obtain, temporary or seasonal employment in agricultural or fishing work, has moved from one school district to another.
- 

### ***Score Reporting Information***

- **Accountability:** The APA is both a student assessment, and a school/district program assessment, for accountability purposes. APA test results are combined with the results from the general assessments for AYP accountability purposes for state and federal reports.
- **Number of portfolios processed:** This is the total number of student portfolios processed, regardless of content areas, including students coded void.

- **Number of LEP students exempt from taking LAL:** The number of students who are not required to take the LAL because they entered the United States after July 1, 2008, and they are currently enrolled in a language assistance program. These students are required to be assessed in Mathematics and Science.
- **Number of students that took the General Assessment (NJASK or HSPA) in the content area:** This is the number of students who took the general assessment in a content area.
- **Number of students not required to submit entries for the content area:** This is the total number of students not required to submit entries based on their grade. Grade 9 and 10 students taking the APA Science did not submit Language Arts Literacy and Mathematics entries. Some APA Grade 11 students previously took the APA Science so no Science entries were submitted.
- **Number of students with no valid scores:** Students without valid scores. This is the total number of students receiving a V1, V3, V4, V5 void code or other unscorable codes.
- **Number of students with valid scores:** This includes only those students who had at least one scorable entry in a content area.
- **Number of students in each proficiency level:** This is the total number of students with valid scores who scored in each proficiency level.
- **Percent of students in each proficiency level:** This is the percentage of students with valid scores who scored in each proficiency level.
- **UNSCORABLE:** An unscorable entry is assigned a zero score. An entry is deemed unscorable (U) if:
  - there is a security breach
  - off-grade testing occurs
  - no evidence is provided
  - insufficient evidence is collected due to extended medical leave
  - the student takes the general assessment in a content area
- **VOID:** The proficiency level for a student will be voided if all entries are unscorable. The levels are replaced with the appropriate void code:
  - **Medical Emergency** = voided due to medical emergency
  - **Off-Grade** = voided due to off-grade testing
  - **V4** = voided due to an entry not being provided
  - **Took General Assessment** = if the student takes the general assessment in a content area;
  - **Security Breach** = voided due to breach of security by a school or district

### **VOID and UNSCORABLE combinations on Individual Student Reports**

- **ME & U<sup>A</sup>** = insufficient evidence due to extended sick leave. Reported with Void codes.
- **V3 & U<sup>X</sup>** = Off-grade testing.
- **V4 & U<sup>B</sup>** = Entry has no evidence.
- **V4 & U<sup>H</sup>** = Student took general assessment.
- **V5 & U<sup>Y</sup>** = Security Breach due to inappropriate portfolio development.

If all entries are unscorable, except for U<sup>A</sup>, U<sup>X</sup>, U<sup>Y</sup>, or U<sup>H</sup>, the subtotal and total scores of each dimension is translated to V4.

## **APPENDIX J: 2009 Executive Summary**

# 2009 New Jersey Alternate Proficiency Assessment

## Executive Summary

The Alternate Proficiency Assessment (APA) is a portfolio assessment designed to measure progress toward achieving New Jersey's state educational standards for students with the most significant cognitive disabilities who are unable to participate in the general assessments: New Jersey Assessment of Skills and Knowledge (NJASK) or the High School Proficiency Assessment (HSPA).

The New Jersey Alternate Proficiency Assessment was developed for two purposes:

- To measure the progress of a small percentage of students with the most significant cognitive disabilities who cannot participate in the regular statewide assessments even with accommodations.
- To ensure that the educational results for all students are included in the statewide accountability system at the individual, school, district, and state levels.

Accountability through assessment provides equity in program and educational opportunities for all students. Alternate assessment ensures an inclusive statewide assessment system and student accountability.

The Alternate Proficiency Assessment was designed and developed to meet the requirements of the *Individuals With Disabilities Education Act of 1997 (IDEA 1997)*, *Individuals With Disabilities Education Improvement Act of 2004 (IDEA 2004)*, and *No Child Left Behind Act of 2001 (NCLB)*.

The *No Child Left Behind Act of 2001 (NCLB)* requires that all students, including those with disabilities, participate in the state assessment program. NCLB also requires that the measurement of progress toward meeting state standards include assessment results for all students.

The Alternate Proficiency Assessment fulfills these requirements and is based on the Core Curriculum Content Standards (CCCS) in the content areas of language arts literacy, mathematics, and science. In this manner, all students in New Jersey are moving toward the same general standards with whatever modifications or supports they need.

The 2008–2009 APA was administered in Language Arts Literacy and Mathematics in grades 3, 4, 5, 6, 7, 8, and 11. Science was assessed in grades 4 and 8, and in grades 9, 10, or 11, depending on the grade in which a student received Biology instruction. Evidence of student performance as demonstrated in the student portfolio was collected during two collection periods from September 1, 2008, through November 21, 2008, and December 15, 2008, through February 20, 2009. A portfolio is a collection of student work samples that measure a student's progress related to the Core Curriculum Content Standards, strands, grade-level cumulative progress indicators (CPIs), and skill statements called CPI links.

Extensive APA information is available at <http://pem.ncspearson.com/nj/apa>

For the *Core Curriculum Content Standards (July 2004)*, see <http://www.nj.gov/njded/cccs>

The 2009 APA state summary reports appear at <http://www.state.nj.us/education/schools/achievement/>

## Changes to the 2008–2009 Test Design

The re-design of the APA has been in transition since the 2006 administration. In order to meet the requirements of NCLB and the United States Department of Education peer review, the APA has been revised, including changes to content that may be assessed and the dimensions on which that content is scored. In the interim, changes were introduced gradually to the APA to provide administrators, teachers, and students time to understand and implement the changes. These changes were fully implemented in the 2008–2009 school year. As a result, longitudinal analyses and comparisons across or including the transition years are not recommended, nor are they likely to be interpretable.

Peer reviewers from the U.S. Department of Education assist the New Jersey Department of Education with expert professional judgment regarding the test design. Specific requirements addressed during the design changes were:

- APA students must be assessed on a subset of skills from the general assessment. The skills must be mapped to the general assessment specifications, and address the breadth and depth of skills tested across grade levels.
- The skills assessed must link to the cumulative progress indicators of the student's assigned grade level.
- Students in the same grade must be assessed on the same content; teachers choose from a limited selection of standards and strands to assess their students.
- Strengthen the alignment of the APA program design to grade level academic content and progress indicators.

The 2008–2009 APA has test specifications, by grade and content, which prescribe the standards and strands that must be assessed. Test specifications were written in order to provide more specific guidance on how to link to grade level CPIs, and to address the federal requirement of linkage to the skills tested in the general assessments. Specifying the requirements increases standardization of the assessment for students with significant cognitive disabilities. Students may not be assessed in functional, behavioral, or access (social, motor, etc.) skills. Functional activities and materials might be used to promote understanding during instruction, but the evidence and activities demonstrating student achievement for assessment must be academically focused and represent the entire grade-level CPI Link.

The grade and content specifications for the re-designed (2008–2009) APA administration are noted below:

**Language Arts Literacy** requires four entries from two different strands each from standards 3.1 and 3.2.

**Mathematics** requires four entries, one strand each, from standards 4.1, 4.2, 4.3, and 4.4.

**Science** requires four entries as follows:

Grade 4: One strand each from standards 5.5, 5.6, 5.8, and 5.9.

Grade 8: One strand each from standards 5.5, 5.6, 5.7, and 5.9.

High School (Grade 9, 10, or 11): Two different strands each from standards 5.5 and 5.10.

The CPI links were developed from a subset of the Core Curriculum Content Standards, strands, and CPIs. The subset was prioritized for assessment on the APA by ILSSA (Inclusive Large Scale Standards and Assessment) content specialists, New Jersey Department of Education content specialists, New Jersey special education teachers and general education teachers, and the APA advisory committee. Individuals from each of these areas were also involved in drafting the content in the CPI links and ensuring its alignment to the CCCS. Each CPI Link offers three levels of connection to each CPI: Matched Link, Near Link, and Far Link. Educators now choose one CPI Link per entry and use that as the basis for developing portfolio entries for assessment within the APA instead of developing their own targeted skills and criterion as was done in the past.

New test standards should be set whenever a testing procedure is adopted that is judged to be meaningfully different from previous testing procedures.

A standard setting for the re-designed APA was conducted June 9–12, 2009, to describe and delineate the thresholds of performance that are indicative of APA Partially Proficient, Proficient, and Advanced Proficient performance for Language Arts Literacy and Mathematics in grades 3–8 and 11, and for Science in grades 4, 8, and high school (grades 9,10, or 11). Results of these standard setting studies were used to formulate recommendations to the Commissioner of Education and the New Jersey State Board of Education for the adoption of the cut scores (i.e., proficiency levels). In late June and early July, the standard setting panelists' recommendations were reviewed by the senior staff in the Office of State Assessments and the Office of Special Education Programs, the Assistant Commissioner for the Division of Student Services, the Deputy Commissioner, and the Commissioner. The review led to some modifications to the panels' recommended cut scores, chiefly affecting the advanced proficient cut points. These cut scores were presented to the State Board of Education on July 15, 2009, and approved unanimously by resolution.

## Scoring Process

The entries of the APA portfolio are scored based on three dimensions:

**Complexity:** Evaluates how closely the assessed grade-level CPIs link to the CCCS. The CPI links vary by complexity and difficulty in relation (Matched, Near, Far) to the CPI.

**Performance:** Evaluates the student's accuracy performing the skills represented in the CPI links.

**Independence:** Evaluates the extent to which the student completed test items (questions/tasks elements) independently.

Complexity is the expectation level at which the student should perform the skill (remembering, understanding, applying, analyzing, evaluating and creating). Difficulty involves the number of concepts, skills, or ideas on which the student will be working or the type of adaptations and supports in place. Performance measures how well the student has demonstrated the skill specified in the CPI Link within the collection periods.

To score the portfolios, trained expert scorers used a scoring rubric designed to measure student performance on the skill, the level of independence when performing the skill, and the relationship of the skill to the grade level cumulative progress indicator.

A proficiency classification for each content area is derived by combining the scores of the three dimensions. Performance contributes twice as many points as Complexity and Independence to the total score. Each content area assessed receives a proficiency level. The three proficiency levels are:

**Advanced Proficient** exceeded the level of proficiency  
**Proficient** met the state level of proficiency  
**Partially Proficient** is below the state minimum level of proficiency.

Scores are reported by content area. Entries that are inappropriate, missing, or when the student took the general assessment in a content area, are reported as unscorable. If all entries in a content area are unscorable, then the Proficiency Level, Complexity subtotal and total, Performance subtotal and total, and Independence subtotal and total are reported as Void. Of the required four entries, only one scorable entry is required to assign a proficiency level. If the “subject portfolio” contains only one scorable entry, the total score and proficiency level are reported based on the dimension scores of that entry.

The proficiency level classification allows the APA results to be combined with other state assessment results for accountability purposes as required by the United States Department of Education.

It is important to recognize that the APA system does not report scale scores. The data provided are the key components when interpreting the portfolio results. The APA scores are based solely on the information provided in the individual portfolio submitted. Therefore, it may not be possible to compare these scores to other APA students and students taking the general assessments. Scale scores are not appropriate for use for the APA system so there are no issues of equating involved. There are no sets of test items; therefore, there are no item difficulties, nor is there a need to equate test scores from year to year.

This executive summary includes four tables derived from the statewide summary for the 2009 APA. The state summary data file and the state level Performance by Demographic Group reports are produced and posted on the NJDOE website. The Performance by Demographic Group reports show additional columns including the number of portfolios processed and the percentages of students who scored at the Partially Proficient, Proficient, and Advanced Proficient level. Values are suppressed and an asterisk is printed when the number of students with valid scores for a particular group is greater than zero but 10 or less.

Table 1 in this executive summary provides the number of participating APA students with valid scores and the percent of students at each APA proficiency level. The percentages may not total to one hundred due to rounding.

As seen in the Table 1 summary data, a total of 8,354 students were evaluated by the 2009 APA. Of these, 7,865 students had valid Language Arts Literacy scores, 7,776 students had valid Mathematics scores, and 2,687 students had valid Science scores. Science was assessed in grade 4, in grade 8, and for high school in grade 9, 10, or 11, if the student was enrolled in a biology course.

A small number of Grade 12 students participated in the high school level APA because they are either (1) students new to the state for whom IEP team determines the APA is the appropriate assessment, or (2) students who were juniors last year and should have participated in the APA last year but did not. Results of these students were extracted in order to report results of the Grade 11 students properly.

Tables 2 through 4 present the grade level performance by demographic groups for subject areas assessed. Results are presented for the total student group and the following demographic variables:

limited English proficient status, gender, ethnicity, economic status, and migrant status. These tables show the number of students with valid scores and the percentage of students who scored at or above Proficient on their portfolios. This percentage, the students in Proficient or Advanced Proficient, was calculated by subtracting the percentage of students in Partially Proficient from one hundred.

Students are counted in the Total Students category only once, but are counted in as many other categories that apply. Some students might not be included in a gender group because of incomplete or missing information. Students with only one ethnic code are reported in the appropriate ethnic group. Examiners were asked to code all categories applicable to indicate a student's ethnicity. Students with multiple ethnic codes or no ethnic code (unspecified) are counted in the category called "Other." Limited English Proficient (LEP) is reported as LEP (Current plus Former) with two subcategories: Current LEP and Former LEP.

The demographic information originates from the data collected on the APA scan sheets submitted for the students by school districts. Demographic information was reviewed by the school district personnel prior to reporting, allowing them an opportunity to correct any errors.

### **Highlights from the 2009 APA Performance Results**

Tables 2, 3, and 4 present the number of students with valid scores and the percentage of APA students who scored at or above Proficient on their portfolios in the tested grade levels. Statewide results are shown in Table 2 for Language Arts Literacy, Table 3 for Mathematics, and Table 4 for Science. Total results are summarized as follows:

#### Language Arts Literacy:

- Grade 3 – 69.3%
- Grade 4 – 62.9%
- Grade 5 – 57.9%
- Grade 6 – 63.4%
- Grade 7 – 60.8%
- Grade 8 – 57.4%
- Grade 11 – 60.4%

#### Mathematics:

- Grade 3 – 61.9%
- Grade 4 – 55.1%
- Grade 5 – 62.2%
- Grade 6 – 58.3%
- Grade 7 – 60.3%
- Grade 8 – 59.4%
- Grade 11 – 49.9%

#### Science

- Grade 4 – 52.2%
- Grade 8 – 58.7%
- Grade 11 – 55.1%

For high school, science was assessed in Grades 9, 10, or 11, depending on the grade in which a student received Biology instruction. The greatest number of students with valid scores was 503 students in Grade 11. Since much smaller numbers of students in Grades 9 and 10 took Science, the discussion is limited to the Grade 11 group.

**LEP Status** More than 98% of APA students were not current Limited English Proficient (LEP) students. For the following summary of LEP students' performance, LEP is defined as current and former LEP students combined. The greatest numbers of LEP students were in Language Arts Literacy and Mathematics in Grade 7. Most LEP students were current LEP students rather than former LEP students. In Language Arts Literacy, the percentage of LEP students scoring at or above Proficient ranged from 85.0% for Grade 6 students to 60.0% for Grade 4 students. In Mathematics, the percentage of LEP students scoring at or above Proficient varied from 80% and above for students in Grades 5 and 11 to 66.7% for Grade 3 students.

**Gender** The number of portfolios processed indicates there were about twice as many male students taking the APA as female students. The percentage of male students decreased from 70.9% at Grade 3, to 70.2% at Grade 4, and to 67.6% at Grade 5. The percentage of male students was 67.7% at Grade 6, 64.0% at Grade 7, 64.8% at Grade 8, and 66.1% at Grade 11. Overall, 67.3% were male students and 32.7% were female students.

**Language Arts Literacy:**

For Grades 3, 4, 5, and 7, the percentage of female students scoring at or above Proficient was similar to the percentage of male students scoring at or above Proficient. The greatest difference was at Grade 6 with 58.0% of the females and 65.9% of the male students scoring at or above Proficient. At Grade 8, 54.7% of the females and 58.6% of the males scored at or above Proficient. At Grade 11, 58.1% of the females and 61.6% of the males scored at or above Proficient.

**Mathematics:**

For Grades 3, 7, and 11, the percentages of female students and male students scoring at or above Proficient was similar. At Grade 4, 47.5% of the females and 58.3% of the males scored at or above Proficient. At Grade 5, 56.6% of the females and 64.9% of the males scored at or above Proficient. At Grade 6, 52.9% of the females and 60.9% of the males scored at or above Proficient. At Grade 8, 56.0% of the females received scores at or above Proficient and 61.2% of the males scored at or above Proficient.

**Science:**

The greatest difference was at Grade 4 with 47.6% of females scoring at or above Proficient and 54.2% of the male students scoring at or above Proficient. At Grade 8, 55.3% of the females and 60.4% of the males scored at or above Proficient. For Grade 11, the percentage of female students scoring at or above Proficient was similar to the percentage of male students with 53.2% of females and 56.1% of male students scoring at or above Proficient.

## **Ethnicity**

The range of the number of APA students with valid scores by ethnicity groups varied as follows:

- White** 592 students in Grade 11 Mathematics to 484 students in Grade 4 Science
- Black** 287 students in Grade 5 Language Arts Literacy to 245 students each in Grades 4 and 8 Science, and 110 students in Grade 11 Science
- Asian** 83 students in Grade 3 Language Arts Literacy to 47 students in Grade 11 Language Arts Literacy and Mathematics, and 22 students in Grade 11 Science
- Hispanic** 273 students in Grade 3 Language Arts Literacy to 186 students in Grade 8 Science and 82 students in Grade 11 Science
- Other** 18 students in Grade 11 Language Arts Literacy and Mathematics to 10 or fewer students in all content areas of Grade 8

Since 10 or fewer students in the Native Hawaiian or Pacific Islander and American Indian or Alaskan Native ethnic groups took the APA, data for these groups were not reported.

For high school, science was required only for students in Grades 9, 10, and 11 enrolled in a biology course; the total number of students with valid scores was 55 in Grade 9, 109 in Grade 10, and 503 in Grade 11. Of the total number of 667 students, 370 students were white, 146 were Black, and 97 students were Hispanic.

### **Language Arts Literacy:**

For Grade 3, the percentage of students scoring at or above Proficient level ranged from 85.7% of the Other student group to 66.7% of the Black and Hispanic student groups. (The percentages for the ethnic groups not stated fell between the percentages of the noted ethnic groups – in Grade 3, 72.3% of the Asian students and 71.2% of the White students.) For Grade 4, the percentages ranged from 64.4% of the White students to 56.1% of the Asian student group. The Grade 5 percentages ranged from 60.5% for Asian students to 52.9% for the Other student group. The Grade 6 percentages ranged from 68.9% for White students to 53.8% for Other students. The Grade 7 percentages ranged from 66.7% of the Other student group to 56.0% of Black students. The Grade 8 percentages ranged from 65.6% of Asian students to 49.4% of Black students. The Grade 11 percentages ranged from 65.1% of the Black student group to 38.9% of the Other student group.

### **Mathematics:**

For Grade 3, the percentage of students scored at or above Proficient level ranged from 64.3% of the Other student group to 56.2% of the Asian student group. The percentage of students scoring at or above Proficient level for Grade 4 ranged from 56.0% of the White student group to 50.0% of the Other student group. For Grade 5, the percentage ranged from 65.4% of the White student group to 55.4% of the Black student group. For Grade 6, the percentage ranged from 60.9% of the White student group to 41.7% of the Other student group. For Grade 7, the percentage ranged from 63.4% of the White student group to 56.2% of the Hispanic student group. For Grade 8, the percentage ranged from 65.0% of the Asian student group to 53.5% of the Black student group. For Grade 11, the percentage ranged from 52.9% of the White student group to 34.0% of Asian student group.

### **Science:**

For Grade 4, the percentage ranged from 58.4% of the Black students to 41.3% of the Asian students. The percentage of students scoring at or above Proficient level for Grade 8 ranged from 71.7% of the Asian students to 52.2% of the Hispanic student group. The percentage of Grade 11 Science students who scored at or above Proficient level ranged from 58.4% of White students to 40.9% of the Asian student group.

**Economic Status** The number of portfolios processed indicates the number of economically disadvantaged students taking the APA was approximately one-half of the number of non-economically disadvantaged students. The greatest percentage (34.5%) of economically disadvantaged students took the APA Grade 7 and the smallest percentage (29.1%) of economically disadvantaged students took the APA Grade 11.

### **Language Arts Literacy:**

Non-economically disadvantaged students generally did better than economically disadvantaged students. The greatest difference was at Grade 8 with 59.8% of non-economically disadvantaged students and 52.2% of economically disadvantaged students scoring at or above Proficient. However, for Grades 4 and 7, a slightly greater percentage of the economically disadvantaged students scored better than the non-economically disadvantaged students. At Grade 4, 64.4% of the economically disadvantaged students and 62.2% of the non-economically disadvantaged students scored at or above Proficient. At Grade 7, 62.2% of the economically disadvantaged students and 60.0% of the non-economically disadvantaged students scored at or above Proficient.

### **Mathematics:**

Similar to Language Arts Literacy, the percentage of non-economically disadvantaged students scoring at or above Proficient was generally greater than the percentage of economically disadvantaged students scoring at or above Proficient. The greatest difference was at Grade 7 with 62.2% of the non-economically

disadvantaged students and 56.5% of the economically disadvantaged students scoring at or above Proficient. For Grades 6 and 11, the percentage of economically disadvantaged students was slightly greater than the percentage of non-economically disadvantaged students scoring at or above Proficient. The greater difference was at Grade 11 with 50.9% of the economically disadvantaged students scoring at or above Proficient and 49.5% of the non-economically disadvantaged students scoring at or above Proficient.

**Science:**

The non-economically disadvantaged students did better than the economically disadvantaged group in all grades. The greatest difference was at Grade 11 with 57.3% of the non-economically disadvantaged and 47.3% of the economically disadvantaged students scoring at or above Proficient. However, for Grade 4, the percentages were nearly the same for the two groups: 52.1% of the economically disadvantaged students scored at or above Proficient and 52.3% of the non-economically disadvantaged students scored at or above Proficient.

**Migrant Status** Only Non-Migrant data appear on this report. Since three or fewer migrant students took the APA in each grade and content area, data are suppressed for student confidentiality.

**Reporting Rules for APA State Summary**

In order to safeguard student confidentiality, certain information is suppressed in the state summary files according to the following reporting rules:

- Data are not reported where the number of students with valid scores for a particular group is greater than zero but less than 11.
- Data are not reported when it is otherwise possible to identify individual student performance.

**Table 1**  
**2009 New Jersey Alternate Proficiency Assessment**  
**Number of Valid Scores and Percent of Students at Each APA Proficiency Level**

YEAR	Number of Portfolios Processed	LANGUAGE ARTS LITERACY				MATHEMATICS				SCIENCE			
		Number of Valid Scores	% Partially Proficient	% Proficient	% Advanced Proficient	Number of Valid Scores	% Partially Proficient	% Proficient	% Advanced Proficient	Number of Valid Scores	% Partially Proficient	% Proficient	% Advanced Proficient
Grade 3 2009	1219	1190	30.7	47.6	21.7	1164	38.1	43	18.9	-	-	-	-
Grade 4 2009	1132	1092	37.1	52.1	10.8	1064	44.9	33.1	22.0	1009	47.8	49.7	2.6
Grade 5 2009	1147	1101	42.1	50.9	7.0	1084	37.8	38.6	23.6	-	-	-	-
Grade 6 2009	1133	1093	36.6	51.8	11.6	1079	41.7	42.1	16.2	-	-	-	-
Grade 7 2009	1158	1111	39.2	45.9	14.9	1092	39.7	43.5	16.8	-	-	-	-
Grade 8 2009	1135	1079	42.6	48.4	9.0	1085	40.6	46.6	12.8	1011	41.3	42.8	15.8
Grade 9*	57	-	-	-	-	-	-	-	-	55	61.8	27.3	10.9
Grade 10*	109	-	-	-	-	-	-	-	-	109	28.4	57.8	13.8
Grade 11* 2009	1187	1125	39.6	34.0	26.4	1136	50.1	33.5	16.5	503	44.9	46.5	8.5
Grade 12 2009	77	74	58.1	31.1	10.8	72	70.8	25.0	4.2	-	-	-	-
All Grades 2009	8354	7865	38.4	47.0	14.6	7776	42.1	40.0	18.0	2687	44.3	46.4	9.3

\*In 2009, the APA assessed Science in grades 9, 10, or 11, depending on the grade in which a student received Biology instruction.

**Table 2**  
**2009 New Jersey Alternate Proficiency Assessment**  
**Statewide Performance by Demographic Groups**  
**Language Arts Literacy**

	GRADE 3		GRADE 4		GRADE 5		GRADE 6		GRADE 7		GRADE 8		GRADE 11	
	Number of Students with Valid Scores	% At or Above Proficient	Number of Students with Valid Scores	% At or Above Proficient	Number of Students with Valid Scores	% At or Above Proficient	Number of Students with Valid Scores	% At or Above Proficient	Number of Students with Valid Scores	% At or Above Proficient	Number of Students with Valid Scores	% At or Above Proficient	Number of Students with Valid Scores	% At or Above Proficient
<b>STATE TOTAL</b>	1,190	69.3	1,092	62.9	1,101	57.9	1,093	63.4	1,111	60.8	1,079	57.4	1,125	60.4
<b>LEP Status</b>														
LEP(Current & Former)	17	76.5	20	60.0	21	81.0	20	85.0	29	69.0	*	*	*	*
Current LEP	16	75.0	16	56.2	20	80.0	16	81.2	20	65.0	*	*	*	*
Former LEP	*	*	*	*	*	*	*	*	*	*	0	NA	*	*
Not Current LEP	1,174	69.3	1,076	63.0	1,081	57.4	1,077	63.1	1,091	60.7	1,075	57.4	1,117	60.4
<b>Gender</b>														
Female	343	68.2	320	62.2	347	56.5	348	58.0	399	59.4	369	54.7	382	58.1
Male	843	70.1	767	63.5	753	58.6	745	65.9	712	61.5	708	58.6	742	61.6
<b>Ethnicity</b>														
White	541	71.2	531	64.4	517	59.0	530	68.9	553	61.8	553	61.5	584	60.4
Black	270	66.7	261	62.1	287	56.4	250	58.8	259	56.0	255	49.4	258	65.1
Asian	83	72.3	66	56.1	76	60.5	71	60.6	55	58.2	61	65.6	47	55.3
Pacific Islander	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Hispanic	273	66.7	210	62.4	195	55.9	222	57.7	226	63.7	203	53.7	214	57.5
Amer.Indian/AK Native	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Other	14	85.7	15	60.0	17	52.9	13	53.8	15	66.7	*	*	18	38.9
<b>Economic Status</b>														
Disadvantaged	383	68.9	340	64.4	349	53.6	337	60.5	389	62.2	343	52.2	337	58.2
Non-Disadvantaged	807	69.5	752	62.2	752	59.8	756	64.7	722	60.0	736	59.8	788	61.3
<b>Migrant Status</b>														
Migrant	0	NA	0	NA	*	*	*	*	0	NA	0	NA	0	NA
Non-Migrant	1,190	69.3	1,092	62.9	1,100	57.8	1,092	63.4	1,111	60.8	1,079	57.4	1,125	60.4
*Values are suppressed for student counts of 10 or less.														

**Table 3**  
**2009 New Jersey Alternate Proficiency Assessment**  
**Statewide Performance by Demographic Groups**  
**Mathematics**

	GRADE 3		GRADE 4		GRADE 5		GRADE 6		GRADE 7		GRADE 8		GRADE 11	
	Number of Students with Valid Scores	% At or Above Proficient	Number of Students with Valid Scores	% At or Above Proficient	Number of Students with Valid Scores	% At or Above Proficient	Number of Students with Valid Scores	% At or Above Proficient	Number of Students with Valid Scores	% At or Above Proficient	Number of Students with Valid Scores	% At or Above Proficient	Number of Students with Valid Scores	% At or Above Proficient
<b>STATE TOTAL</b>	1,164	61.9	1,064	55.1	1,084	62.2	1,079	58.3	1,092	60.3	1,085	59.4	1,136	49.9
<b>LEP Status</b>														
LEP(Current & Former)	15	66.7	17	70.6	19	84.2	21	71.4	25	76.0	*	*	11	81.8
Current LEP	15	66.7	12	75.0	19	84.2	17	64.7	18	77.8	*	*	*	*
Former LEP	*	*	*	*	*	*	*	*	*	*	0	NA	0	NA
Not Current LEP	1,149	61.9	1,052	54.8	1,065	61.8	1,062	58.2	1,074	60.0	1,081	59.6	1,127	49.6
<b>Gender</b>														
Female	336	60.4	314	47.5	346	56.6	348	52.9	398	59.0	377	56.0	390	49.2
Male	824	62.9	744	58.3	737	64.9	731	60.9	694	61.0	706	61.2	745	50.3
<b>Ethnicity</b>														
White	524	63.4	518	56.0	511	65.4	519	60.9	547	63.4	559	61.9	592	52.9
Black	270	61.5	257	55.3	280	55.4	247	56.7	257	57.6	260	53.5	264	48.5
Asian	80	56.2	64	51.6	73	64.4	74	56.8	55	58.2	60	65.0	47	34.0
Pacific Islander	*	*	*	*	*	*	*	*	*	*	*	*	0	NA
Hispanic	267	61.4	202	54.5	194	61.3	220	55.0	217	56.2	199	58.3	210	48.1
Amer.Indian/AK Native	*	*	*	*	*	*	*	*	*	*	*	*	0	NA
Other	14	64.3	14	50.0	17	64.7	12	41.7	13	61.5	*	*	18	38.9
<b>Economic Status</b>														
Disadvantaged	377	60.5	329	53.8	344	59.9	329	58.7	372	56.5	349	57.6	332	50.9
Non-Disadvantaged	787	62.6	735	55.6	740	63.2	750	58.1	720	62.2	736	60.3	804	49.5
<b>Migrant Status</b>														
Migrant	0	NA	0	NA	*	*	*	*	0	NA	0	NA	0	NA
Non-Migrant	1,164	61.9	1,064	55.1	1,083	62.1	1,078	58.3	1,092	60.3	1,085	59.4	1,136	49.9
*Values are suppressed for student counts of 10 or less.														

**Table 4**  
**2009 New Jersey Alternate Proficiency Assessment**  
**Statewide Performance by Demographic Groups**  
**Science**

	GRADE 4		GRADE 8		GRADE 9		GRADE 10		GRADE 11	
	Number of Students with Valid Scores	% At or Above Proficient	Number of Students with Valid Scores	% At or Above Proficient	Number of Students with Valid Scores	% At or Above Proficient	Number of Students with Valid Scores	% At or Above Proficient	Number of Students with Valid Scores	% At or Above Proficient
<b>STATE TOTAL</b>	1,009	52.2	1,011	58.7	55	38.2	109	71.6	503	55.1
<b>LEP Status</b>										
LEP(Current & Former)	15	40.0	*	*	0	NA	0	NA	*	*
Current LEP	11	36.4	*	*	0	NA	0	NA	*	*
Former LEP	*	*	0	NA	0	NA	0	NA	*	*
Not Current LEP	998	52.4	1,007	58.8	55	38.2	109	71.6	496	54.8
<b>Gender</b>										
Female	294	47.6	342	55.3	15	33.3	36	66.7	158	53.2
Male	710	54.2	667	60.4	40	40.0	73	74.0	344	56.1
<b>Ethnicity</b>										
White	484	51.9	514	61.7	27	51.9	64	81.2	279	58.4
Black	245	58.4	245	54.7	16	25.0	20	45.0	110	58.2
Asian	63	41.3	60	71.7	*	*	*	*	22	40.9
Pacific Islander	*	*	*	*	0	NA	0	NA	*	*
Hispanic	194	50.0	186	52.2	*	*	15	66.7	82	46.3
Amer.Indian/AK Native	*	*	*	*	*	*	0	NA	*	*
Other	15	53.3	*	*	*	*	*	*	*	*
<b>Economic Status</b>										
Disadvantaged	317	52.1	311	55.6	15	20.0	23	56.5	110	47.3
Non-Disadvantaged	692	52.3	700	60.0	40	45.0	86	75.6	393	57.3
<b>Migrant Status</b>										
Migrant	0	NA								
Non-Migrant	1,009	52.2	1,011	58.7	55	38.2	109	71.6	503	55.1
*Values are suppressed for student counts of 10 or less.										

**APPENDIX K: 2009 Frequency Tables of Proficiency Levels by Disability Category**

### Grade 3 Proficiency Levels by Disability Category

	LAL				Math				SCI			
	Advanced Proficient	Proficient	Partially Proficient	Total	Advanced Proficient	Proficient	Partially Proficient	Total	Advanced Proficient	Proficient	Partially Proficient	Total
<b>Auditorily Impaired</b>	2	2	2	6	--	3	3	6	--	--	6	6
<b>Autistic</b>	108	229	122	459	92	210	157	459	--	--	459	459
<b>Blank or Double Grid</b>	--	3	12	15	1	3	11	15	--	--	15	15
<b>Cognitively Impaired</b>	15	58	44	117	19	47	51	117	--	--	117	117
<b>Communication Impaired</b>	16	27	18	61	13	22	26	61	--	--	61	61
<b>Emotionally Disturbed</b>	1	1	1	3	1	1	1	3	--	--	3	3
<b>Multiply Disabled</b>	91	206	173	470	69	184	217	470	--	--	470	470
<b>Orthopedically Impaired</b>	1	--	--	1	1	--	--	1	--	--	1	1
<b>Other Health Impaired</b>	12	18	11	41	11	16	14	41	--	--	41	41
<b>Social Maladjustment</b>	--	--	--	0	--	--	--	0	--	--	--	0
<b>Specific Learning Disability</b>	12	22	9	43	13	14	16	43	--	--	43	43
<b>Speech-Language Services Only</b>	--	--	--	0	--	--	--	0	--	--	--	0
<b>Traumatic Brain Injury</b>	--	1	1	2	--	1	1	2	--	--	2	2
<b>Visually Impaired</b>	--	1	--	1	--	1	--	1	--	--	1	1
<b>Total</b>	258	568	393	1219	220	502	497	1219	0	0	1219	1219

**Grade 4 Proficiency Levels by Disability Category**

	LAL				Math				SCI			
	Advanced Proficient	Proficient	Partially Proficient	Total	Advanced Proficient	Proficient	Partially Proficient	Total	Advanced Proficient	Proficient	Partially Proficient	Total
<b>Auditorily Impaired</b>	--	--	4	4	--	--	4	4	--	--	4	4
<b>Autistic</b>	38	213	151	402	91	140	171	402	7	199	196	402
<b>Blank or Double Grid</b>	2	5	10	17	4	1	12	17	1	7	9	17
<b>Cognitively Impaired</b>	11	62	49	122	22	42	58	122	4	46	72	122
<b>Communication Impaired</b>	17	29	24	70	28	16	26	70	6	29	35	70
<b>Emotionally Disturbed</b>	--	3	1	4	1	2	1	4	--	3	1	4
<b>Multiply Disabled</b>	37	214	170	421	64	129	228	421	6	185	230	421
<b>Orthopedically Impaired</b>	1	2	1	4	2	1	1	4	--	2	2	4
<b>Other Health Impaired</b>	4	25	16	45	9	14	22	45	1	16	28	45
<b>Social Maladjustment</b>	--	--	--	0	--	--	--	0	--	--	--	0
<b>Specific Learning Disability</b>	8	17	12	37	12	6	19	37	1	12	24	37
<b>Speech-Language Services Only</b>	--	--	--	0	--	--	--	0	--	--	--	0
<b>Traumatic Brain Injury</b>	--	2	3	5	1	2	2	5	--	3	2	5
<b>Visually Impaired</b>	--	--	1	1	--	--	1	1	--	--	1	1
<b>Total</b>	118	572	442	1132	234	353	545	1132	26	502	604	1132

**Grade 5 Proficiency Levels by Disability Category**

	LAL				Math				SCI			
	Advanced Proficient	Proficient	Partially Proficient	Total	Advanced Proficient	Proficient	Partially Proficient	Total	Advanced Proficient	Proficient	Partially Proficient	Total
<b>Auditorily Impaired</b>	--	6	1	7	1	2	4	7	--	--	7	7
<b>Autistic</b>	19	191	128	338	86	131	121	338	--	--	338	338
<b>Blank or Double Grid</b>	1	3	2	6	1	2	3	6	--	--	6	6
<b>Cognitively Impaired</b>	8	67	67	142	28	55	59	142	--	--	142	142
<b>Communication Impaired</b>	9	37	20	66	19	22	25	66	--	--	66	66
<b>Emotionally Disturbed</b>	--	3	5	8	1	3	4	8	--	--	8	8
<b>Multiply Disabled</b>	26	229	248	503	96	182	225	503	--	--	503	503
<b>Orthopedically Impaired</b>	--	1	--	1	--	--	1	1	--	--	1	1
<b>Other Health Impaired</b>	5	11	14	30	10	8	12	30	--	--	30	30
<b>Social Maladjustment</b>	--	--	--	0	--	--	--	0	--	--	--	0
<b>Specific Learning Disability</b>	7	13	15	35	12	12	11	35	--	--	35	35
<b>Speech-Language Services Only</b>	--	--	--	0	--	--	--	0	--	--	--	0
<b>Traumatic Brain Injury</b>	2	2	6	10	2	3	5	10	--	--	10	10
<b>Visually Impaired</b>	--	--	1	1	--	--	1	1	--	--	1	1
<b>Total</b>	77	563	507	1147	256	420	471	1147	0	0	1147	1147

**Grade 6 Proficiency Levels by Disability Category**

	LAL				Math				SCI			
	Advanced Proficient	Proficient	Partially Proficient	Total	Advanced Proficient	Proficient	Partially Proficient	Total	Advanced Proficient	Proficient	Partially Proficient	Total
<b>Auditorily Impaired</b>	--	4	5	9	1	2	6	9	--	--	9	9
<b>Autistic</b>	52	183	116	351	59	152	140	351	--	--	351	351
<b>Blank or Double Grid</b>	2	6	3	11	1	4	6	11	--	--	11	11
<b>Cognitively Impaired</b>	13	63	64	140	20	54	66	140	--	--	140	140
<b>Communication Impaired</b>	12	27	13	52	16	24	12	52	--	--	52	52
<b>Emotionally Disturbed</b>	1	2	1	4	2	1	1	4	--	--	4	4
<b>Multiply Disabled</b>	36	233	198	467	54	180	233	467	--	--	467	467
<b>Orthopedically Impaired</b>	--	--	1	1	--	--	1	1	--	--	1	1
<b>Other Health Impaired</b>	2	19	14	35	7	18	10	35	--	--	35	35
<b>Social Maladjustment</b>	--	--	--	0	--	--	--	0	--	--	--	0
<b>Specific Learning Disability</b>	8	28	17	53	15	19	19	53	--	--	53	53
<b>Speech-Language Services Only</b>	--	--	--	0	--	--	--	0	--	--	--	0
<b>Traumatic Brain Injury</b>	3	2	4	9	2	2	5	9	--	--	9	9
<b>Visually Impaired</b>	--	1	--	1	--	--	1	1	--	--	1	1
<b>Total</b>	129	568	436	1133	177	456	500	1133	0	0	1133	1133

### Grade 7 Proficiency Levels by Disability Category

	LAL				Math				SCI			
	Advanced Proficient	Proficient	Partially Proficient	Total	Advanced Proficient	Proficient	Partially Proficient	Total	Advanced Proficient	Proficient	Partially Proficient	Total
<b>Auditorily Impaired</b>	--	--	--	0	--	--	--	0	--	--	--	0
<b>Autistic</b>	32	154	113	299	46	135	118	299	--	--	299	299
<b>Blank or Double Grid</b>	--	3	6	9	1	4	4	9	--	--	9	9
<b>Cognitively Impaired</b>	17	65	74	156	13	64	79	156	--	--	156	156
<b>Communication Impaired</b>	12	16	19	47	15	15	17	47	--	--	47	47
<b>Emotionally Disturbed</b>	1	1	3	5	2	1	2	5	--	--	5	5
<b>Multiply Disabled</b>	58	237	223	518	73	215	230	518	--	--	518	518
<b>Orthopedically Impaired</b>	--	2	1	3	--	2	1	3	--	--	3	3
<b>Other Health Impaired</b>	15	11	9	35	13	10	12	35	--	--	35	35
<b>Social Maladjustment</b>	--	--	--	0	--	--	--	0	--	--	--	0
<b>Specific Learning Disability</b>	27	21	27	75	22	25	28	75	--	--	75	75
<b>Speech-Language Services Only</b>	--	--	--	0	--	--	--	0	--	--	--	0
<b>Traumatic Brain Injury</b>	3	3	5	11	1	6	4	11	--	--	11	11
<b>Visually Impaired</b>	--	--	--	0	--	--	--	0	--	--	--	0
<b>Total</b>	165	513	480	1158	186	477	495	1158	0	0	1158	1158

**Grade 8 Proficiency Levels by Disability Category**

	LAL				Math				SCI			
	Advanced Proficient	Proficient	Partially Proficient	Total	Advanced Proficient	Proficient	Partially Proficient	Total	Advanced Proficient	Proficient	Partially Proficient	Total
<b>Auditorily Impaired</b>	--	1	3	4	--	--	4	4	--	--	4	4
<b>Autistic</b>	21	164	98	283	24	161	98	283	36	146	101	283
<b>Blank or Double Grid</b>	1	2	4	7	--	3	4	7	1	3	3	7
<b>Cognitively Impaired</b>	14	70	95	179	18	62	99	179	20	71	88	179
<b>Communication Impaired</b>	8	19	9	36	14	10	12	36	14	6	16	36
<b>Emotionally Disturbed</b>	--	3	3	6	2	1	3	6	2	1	3	6
<b>Multiply Disabled</b>	30	221	247	498	55	224	219	498	64	191	243	498
<b>Orthopedically Impaired</b>	--	1	--	1	--	1	--	1	1	--	--	1
<b>Other Health Impaired</b>	6	10	12	28	8	8	12	28	9	3	16	28
<b>Social Maladjustment</b>	--	--	--	0	--	--	--	0	--	--	--	0
<b>Specific Learning Disability</b>	16	26	34	76	17	29	30	76	13	7	56	76
<b>Speech-Language Services Only</b>	--	--	--	0	--	--	--	0	--	--	--	0
<b>Traumatic Brain Injury</b>	1	7	7	15	2	7	6	15	2	6	7	15
<b>Visually Impaired</b>	--	2	--	2	--	1	1	2	--	1	1	2
<b>Total</b>	97	526	512	1135	140	507	488	1135	162	435	538	1135

**Grade 9 Proficiency Levels by Disability Category**

	LAL				Math				SCI			
	Advanced Proficient	Proficient	Partially Proficient	Total	Advanced Proficient	Proficient	Partially Proficient	Total	Advanced Proficient	Proficient	Partially Proficient	Total
<b>Auditorily Impaired</b>	--	--	2	2	--	--	2	2	--	1	1	2
<b>Autistic</b>	--	--	7	7	--	--	7	7	1	3	3	7
<b>Blank or Double Grid</b>	--	--	2	2	--	--	2	2	--	--	2	2
<b>Cognitively Impaired</b>	--	--	15	15	--	--	15	15	1	1	13	15
<b>Communication Impaired</b>	--	--	2	2	--	--	2	2	1	1	--	2
<b>Emotionally Disturbed</b>	--	--	--	0	--	--	--	0	--	--	--	0
<b>Multiply Disabled</b>	--	--	21	21	--	--	21	21	3	6	12	21
<b>Orthopedically Impaired</b>	--	--	--	0	--	--	--	0	--	--	--	0
<b>Other Health Impaired</b>	--	--	3	3	--	--	3	3	--	1	2	3
<b>Social Maladjustment</b>	--	--	--	0	--	--	--	0	--	--	--	0
<b>Specific Learning Disability</b>	--	--	5	5	--	--	5	5	--	2	3	5
<b>Speech-Language Services Only</b>	--	--	--	0	--	--	--	0	--	--	--	0
<b>Traumatic Brain Injury</b>	--	--	--	0	--	--	--	0	--	--	--	0
<b>Visually Impaired</b>	--	--	--	0	--	--	--	0	--	--	--	0
<b>Total</b>	0	0	57	57	0	0	57	57	6	15	36	57

**Grade 10 Proficiency Levels by Disability Category**

	LAL				Math				SCI			
	Advanced Proficient	Proficient	Partially Proficient	Total	Advanced Proficient	Proficient	Partially Proficient	Total	Advanced Proficient	Proficient	Partially Proficient	Total
<b>Auditorily Impaired</b>	--	--	--	0	--	--	--	0	--	--	--	0
<b>Autistic</b>	--	--	16	16	--	--	16	16	1	13	2	16
<b>Blank or Double Grid</b>	--	--	2	2	--	--	2	2	--	--	2	2
<b>Cognitively Impaired</b>	--	--	22	22	--	--	22	22	2	12	8	22
<b>Communication Impaired</b>	--	--	3	3	--	--	3	3	--	1	2	3
<b>Emotionally Disturbed</b>	--	--	--	0	--	--	--	0	--	--	--	0
<b>Multiply Disabled</b>	--	--	56	56	--	--	56	56	12	34	10	56
<b>Orthopedically Impaired</b>	--	--	--	0	--	--	--	0	--	--	--	0
<b>Other Health Impaired</b>	--	--	2	2	--	--	2	2	--	--	2	2
<b>Social Maladjustment</b>	--	--	--	0	--	--	--	0	--	--	--	0
<b>Specific Learning Disability</b>	--	--	6	6	--	--	6	6	--	2	4	6
<b>Speech-Language Services Only</b>	--	--	--	0	--	--	--	0	--	--	--	0
<b>Traumatic Brain Injury</b>	--	--	2	2	--	--	2	2	--	1	1	2
<b>Visually Impaired</b>	--	--	--	0	--	--	--	0	--	--	--	0
<b>Total</b>	0	0	109	109	0	0	109	109	15	63	31	109

**Grade 11 Proficiency Levels by Disability Category**

	LAL				Math				SCI			
	Advanced Proficient	Proficient	Partially Proficient	Total	Advanced Proficient	Proficient	Partially Proficient	Total	Advanced Proficient	Proficient	Partially Proficient	Total
<b>Auditorily Impaired</b>	1	4	6	11	1	4	6	11	--	1	10	11
<b>Autistic</b>	58	101	92	251	29	86	136	251	10	82	159	251
<b>Blank or Double Grid</b>	1	2	9	12	--	4	8	12	--	1	11	12
<b>Cognitively Impaired</b>	57	70	97	224	36	73	115	224	7	41	176	224
<b>Communication Impaired</b>	13	9	14	36	10	10	16	36	4	4	28	36
<b>Emotionally Disturbed</b>	1	1	2	4	--	--	4	4	--	--	4	4
<b>Multiply Disabled</b>	116	159	219	494	63	151	280	494	17	101	376	494
<b>Orthopedically Impaired</b>	2	--	--	2	--	--	2	2	--	2	--	2
<b>Other Health Impaired</b>	5	5	8	18	3	5	10	18	1	--	17	18
<b>Social Maladjustment</b>	--	--	--	0	--	--	--	0	--	--	--	0
<b>Specific Learning Disability</b>	39	29	51	119	42	41	36	119	4	2	113	119
<b>Speech-Language Services Only</b>	--	--	--	0	--	--	--	0	--	--	--	0
<b>Traumatic Brain Injury</b>	4	4	8	16	3	7	6	16	--	1	15	16
<b>Visually Impaired</b>	--	--	--	0	--	--	--	0	--	--	--	0
<b>Total</b>	297	384	506	1187	187	381	619	1187	43	235	909	1187

**Grade 12 Proficiency Levels by Disability Category**

	LAL				Math				SCI			
	Advanced Proficient	Proficient	Partially Proficient	Total	Advanced Proficient	Proficient	Partially Proficient	Total	Advanced Proficient	Proficient	Partially Proficient	Total
<b>Auditorily Impaired</b>	--	--	2	2	--	--	2	2	--	--	2	2
<b>Autistic</b>	1	3	10	14	--	5	9	14	--	--	14	14
<b>Blank or Double Grid</b>	--	1	--	1	--	--	1	1	--	--	1	1
<b>Cognitively Impaired</b>	2	11	16	29	1	6	22	29	--	--	29	29
<b>Communication Impaired</b>	1	--	2	3	--	1	2	3	--	--	3	3
<b>Emotionally Disturbed</b>	--	--	1	1	--	--	1	1	--	--	1	1
<b>Multiply Disabled</b>	3	6	11	20	1	4	15	20	--	1	19	20
<b>Orthopedically Impaired</b>	--	--	--	0	--	--	--	0	--	--	--	0
<b>Other Health Impaired</b>	--	--	--	0	--	--	--	0	--	--	--	0
<b>Social Maladjustment</b>	--	--	--	0	--	--	--	0	--	--	--	0
<b>Specific Learning Disability</b>	--	2	2	4	1	1	2	4	--	--	4	4
<b>Speech-Language Services Only</b>	--	--	--	0	--	--	--	0	--	--	--	0
<b>Traumatic Brain Injury</b>	1	--	1	2	--	1	1	2	--	--	2	2
<b>Visually Impaired</b>	--	--	1	1	--	--	1	1	--	--	1	1
<b>Total</b>	8	23	46	77	3	18	56	77	0	1	76	77

## References

- American Educational Research Association, American Psychological Association, and National Council on Measurement in Education. (1999). *Standards for Educational and Psychological Testing*. Washington, DC: Author.
- Baker, E.L., & Linn, R.L. (2002) Validity issues for accountability systems. Center for the Study of Evaluation. Technical Report 585, Los Angeles, CA.
- Browder, D.M., & Spooner, F. (2006). Teaching language arts, math, and science to students with significant cognitive disabilities. Baltimore, MD: Paul H. Brookes Publishing Co.
- Browder, D.M., Wakeman, S.Y., Flowers, C., Rickelman, R.J., Pugalee, D., & Karvonen, M. (2007). Creating access to the general curriculum with links to grade-level content for students with significant cognitive disabilities: An explication of the concept. *The Journal of Special Education*, 41(1), 2–16.
- Clayton, J., Burdge, M., Denham, A., Kleinert, H.L., & Kearns, J. (2006). A four-step process for accessing the general curriculum for students with cognitive disabilities. *Teaching Exceptional Children*, 38(5), 20–27.
- Flowers, C., Wakeman, S.Y., Browder, D.M., & Karvonen, M. (2009). Links for academic learning (LAL): A conceptual model for investigating alignment of alternate assessments based on alternate achievement standards. *Educational Measurement: Issues and Practice*. 28(1), 25–37.
- Kleinert, H.L., & Kearns, J.F. (2001) Alternate assessment: Measuring outcomes and supports for students with disabilities. Baltimore, MD: Paul H. Brookes Publishing Co.
- New Jersey Alternate Proficiency Assessment (APA) 2008–2009 Procedures Manual*. Developed by the New Jersey Department of Education, September 2008.
- U.S. Department of Education. (Revised December 21, 2007 to include modified academic achievement standards. Revised with technical edits January 12, 2009.) Standards and assessments peer review guidance: Information and examples for meeting requirements of the No Child Left Behind Act of 2001. Washington, DC: Author. [www.ed.gov/policy/elsec/guid/saaprguidance.pdf](http://www.ed.gov/policy/elsec/guid/saaprguidance.pdf).