

Personalized Alternate Assessment Portfolio
MeCAS Part II
2014–15 TECHNICAL REPORT



TABLE OF CONTENTS

CHAPTER 1	OVERVIEW	1
1.1	PURPOSE OF THIS REPORT.....	1
1.2	ORGANIZATION OF THIS REPORT.....	1
CHAPTER 2	CURRENT YEAR UPDATES.....	2
CHAPTER 3	THE STATE ASSESSMENT SYSTEM.....	3
3.1	INTRODUCTION	3
3.2	ALTERNATE ASSESSMENT BASED ON ALTERNATE ACHIEVEMENT STANDARDS.....	4
3.3	THE ALTERNATE ASSESSMENT SYSTEM	4
3.4	PURPOSES OF THE ALTERNATE ASSESSMENT SYSTEM.....	4
3.5	GENERAL FORMAT AND BACKGROUND.....	5
CHAPTER 4	THE STUDENTS.....	8
4.1	PARTICIPATION DECISION PROCESS.....	8
4.2	SUMMARY OF PARTICIPATION RATES.....	9
CHAPTER 5	TEST CONTENT.....	10
5.1	ALTERNATE GRADE LEVEL EXPECTATIONS (AGLEs)	10
5.1.1	Levels of Complexity (LoC).....	10
5.1.2	Format of the AGLEs for the PAAP	10
5.2	ACCESS TO THE GENERAL CURRICULUM.....	12
5.3	ASSESSMENT DESIGN.....	12
5.4	ASSESSMENT DIMENSIONS	16
CHAPTER 6	TEST DEVELOPMENT.....	20
6.1	GENERAL PHILOSOPHY.....	20
6.2	ROLE OF COMMITTEES IN TEST DEVELOPMENT	21
CHAPTER 7	ALIGNMENT	22
7.1	DESCRIPTION OF LINKAGES TO DIFFERENT CONTENT AREAS ACROSS GRADES.....	22
CHAPTER 8	PAAP ADMINISTRATION TRAINING	23
8.1	STEPS FOR ADMINISTRATIONS	23
8.2	STEPS IN CONSTRUCTING THE PORTFOLIO	24
CHAPTER 9	SCORING.....	29
9.1	TABLE LEADER AND SCORER RECRUITMENT AND QUALIFICATIONS	29
9.2	TABLE LEADER AND SCORER TRAINING	29
9.3	SCORING PROCESS.....	30
9.4	FLOW OF MATERIALS.....	32
9.5	SECURITY	33
9.6	SCORING RUBRIC.....	33
9.7	SCORING QUALITY CONTROL	36
9.8	CALCULATION OF REPORTED SCORES.....	36

CHAPTER 10	CLASSICAL ITEM ANALYSIS	37
10.1	DIFFICULTY AND DISCRIMINATION.....	37
10.2	STRUCTURAL RELATIONSHIP.....	39
10.3	BIAS/FAIRNESS	40
CHAPTER 11	CHARACTERIZING ERRORS ASSOCIATED WITH TEST SCORES.....	41
11.1	RELIABILITY.....	41
11.2	SUBGROUP RELIABILITY.....	42
11.3	DECISION ACCURACY AND CONSISTENCY	43
11.4	INTERRATER CONSISTENCY	45
CHAPTER 12	COMPARABILITY (SCALING AND EQUATING)	46
12.1	COMPARABILITY OF SCORES ACROSS YEARS	46
12.1.1	Reported Scores	46
12.1.2	Standard Setting	46
12.2	LINKAGES ACROSS GRADES	47
CHAPTER 13	SCORE REPORTING	49
13.1	PRIMARY REPORTS	49
13.1.1	Individual Student Reports.....	49
13.1.2	School Analysis Reports	50
13.1.3	School, SAU, and State Summary Reports	50
13.2	SCORE OF RECORD AND DECISION RULES.....	50
13.3	QUALITY ASSURANCE	50
CHAPTER 14	VALIDITY	52
14.1	EVIDENCE BASED ON TEST DEVELOPMENT AND STRUCTURE.....	52
14.2	OTHER EVIDENCE.....	53
14.3	FUTURE DIRECTIONS	53
REFERENCES		54
APPENDICES		55
APPENDIX A	2015 ALTERNATE GRADE LEVEL EXPECTATIONS	
APPENDIX B	PROCESS FOR DETERMINING THE APPROPRIATE AVENUE FOR PARTICIPATION	
APPENDIX C	2015 SCORING INSTRUCTIONS	
APPENDIX D	ITEM-LEVEL CLASSICAL STATISTICS	
APPENDIX E	ITEM-LEVEL SCORE DISTRIBUTIONS	
APPENDIX F	SUBGROUP RELIABILITY	
APPENDIX G	DECISION ACCURACY AND CONSISTENCY RESULTS	
APPENDIX H	INTERRATER CONSISTENCY	
APPENDIX I	SCORE OF RECORD	
APPENDIX J	CUMULATIVE SCORE DISTRIBUTIONS	
APPENDIX K	ACHIEVEMENT-LEVEL DISTRIBUTIONS	
APPENDIX L	SAMPLE REPORTS	
APPENDIX M	ANALYSIS AND REPORTING DECISION RULES	

CHAPTER 1 OVERVIEW

This section of the technical report provides an overview of Maine’s alternate science assessment, the Maine Educational Assessments (MEA) Alternate Science - Personalized Alternate Assessment Portfolio (PAAP), which is administered to students with significant cognitive disabilities who cannot participate in the MEA Science. Descriptions of the purpose of the PAAP, the processes utilized to develop and implement the PAAP program, and stakeholder involvement in those processes are included in this section. By comparing the intent of the PAAP with its process and design, the assessment’s validity can be evaluated. Stakeholder groups such as the PAAP Advisory Committee, item/task review committees, and content committees helped guide the development and implementation process. Teacher input in the development of the overall PAAP process is described, from the Alternate Grade Level Expectations (AGLE) design through blueprint/test design, content alignment, task development, task tryout/field-testing, teacher trainings, test administration, scoring, and standard setting.

1.1 PURPOSE OF THIS REPORT

The purpose of the report is to document the technical aspects of the 2014–15 PAAP operational implementation. Science was assessed at grades 5, 8, and 3rd year high school.

Several technical aspects of the PAAP are described in an effort to contribute to evidence supporting the validity of PAAP score interpretations. Because the interpretations of the test scores are evaluated for validity, not the test itself, this report presents documentation to substantiate intended interpretations (AERA et al., 2014). Each chapter in this section contributes important information to the validity argument by addressing one or more of the following aspects of the PAAP: task development, alignment, administration, scoring, reliability, standard setting, achievement levels, and reporting.

Standards for Educational and Psychological Testing (AERA et al., 2014) provide a framework for describing sources of evidence that should be considered when constructing an argument for assessment validity. These sources include evidence in five general areas: test content, response processes, internal structure, relationship to other variables, and consequences of testing. Although each of these sources may speak to a different aspect of validity, they are not distinct types of validity. Instead, each contributes to a body of evidence about the comprehensive validity of score interpretations

1.2 ORGANIZATION OF THIS REPORT

This report is organized based on the conceptual flow of the PAAP’s year-long process, which includes blueprint design/development, task development, administration, scoring, reporting of scores, technical characteristics, and validity. The appendices contain supporting documentation.

CHAPTER 2 CURRENT YEAR UPDATES

Beginning with the 2014–15 assessment year, the alternate assessment for English language arts/literacy and mathematics transitioned to an assessment designed by the National Center and State Collaborative (NCSC). The assessment of science was still conducted through the PAAP and was administered in the same manner as previous years.

CHAPTER 3 THE STATE ASSESSMENT SYSTEM

The Maine Comprehensive Assessment System (MeCAS) is a statewide instructionally supportive assessment system that complies with the federal requirements of No Child Left Behind (NCLB) Act and the Individuals with Disabilities Education Improvement Act, as amended (IDEA). These acts, along with state regulations, require that all students, including those with disabilities, participate in state-mandated assessments in grades 3–8 and 3rd year high school, and they are intended to hold schools accountable for the academic performance of students. Those assessments include:

- The MEA Mathematics and English Language Arts/Literacy, which assesses mathematics and ELA/literacy, at grades 3–8 and 3rd year high school.
- The MEA Science, which assesses science at grades 5, 8, and 3rd year high school.
- MEA Science Alternate (PAAP), which alternately assesses MEA Science, for a small number of students with the most significant cognitive disabilities who are unable to take part in the general science assessment.
- MEA Alternate Mathematics and English Language Arts/Literacy which assess students with the most significant cognitive disabilities who are unable to take part in the mathematics and ELA/literacy assessment successfully.

All students participate in statewide assessment in one of three ways: general assessment, general assessment with accommodations, or alternate assessment, as outlined in the following sections.

3.1 INTRODUCTION

The PAAP, like the MEA Science, is designed to provide a snapshot in time of an individual student's performance. A broader picture will emerge as the student results on the PAAP are reviewed along with results on other formative and summative assessments.

PAAP tasks are provided in the PAAP Task Bank for the science content standard levels of complexity (LoC) as described in the PAAP Alternate Grade Level Expectations (AGLEs) document (Appendix A). Tasks selected for use in an individual student's PAAP should match the instructional level at which the student is working and be designated within the PAAP AGLEs/Indicators as appropriate for his or her grade level.

The AGLE/Indicators include LoC descriptors that have been reduced in complexity to ensure access to instruction and assessment for all students.

All tasks submitted in a PAAP are corrected (by item) resulting in an overall percentage score for the task. The evidence (student work) included in a 2014–15 PAAP for science must have been generated during the PAAP test administration window: December 1, 2014–April 30, 2015.

3.2 ALTERNATE ASSESSMENT BASED ON ALTERNATE ACHIEVEMENT STANDARDS

Up to 1% of Maine students in grades tested may show academic proficiency through administration of an alternate assessment based on alternate achievement standards. The PAAP is designed for those students with such significant cognitive disabilities that they are unable to participate in the general MEA even with the best instruction and appropriate accommodations.

As previously described, the PAAP is designed under the guiding philosophy that alternate achievement standards are built on measurable, targeted skills linked to Maine's *2007 Learning Results* for science, and represent student performance at a lower level of breadth, depth, and complexity than that found in the general assessment.

3.3 THE ALTERNATE ASSESSMENT SYSTEM

Given the legislative context within which the entire statewide assessment system sits, the PAAP is, as a part of the overall MeCAS, governed by the same laws and rules that govern general assessment. Federal legislation, including the Individuals with Disabilities Education Improvement Act of 2004 (IDEA) and the No Child Left Behind (NCLB) Act, requires that students with disabilities have access to the general curriculum, with appropriate accommodations where necessary, and that they be assessed on the same general curriculum standards as all other students. For the small number of students who cannot participate in the general large-scale assessment due to their significant cognitive disabilities, the law also allows—and Maine provides—a statewide alternate assessment based on the AGLEs. Alternate achievement standards are reduced in breadth, depth, and complexity while maintaining linkage to the same general curriculum standards taught to all children.

3.4 PURPOSES OF THE ALTERNATE ASSESSMENT SYSTEM

The PAAP is designed to provide instruction and a meaningful academic assessment experience, based on the AGLEs, for those Maine students with the most significant cognitive disabilities.

The portfolio approach captures student progress in academic content over the course of a five-month window, enabling teachers and others to see evidence of this progress within the context of the instructional program they are providing. The PAAP is also intended to provide feedback to teachers on student performance, which they can use to improve instruction.

As part of this purpose, the PAAP signals to Maine special education teachers the need to maintain high academic expectations for their students and high standards in the delivery of their instructional programs. Students receive greater learning opportunities throughout their academic careers because of tight test blueprints and teacher trainings that encourage educators to move PAAP students to higher levels of complexity.

The PAAP ensures that all Maine students are appropriately included in state and federal assessment requirements and provides instructional improvement that reveals what students know and are able to do. This system aims to meet the highest technical standards possible while best serving the students participating in the assessment.

3.5 GENERAL FORMAT AND BACKGROUND

AGLE Entries submitted in a PAAP must be composed of four components:

- an Entry Slip that serves as the organizer for all student work related to a single content standard
- the required number of Task Descriptions designed to help the user understand the expectations of an individual task, how the task was administered, the prior knowledge required to perform the task, and the alignment to the specific standard and performance indicator being measured
- the required quantity of student work to serve as evidence of student performance (see Appendix A)
- a Task Summary page summarizing the Level of Accuracy and Level of Assistance

Forms for the Entry Slips and Task Descriptions have been common since 2003. From 2002 to 2004, only teacher-developed tasks were used in PAAPs. Teacher training on the PAAP process included tools to ensure alignment to the rubrics, sufficiency of evidence, and clarity for scorers. During the 2003 and 2004 scoring sessions, scorers were asked to identify tasks they saw as “exemplary”—those tasks that, clearly aligned, provided evidence of a pattern of performance and could be reliably scored. Those exemplar tasks were then reviewed by a group of teachers brought together in the summer of 2004. Members of that group made suggestions for revisions as necessary and eliminated tasks that did not meet the criteria outlined for the review process. The tasks approved by that group served as the basis for the early development of tasks to be included in an online PAAP Task Bank. A small number of tasks, based on the exemplars and finalized in form by Maine Department of Education (DOE) staff, were posted online for optional use in 2004. The number of Task Bank items was expanded in 2004–05 to allow teachers to create an entire 2005 PAAP, including reading, mathematics, and science, without using teacher-developed tasks. The use of teacher-developed tasks was still permitted, however. At each stage of this development evolution, final tasks were reviewed by members of the PAAP Work Collaborative or the PAAP Advisory Group.

The use of teacher-developed tasks was no longer permitted for the 2006–07 school year. Due to the teacher time involved and the variations in the skill levels among teachers for developing tasks, the Maine DOE contracted with Measured Progress to collaborate on the development of new tasks. The first set of tasks produced by Measured Progress was developed during 2004–05 for use in 2005–06. A second set of tasks was developed in 2005–06 for use in 2006–07. The purpose of this development was to populate an expanded version of the PAAP Task Bank for reading and mathematics.

Teachers completed a Specific Task Feedback Form to provide Measured Progress and the Maine DOE with guidance to inform further development and quality assurance of the tasks. Based on the feedback from teachers, all of the first-round PAAP tryout tasks were revised by Measured Progress and the Maine DOE. A second round of development was completed in the summer of 2006 that focused on reading, writing, and science tasks.

In 2007–08, the Task Bank became password protected and was provided solely for the use of Maine teachers developing PAAPs for their students. Because the PAAP is for students with the most significant cognitive disabilities within the Maine school population, the PAAP rubrics were revised to contain only rubric levels 1 and 2.

The 2009–10 assessment program began to move toward a required test blueprint by grade and content area. In developing the blueprint for the PAAP, care was taken to make the progression of tasks parallel to the progression of the general NECAP assessment in all content areas. Teachers were no longer allowed to freely select which AGLEs to assess. Because the Task Bank was not fully populated, teachers were asked to familiarize themselves with the test blueprints for all content areas, but to implement the test blueprint for reading only, as reading was the only content area fully populated in the Task Bank. Teachers were not penalized if they did not follow the test blueprint for reading during that assessment year.

Beginning in 2010–11 and continuing through 2013–14, the program provided a fully populated Task Bank for all content areas and enforced the required grade-level test blueprint provided to teachers in 2009–10. Teachers were no longer allowed to select AGLEs for assessment outside of the grade-level blueprint. Instead, the teachers were required to administer the AGLE entry requirements for each content area. The 2014-15 PAAP program required teachers to administer the science AGLES only, as shown below and in Figure 3-1.

Figure 3-1. 2014–15 PAAP: Content Blueprint

<i>PAAP Science Blueprint</i>	
<i>Required AGLE/Indicators by Grade Level</i>	
<i>Grade</i>	<i>Science</i>
3	
4	
5	D1, D2, E2
6	
7	
8	D4, E3, E4
3 rd Year High School	D3, E1, E5

The science portion of the Alternate MEA (PAAP) assesses two AGLEs: D, the physical setting (D1–D4), and E, the living environment (E1–E5). AGLE D, the physical setting, contains indicators that

encompass the subject matter conventionally referred to as physical, earth and space science, while E, the living environment, contains indicators related to life science.

Indicators from both the physical setting and the living environment are assessed each year in grades 5, 8, and 3rd year high school. The focus at the elementary level is on concepts that the student can directly observe, such as the Sun, the Moon, rocks, plants, and animals. Force and motion provide concrete observations at the middle school level for the more abstract concepts of matter and energy that will be addressed in high school. Likewise, cells and heredity/reproduction provide foundations for the more abstract concepts of biodiversity and evolution taught in high school while the level of abstraction increases for the concepts of matter and energy. These are all high school concepts that are more abstract than the concepts covered in the elementary and middle school levels.

In the living environment, the progression from grade 5 to high school is from an understanding of individual organisms and populations to an understanding of how organisms change over time. In the physical setting, the progression is from an understanding of the macroscopic universe, solar system, and Earth to an understanding of forces and motion in the everyday environment, and progressing in high school to an understanding of matter and energy at the macroscopic and atomic levels. Each successive grade-level assessment connects to and builds on the science concepts introduced at a lower level.

As stated in the Chapter 1 Overview, the 2014–15 PAAP was the alternate to the 2014–15 MEA Science.

CHAPTER 4 THE STUDENTS

In effective learning environments, instruction and assessment should always be linked. High-quality assessment practices provide information upon which to base ongoing development of instruction that is responsive to student needs. In alternate assessment, models of learning and subsequently the linkages between curriculum, instruction, and assessment are deeply impacted by the characteristics of the students themselves. Knowing who these students are and how they learn is critical to the design and development of effective instruction and assessment. In Maine, each PAAP is individualized so that each student's learning needs can be met with instruction that effectively promotes academic growth. The carefully designed common structure underlying the development of every PAAP provides a basis for comparison of performance patterns across students. The structure of the PAAP assessment illustrates both student performance and the student program. In effect, this assessment prioritizes observation of the dynamic links between models of student learning, curriculum, and instruction, and relates them to actual student outcomes. The design of the portfolio is based on the belief that those particular assessment events will allow students to demonstrate their understanding in a given domain, given a particular view of learning that takes into account important individual student differences.

4.1 PARTICIPATION DECISION PROCESS

Students eligible for the 2014–15 alternate assessment included students who had an identified significant or profound disability as defined under the Disabilities Education Improvement Act of 2004 (IDEA). These students need assessments that are individualized and flexible as well as integrated with daily instruction, resulting in student work that provides evidence of what these students are capable of doing. The PAAP was developed as the mode of participation in state assessments for these students.

During the 2014–15 school year, participation in the PAAP was required for those needing an alternate to the MEA Science in grades 5, 8, and 3rd year high school. Students in a non-graded program were to be assigned a specific grade through Infinite Campus State Edition for the purposes of assessment.

All students considered for alternate assessment were reviewed individually by the Individualized Education Program (IEP) team prior to the time of assessment to determine the appropriate avenue of participation, allowing sufficient time for administration of the alternate assessment. This team was to include at least one of the student's teachers, the school's principal or other administrator, the parent(s)/guardian(s), related service personnel, and the student, whenever possible. If it was not possible for the parent and student to attend the meeting, they were consulted regarding the committee's recommendations. The materials suggested for use at the meeting included (1) the Process for Determining the Appropriate Avenue of Participation in the MEA Science (a copy of which is included in Appendix B), (2) the student profile, (3) the approved state assessment accommodations list for the

general MEA Science, (4) samples of the student’s work, and (5) MEA Science released items to which the samples of the student’s work could be compared. The recommendation for a student to take an alternate assessment must be documented in the student’s IEP.

4.2 SUMMARY OF PARTICIPATION RATES

Table 4-1 shows a summary of participation in the 2014–15 Maine PAAP by demographic category for Science.

Table 4-1. 2014–15 PAAP: Summary of Participation by Demographic Category—Science

<i>Description</i>	<i>Tested</i>	
	<i>Number</i>	<i>Percent</i>
All Students	583	100.00
Male	380	65.18
Female	203	34.82
Gender Not Reported	0	0.00
Hispanic or Latino	20	3.43
American Indian or Alaskan Native	7	1.20
Asian	5	0.86
Black or African American	23	3.95
Native Hawaiian or Pacific Islander	1	0.17
White (Non-Hispanic)	520	89.19
Two or More Races	7	1.20
No Primary Race/Ethnicity Reported	0	0.00
Currently Receiving LEP ¹ services	25	4.29
Former LEP ¹ Student—Monitoring Year 1	0	0.00
Former LEP ¹ Student—Monitoring Year 2	0	0.00
LEP ¹ : All Other Students	558	95.71
Students with an IEP ²	583	100.00
IEP ² : All Other Students	0	0.00
Economically Disadvantaged Students	395	67.75
SES ³ : All Other Students	188	32.25
Migrant Students	0	0.00
Migrant: All Other Students	583	100.00
Students Receiving Title 1 Services	22	3.77
Title 1: All Other Students	561	96.23
Plan 504	0	0.00
Plan 504: All Other Students	583	100.00

¹ LEP = Limited English Proficient

² IEP = Individualized Education Plan

³ SES = Socio-Economic Status

CHAPTER 5 TEST CONTENT

Designed specifically for students with significant cognitive disabilities, the PAAP is a portfolio-based test that is aligned with Maine’s AGLEs. The content of this assessment has been reduced in depth and breadth but remains focused on the AGLEs, which have been linked down from the MEA (*2007 Learning Results*) science standards.

5.1 ALTERNATE GRADE LEVEL EXPECTATIONS (AGLEs)

The student work included in the PAAP is based on Maine’s AGLEs, which are designed for planning and implementing Maine’s alternate assessment. The PAAP measures progress toward the defined AGLEs by allowing students to produce evidence of their knowledge and skills at a specific point in time. It also assesses students at the same grade levels as the Maine science assessment. The administration window for the PAAP runs for much of the academic year—from the first week of December through the last week of April. This extended administration window provides opportunities for instruction and assessment to be embedded in the student’s daily work throughout the school year and then be assessed using PAAP tasks from an online Task Bank.

5.1.1 Levels of Complexity (LoC)

Maine’s AGLEs provide a common basis for the planning and assessment of standards-based instruction and assessment in a system that allows students to work on the AGLE/Indicators, LoC descriptors, and tasks best suited to their individual needs. All tasks submitted in a student’s PAAP must be selected and downloaded from the secure, online Task Bank (<https://profile.measuredprogress.org/paap/login.aspx>). To establish consistency, teachers may not develop their own tasks.

All tasks within the Task Bank are aligned with Maine’s AGLE/Indicator LoCs 1–8. Students working above the LoCs should participate in the standard Maine state assessment at their grade-level placement with appropriate accommodations.

5.1.2 Format of the AGLEs for the PAAP

Maine’s AGLEs were formatted by content area, AGLE/Indicators, and LoC descriptors. The Task Bank was made fully operational for the 2012–13 school year. However, because of the implementation of the required grade-level test blueprint, not all LoCs within each AGLE were required for assessment purposes.

Those LoCs that were not required for assessment purposes had the content taken out of the LoC in the AGLE document and were placed in a supplemental document called the Extended Learning AGLEs for teachers to access for instructional purposes.

Figure 5-1 is an example of the science AGLE/Indicator D1.

Figure 5-1. 2014–15 PAAP: Sample Science AGLE/Indicator—D1

Level of Complexity 1 (Grades 5, 8, and 3rd Year HS)		Level of Complexity 2 (Grades 5, 8, and 3rd Year HS)		Level of Complexity 3 (Grades 5, 8, and 3rd Year HS)		Level of Complexity 4 (Grades 5, 8, and 3rd Year HS)	
describing or otherwise demonstrating understanding of the positions or apparent motions of different objects in our solar system and what these objects look like from Earth by...							
doing the following: <ul style="list-style-type: none"> identifying night and day. 		doing both of the following: <ul style="list-style-type: none"> identifying pictures of night and day, AND <ul style="list-style-type: none"> identifying the Sun and Earth's Moon. 		doing the following: <ul style="list-style-type: none"> identifying the position of the sun at different times by drawing or otherwise describing the movement of the Sun across the sky. 		doing both of the following: <ul style="list-style-type: none"> identifying the position of the sun at different times by drawing or otherwise describing the movement of the Sun across the sky, AND <ul style="list-style-type: none"> drawing or identifying different phases of the Moon. 	
Level of Complexity 5 (Grade 8 and 3rd Year HS)		Level of Complexity 6 (Grade 8 and 3rd Year HS)		Level of Complexity 7 (3rd Year HS)		Level of Complexity 8 (3rd Year HS)	
explaining the movements and describing the location, composition, and characteristics of our solar system and universe, including planets, the Sun, and galaxies, by...							
doing the following: <ul style="list-style-type: none"> identifying the Sun, Earth's Moon, and planet(s) on a given diagram and listing some planets. 		doing the following: <ul style="list-style-type: none"> listing the four inner planets and placing them in order relative to the Sun. 		doing both of the following: <ul style="list-style-type: none"> describing the relative locations of the Sun, Earth, Earth's Moon, and planets and identifying their orbits; AND <ul style="list-style-type: none"> identifying the role that gravity plays in forming stars, planets, and the solar system. 		doing both of the following: <ul style="list-style-type: none"> identifying the role that gravity plays in forming stars, planets, and the solar system, AND <ul style="list-style-type: none"> identifying the role that gravity plays in keeping moons in position around planets, and planets around stars. 	

The header at the top of this sample AGLE page in Figure 5-1 identifies this AGLE as Maine’s Accountability Standards, Chapter 131, Maine’s *2007 Learning Results* to which this material is aligned. Directly opposite this, on the right side of the field, the corresponding PAAP identifier is situated: Science AGLE/Indicator —D1.

The student expectations for each AGLE—that is, what is being expected of the student in order to demonstrate proficiency as defined in Maine’s *2007 Learning Results* for science—are presented in italics below Maine’s Accountability Standards, Chapter 131 GLE. For example, using Figure 5-1 above, the expectations of the student are that he or she “understands the universal nature of matter, energy, force, and motion, and identifies how these relationships are exhibited in Earth Systems, in the solar system, and throughout the universe . . .”

Exactly how the student demonstrates understanding of the universal nature of matter, energy, force, and motion, and identifies how these relationships are exhibited in Earth Systems, in the solar system, and throughout the universe, is detailed in the LoC descriptor table immediately following the student expectations. For example, referencing Figure 5-1 on the previous page, the student demonstrates understanding of the universal nature of matter, energy, force, and motion by:

[Level of Complexity 1:] identifying night and day.

[Level of Complexity 2:] identifying pictures of night and day, and identifying the Sun and Earth's Moon.

[Level of Complexity 3:] identifying the position of the Sun at different times by drawing or otherwise describing the movement of the Sun across the sky.

And so on, up to and including LoC 8.

LoCs are ranged 1–8, and each LoC is accompanied by information identifying the grade levels for which participation at the LoC is appropriate.

5.2 ACCESS TO THE GENERAL CURRICULUM

In an effort to document the extent to which students are being exposed to the general curriculum, as required by the Disabilities Education Improvement Act of 2004 (IDEA), the achievement standards take into account student access to the general curriculum. The targeted skills taught are connected to the general curriculum standards but are presented in activities that reflect a reduced level of breadth, depth, or complexity. Examples of these targeted skills are found in the online Task Bank by AGLE/Indicator and LoC. Standards-based activities are those learning activities that have outcomes connected to achieving a curriculum framework standard. Activities are evaluated by linkage to grade-level activities. For example, if students in the general education classroom are learning about the solar system and the universe, then the alternately assessed students might be working on activities involving identifying the time of day or the phases of the moon. This activity would be linked to the science standard. Evidence would show application across multiple activities illustrating this skill.

5.3 ASSESSMENT DESIGN

Maine's AGLE document was designed to be a bridge to the general curriculum for all students with significant cognitive disabilities who are unable to participate in the general assessment. The IEP team determines if the student's achievement level on daily work indicates that he or she can participate in Maine's Comprehensive Assessment System (MeCAS) through standard administration or administration with accommodation. If the student cannot, the IEP team plans and implements the PAAP for which the student's skills match the PAAP AGLE/Indicators for his or her grade level.

The 2014–15 PAAP Grade-Level Blueprint outlines the grades and content area assessed through the PAAP. Figure 5-2 demonstrates this outline.

Figure 5-2. 2014–15 PAAP: Grade-Level Blueprint

Grade Level	Assessment for which PAAP is the alternate
3	N/A
4	N/A
5	MEA Science
6	N/A
7	N/A
8	MEA Science
10	N/A
Third Year High School	MEA Science

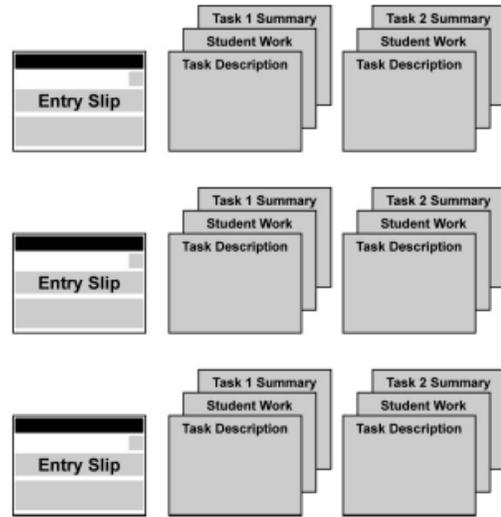
The PAAP requires four basic components to each AGLE Entry that is assessed: the AGLE Entry Slip, Task Description pages, student work template pages, and Task Summary pages. Science requires three AGLE Entries, each containing two tasks.

The visual guide in Figure 5-3 outlines the PAAP requirements as explained above for the 2014–15 PAAP.

Figure 5-3. 2014–15 PAAP: Visual Guide to PAAP Requirements

Visual Guide to PAAP Requirements

Science – Three different AGLE Entries of two tasks each. Science is assessed in grades 5, 8, and 3rd year high school only. Science contains only two ALGEs – D and E. Teachers must select **two entries from one AGLE** (D or E) and **one entry from the other AGLE** (e.g. D1, D2, & E4).



Maine moved to a mandatory PAAP Blueprint for 2013–14 (Figure 5-4) that requires certain AGLE/Indicators to be assessed at specific grade levels to ensure that all students have the opportunity to develop an understanding of concepts included in each AGLE/Indicator at the same time as their general assessment peers. As the blueprint was developed, the design team focused on each content area to ensure that the progression of tasks would parallel the progression in the general assessment. The final blueprint (Figure 5-4) was reviewed by personnel at the Maine DOE, content specialists at Measured Progress, Maine stakeholders, the PAAP Advisory Committee, and the Technical Advisory Committee.

Teachers were asked to familiarize themselves with the new PAAP Blueprint during 2009–10 and to begin implementation for assessment in 2011–12 for all content areas. The new PAAP Blueprint was fully operational for the 2012–13 PAAP administration. In the 2014–15 assessment the PAAP Blueprint was reduced to the single content area of science as outlined in Figure 5-5.

Figure 5-4. 2013–14 PAAP: Blueprint

PAAP Blueprint Required AGLE/Indicators by Content Area and Grade Level				
Grade Level	Reading	Writing	Math	Science
3	A1, A3		A1, B3, C1	
4	A1, A2	B2	A4, B2, D1	
5	A1, A3		A3, B3, C1	D1, D2, E2
6	A1, A2		A2, B1, C2	
7	A1, A3	B3	A4, B4, D2	
8				D4, E3, E4
High School	A2, A3	B1	A5, C2, D4	D3, E1, E5

Figure 5-5. 2014–15 PAAP: PAAP Blueprint

PAAP Blueprint Required AGLE/Indicators by Content Area	
Grade Level	Science
3	
4	
5	D1, D2, E2
6	
7	
8	D4, E3, E4
High School	D3, E1, E5

5.4 ASSESSMENT DIMENSIONS

There are three dimensions on which the PAAP is scored:

- Level of Complexity (LoC)
- Level of Accuracy
- Level of Assistance

Once the AGLE/Indicator for which the student will submit a PAAP has been determined, the teacher determines the LoC that is appropriate for inclusion in the student’s instructional program. The teacher’s role is to consider the student’s current level of performance and the possibilities for increasing that level through instruction. Teachers may choose a specific LoC and assess the student after instruction has been given. If the student completes that LoC independently with a high percentage of accuracy, the teacher is trained to instruct and assess the student at the next higher LoC. The teacher would then submit the higher LoC to be scored. The same can be done if the teacher assesses at a higher LoC and the student performs below the teacher’s expectations (at a very low Level of Accuracy, zero is acceptable) and the student requires the maximum Level of Assistance. The teacher may then back down the instruction to a lower LoC, reassess, and submit the lower LoC to be scored.

The Level of Accuracy on the student work pages is corrected by the teacher item by item on the student work template page, and then the correct/incorrect scores are transferred to the Task Summary page. Each Level of Accuracy box contains the number of items within the task, “Correct/Incorrect” designation with predetermined point values, and the percent correct data key and box. Figure 5-6 is one example of the Level of Accuracy box on the Task Summary page.

Figure 5-6. 2014–15 PAAP: Level of Accuracy

Level of Accuracy					
Item	Correct/ Incorrect (Circle One)	Item	Correct/ Incorrect (Circle One)	Data Key: C = Correct X = Incorrect	
				1 of 6 = 17%	2 of 6 = 33%
				3 of 6 = 50%	4 of 6 = 67%
				5 of 6 = 83%	6 of 6 = 100%
1	C X (1 point)	4	C X (1 point)	% Correct = _____	
2	C X (1 point)	5	C X (1 point)		
3	C X (1 point)	6	C X (1 point)		

Students who participate in the state assessments through the PAAP may need varying degrees of support to complete the required academic tasks. There are three types of support permissible when administering a PAAP:

1. Accommodations selected from the approved list of standard support mechanisms used for general state assessments
2. Flexibility in the method of presentation and student response included within the PAAP directions for task administration
3. PAAP Levels of Assistance

Accommodations do not alter what the test measures or the comparability of results. When used properly, appropriate test accommodations remove barriers to participation in the assessment and provide students with diverse learning needs and equitable opportunity to demonstrate their knowledge and skills.

Accommodations are changes to the standard timing, setting, presentation, or response. An example of an accommodation would be the teacher reading a science task aloud to a student who has a reading disability. The teacher is not altering what is being measured; instead, the student is given the opportunity to demonstrate what he or she knows and can do by eliminating the roadblock his or her disability might otherwise present to the accurate measurement of science knowledge and skills. Students participating in the PAAP may use any of the accommodations that have been approved for use in state assessments by the Maine DOE.

MEA Science

The Operational Procedures document can be found on the MEA Science website: <http://www.maine.gov/doe/mea/administration/index.html> .

The Directions for Task Administration section within each PAAP Task Description includes additional supports not listed among the approved general assessment accommodations. Because of the modified nature of the PAAP and the population for whom the PAAP is intended, some flexibility in the method of presentation is necessary and appropriate. It is important to remember that the use of these support mechanisms does not affect the PAAP scoring formula. They do not change what is being measured in the task.

If a student needs supports beyond those provided through approved accommodations or the flexibility that is part of every PAAP Task Description, the opportunity to use individualized Levels of Assistance is provided. Supports classified as Levels of Assistance are teacher-developed support mechanisms that, while not modifying the content being measured, assist a student in completing the task or retrieving the answer to a particular question without actually providing that answer to the student.

Levels of Assistance are determined on a three-point scale of 1–3, with each point affecting the overall score of a PAAP task. Note that as the teacher support decreases, the point score increases. These point values do not affect the student’s preliminary score for the task—the percent correct. Rather, the points awarded for Levels of Assistance make up one part of the final scoring matrix, along with Level of Accuracy and LoC. The following are the Levels of Assistance by score point.

- Level of Assistance Score of 1
 - Modeling
 - Demonstrating a response similar to that desired (e.g., Teacher says, “When I put the water in the freezer, it gets cold, hard, and turns white.” What happens when you put water in the freezer? Student response: “It freezes” or “It becomes ice.”) Note that this is not a question in the task bank as we would not use “freezer” in the question when the answer is it freezes.
- Level of Assistance Score of 2
 - Use of Option 2 (provided at LoC 1 when appropriate) to use fewer of the item sets multiple times in order to match the student’s knowledge
 - Limiting a student’s response (except at LoC 1) by removing one response option (e.g., multiple-choice items/problems) and reducing the response options from 3 to 2
 - Asking clarifying questions to stimulate student thought without providing clues to specific answers (e.g., “Which happened first? Show me on your board.”)
- Level of Assistance Score of 3
 - Independent
 - Providing encouragement
 - Completing task by using augmentative/alternative means of communication
 - Repeating directions
 - Reacting to student
 - Rereading a passage
 - Reminding a student to stay focused

A special field is provided on each Task Summary page where detailed information regarding the Level of Assistance for that particular task is recorded (as shown in Figure 5-7). The teacher administering the task must first check the appropriate box indicating the Level of Assistance needed by the student (1–3). Once a box has been marked, details regarding how the assistance was given must be circled on the provided list.

Figure 5-7. 2014–15 PAAP: Level of Assistance

Level of Assistance		
Level of Assistance 1 <input type="checkbox"/>	Level of Assistance 2 <input type="checkbox"/>	Level of Assistance 3 <input type="checkbox"/>
Circle the type of assistance from the list below.	Circle the type of assistance from the list below.	Circle the type of assistance from the list below.
<ul style="list-style-type: none"> • Modeling • Demonstrating a response similar to that desired • Other: _____ _____ 	<ul style="list-style-type: none"> • Use of Option 2 • Limiting student's response by removing one option • Asking clarifying questions • Prompting • Cueing • Other: _____ _____ 	<ul style="list-style-type: none"> • Independent • Encouragement • Use of augmentative/alternative communication • Repeating directions • Reacting to student • Rereading passage • Reminding student to focus • Other: _____ _____

It is vital that information regarding the Level of Assistance be recorded on each Task Summary page by the teacher administering the task, as this information is essential to the scoring of the PAAP. If such information is not provided, the task may be judged as Unscorable.

Levels of Assistance not permissible are the use of “hand-over-hand” (where the teacher prompts the student by placing his or her hand over the student’s hand) or any alterations to the task. Altering a task jeopardizes the integrity of the task and its alignment to the AGLEs.

In 2014–15, the Task Summary pages were available to fill in online from the Task Bank. Teachers entered the information in the online forms, printed them, and then submitted the paper copy of the Task Summary forms with the appropriate Task Description page and student work in the student’s paper portfolio.

CHAPTER 6 TEST DEVELOPMENT

The PAAP is intended to provide students who have significant cognitive disabilities the opportunity to participate in a statewide assessment that is both meaningful and academically challenging. Given the wide diversity of this student population, great emphasis is placed on ensuring that the PAAP is appropriate and accessible to all students. The assessment design allows students to progress through eight Levels of Complexity (LoC). LoC 1, the lowest LoC, represents the lowest level of knowledge and entry level skills and therefore provides students with the most access while still maintaining an academic foundation aligned to grade-level content.

6.1 GENERAL PHILOSOPHY

The development of writing, mathematics, and science for the PAAP began with face-to-face meetings over the course of three days (September 1–3, 2009) at Measured Progress. Each meeting consisted of Maine DOE staff, Measured Progress Special Education Project Management staff, and Measured Progress Curriculum and Assessment staff. The purpose of the meetings was to collaborate on plans for the development of tasks to finish populating the PAAP Task Bank in writing, mathematics, and science. (Note: The Task Bank was fully populated for reading in 2009–10.)

The notes from the above-mentioned planning meetings were frequently referenced by the Curriculum and Assessment test developers, Special Education Specialist, and Maine DOE staff as items were drafted and reviewed. In addition to the Measured Progress review process, staff from the Maine DOE and small groups of stakeholders evaluated all tasks through a task tryout process. This multistage development and review process provided ample opportunities to evaluate items for their alignment, accessibility, appropriateness, and adherence to the principles of universal design. In this way, accessibility emerged as a primary area of consideration throughout the item development process. This was critical in developing an assessment that allows for the widest range of student participation as educators seek to provide access to the general education curriculum and to foster high expectations for students with significant cognitive disabilities.

Table 6-1 indicates the full development of science tasks by LoC for the Maine PAAP Task Bank. This was completed in 2010–11.

Table 6-1. 2010–2011 PAAP: Task Development—Science

<i>LoCs</i>	<i>AGLE¹/Indicator</i>	<i>Number of Tasks</i>	<i>Total Tasks</i>
1–2	D2	2 tasks per LoC ²	4
1–8	D3, E1, E5	2 tasks per LoC ²	48
3–4	D2	2 tasks per LoC ²	4
5–6	D4	2 tasks per LoC ²	4
4	E2	2 tasks per LoC ²	2
6	E3	2 tasks per LoC ²	2
4 & 6	E4	2 tasks per LoC ²	4
Overall Science task revision total			68

¹ AGLE = Alternate Grade Level Expectation

² LoC = Level of Complexity as described in the AGLEs

6.2 ROLE OF COMMITTEES IN TEST DEVELOPMENT

The Advisory Committee comprised teachers, education administrators, representatives from higher education, and other agencies who advised the Maine DOE on defining the parameters of the alternate assessment. The committee was asked to review the issues related to the creation of the AGLEs, PAAP Blueprint, PAAP tasks, and the achievement-level descriptors for students who are unable to participate in statewide assessments even with accommodations. Members responded to written samples and recommendations from internal groups at Measured Progress and the Maine DOE regarding these areas to ensure accountability for students taking the PAAP. They also worked with the Maine DOE to determine the structures that serve as the basis for today’s PAAP.

CHAPTER 7 ALIGNMENT

7.1 DESCRIPTION OF LINKAGES TO DIFFERENT CONTENT AREAS ACROSS GRADES

The Maine DOE contracted two external alignment studies to be completed by Amy S. Burkam, Lothlorien Consulting, LLC: one in March 2010 and one in June 2012. The March 2010 study was conducted in two phases. The results of the first study are documented in the 2010–11 technical report. The 2012 study is discussed in the 2011–12 technical report.

CHAPTER 8 PAAP ADMINISTRATION TRAINING

In November 2014, the Maine DOE, in collaboration with program management at Measured Progress, trained teachers from across the state in the process of constructing a PAAP. Introductory PAAP trainings, titled “Introduction to PAAP,” were designed and presented to teachers and administrators who had not administered a PAAP previously. PAAP update webinar trainings were designed for those teachers who had administered a PAAP in previous years. Both trainings provided test administrators with the steps for administration of the PAAP process (see Section 8.1), a thorough review of the Alternate Grade Level Expectations (AGLEs) document, and other changes in procedures that had been made since the prior year. Beginning in June 2012, the teachers’ scores submitted electronically on the Task Summary page in the Task Bank were used as the first score. The second score was provided by Measured Progress’s trained scorers. This use of the Task Bank was integrated into the PAAP update presentations.

Four PAAP trainings occurred at four locations: Presque Isle, Bangor, Augusta, and Portland. One webinar was also held for teachers who were unable to attend an in-person session. Table 8-1 outlines the number of participants at each training session.

Table 8-1. 2014–15 PAAP: Workshop Attendance Count

<i>Workshop</i>	<i>Presque Isle</i>	<i>Bangor</i>	<i>Augusta</i>	<i>Portland</i>	<i>Webinar</i>	<i>Total</i>
Introduction to PAAP	9	28	18	15	55	125

A webinar that was originally conducted in 2012 was still available in 2014. The webinar provided teachers with guidance on how to submit a PAAP for scoring. The purpose was to remind teachers of the process required to electronically submit the Task Summary pages (where teachers recorded the students’ scores) via the ProFile Task Bank before the administration window closed on April 30, 2015. A power point entitled 2014-15 Introduction to the PAAP was also posted on the Maine’s DOE website (<http://www.maine.gov/doe/paap/training/index.html>).

8.1 STEPS FOR ADMINISTRATIONS

A detailed handbook was developed by the Maine DOE in collaboration with Measured Progress as a training tool to instruct teachers on how to design and implement a PAAP. Minimal changes to the handbook occurred between the 2013–14 and 2014–15 administrations. In an effort to conserve state finances, teachers were requested to use their *2013–14 PAAP Administration Handbook*. The *2014–15 PAAP Administration*

Handbook, which includes the AGLEs, was available to download from the Maine DOE’s website (<http://www.maine.gov/doe/paap/>).

The administration process, clearly outlined in the *PAAP Administration Handbook*, is broken into steps that guide the teacher from the point of determining student eligibility to the actual submission of the PAAP. The handbook provides detailed information to the reader on what evidence to collect and how to design a PAAP appropriate for an individual student.

The main *PAAP Administration Handbook* sections are as follows:

- Vital Information At-a-Glance
- Introduction
- Determining the Appropriate Avenue for Student Participation in State Assessments
- Alternate Grade Level Expectations (AGLEs)
- The Task Bank
- Types of Supports
- Administering a PAAP
- Scoring a PAAP
- Reporting
- Code of Conduct
- Supplemental Materials

Announcements of the upcoming trainings and registration information were posted on the PAAP website and e-mailed to Special Education Directors. Workshop registration was submitted through Measured Progress’s online registration application.

8.2 STEPS IN CONSTRUCTING THE PORTFOLIO

The steps and scoring ramifications for constructing the PAAP are outlined in the *2014–15 PAAP Administration Handbook* to assist teachers in planning, instructing, and assessing students taking a PAAP.

The steps are:

A. Planning a PAAP

Step 1

Meet with the student’s IEP team to determine the appropriate avenue of participation by content area in the state assessment using the participation guidelines. The team should use the Flow Chart for Determining Appropriate Avenue of Assessment and the Criteria to Determine Participation in the PAAP.

Scoring Ramifications: Participation in the PAAP by a student who does not meet the defined guidelines will result in the student being counted as a nonparticipant in the MEA Science.

Step 2

Using the grade-level blueprint, choose the required number of AGLE/Indicators for which the student will submit a PAAP. The AGLE/Indicators will be the target of instruction for the individual student. Related instruction and assessment should be integrated with the student's IEP.

Scoring Ramifications: If student work is submitted for fewer than the required number of AGLE Entries, the raw score for the PAAP will be lower and may not accurately reflect the student's level of knowledge and skills. AGLE Entries submitted beyond the number required will not be scored.

Step 3

For each AGLE/Indicator required, use the PAAP AGLEs to identify the LoC descriptors that are appropriate for inclusion in the student's instructional program. Consider the student's current level of performance and the possibilities for increasing that level through instruction as you read the PAAP LoC descriptors. The LoC should challenge the student and allow the opportunity for the student to demonstrate proficiency.

B. Registering a Student for PAAP

Step 4

Create a user account within the PAAP Task Bank. This can be done by using the registration button on the top of the Task Bank homepage. The Task Bank can be accessed by going to <http://www.maine.gov/doe/paap/administration/index.html> and clicking on the "Task Bank" button. More detailed instructions on creating your account can be found in the Task Bank Manual located on the homepage of the Task Bank.

Step 5

Add students to your list by entering the student ID (MEDMS #) and then verifying the student name and grade upon pressing the "OK" button.

Step 6

Verify that the student information is accurate. Then use the "Add to Student List" button to register the student.

If the student information is not accurate, contact the person responsible for entering and uploading MEDMS data to the state site from your school. (This may be your building secretary or other designee.) If the student record is not found in the Task Bank once the student is enrolled in Infinite Campus State Edition (ICSE) correctly, contact the Maine DOE to make changes in the Task Bank.

C. Implementing a PAAP

Step 7

Using tasks from the Task Bank, collect student work for the required AGLE/Indicators throughout the testing window. Students may have been assessed on a task multiple times during the testing window. Submit only the required number of completed tasks for an Entry.

When the teacher records the answer on the student work template, the teacher must indicate the student response (e.g., “student pointed” on the answer line is not sufficient; you must write “student pointed to the cup”).

Scoring Ramifications: Fewer than the required number of tasks submitted for an AGLE Entry will result in the task being “Unscorable.” Extra student work submitted will not be scored and may result in scorer confusion and negatively affect the scoring process for the PAAP. If there is no student response listed, the task may be “Unscorable.”

Step 8

Fill out a single Entry Slip for each AGLE Entry that you are assessing for the PAAP.

Submit three AGLE Entries in science.

Scoring Ramifications: Student work submitted without an Entry Slip may result in scorer confusion and negatively affect the scoring process for the PAAP.

Step 9

On the Work Template, make sure information has been filled in for all sections, including the “Student Response” column.

Scoring Ramifications: Work Templates that are not completely filled in may result in an inability to score the work for the Task, or even the entire AGLE Entry.

Step 10

All student work must be corrected item-by-item on the Work Template. Use an “X” for an incorrect response and a “C” for a correct response. If the student self-corrects (i.e., without any prompting, changes error), please clearly indicate this and score the student’s final answer choice. Transfer the student’s correct/incorrect scores to the online Task Summary page.

Scoring Ramifications: Work that has not been corrected item-by-item will be considered “Unscorable.”

Step 11

Using Levels of Assistance information, determine the Level of Assistance score that best represents the Level of Assistance earned. You are required to indicate how assistance was given by checking an entry from the populated list or by writing a brief description in the “Other” section.

Scoring Ramifications: The description is used to verify the score for this variable. Simply checking one of the boxes on the Task Summary page does not provide the scorer with sufficient information and will result in the task being “Unscorable.”

Step 12

Electronically complete and submit all Task Summary pages. Information within the Level of Accuracy box and the Level of Assistance section must be populated. Refer to Levels of Assistance to determine the score.

Task Summary pages must be filled in electronically and submitted online (by April 30) using the Task Bank and be included in the portfolio. The electronic submission will result in the student's first score of the portfolio, while the paper version will assist the second scorer.

Scoring Ramifications: Task Summary pages that are not filled in electronically and submitted online by April 30 using the Task Bank will result in the inability to score the work for the AGLE Entry.

D. Organizing a PAAP

Step 13

Assemble each AGLE Entry by attaching the required number of Task Descriptions with accompanying student work and Task Summary pages. Do not attach the following:

- More than the required number of Task Descriptions.
- More than the required amount of student work and Task Summary pages.
- Description cards, and/or cutout graphics used for the tasks. If you would like to save these items, place them in a separate section at the end of the PAAP.

Scoring Ramifications: Student work submitted without an Entry Slip and/or without the required number of Task Descriptions may result in scorer confusion and negatively affect the scoring process for the PAAP. Student work submitted without the required number of Work Templates and/or the required number of Task Summary pages will result in the entry being "Unscorable." Extra Task Descriptions and/or student work submitted will not be scored and may result in scorer confusion and negatively affect the scoring process for your student's PAAP.

Step 14

Arrange each AGLE Entry in alphabetical order by AGLE and then in numerical order by Indicator. Refer to the grade-level blueprint for more details.

Scoring Ramifications: Lack of organization may result in scorer confusion and negatively affect the scoring process.

Step 15

Print the Table of Contents (available through the Task Bank or on the PAAP website) and check that all white sections of the Entry Slips (Name and Grade), Student Work (Name and Date), and Task Summary page (Name, Date, Level of Accuracy, and Level of Assistance) have been filled in.

Scoring Ramifications: Incomplete documentation and lack of organization can result in an inability to score the PAAP.

E. Submitting a PAAP

Step 16

Prepare the PAAP for mailing according to the directions received from Measured Progress in the return materials shipment that will be sent in April. Measured Progress has arranged for a one-day UPS

pickup of all PAAPs during the first week of May from every school with PAAP students. UPS will deliver the PAAPs to Measured Progress. PAAPs will be returned to schools at the start of the new school year.

Scoring Ramifications: Any PAAPs received later than one week from the pickup date will not be scored, and students for whom late PAAPs have been submitted will be counted as nonparticipants in the MEA Science.

IMPORTANT: Sending schools are responsible for verifying that students who are tuitioned to Special Purpose Private Schools, or who are attending out-of-district programs, are being assessed.

CHAPTER 9 SCORING

One 2014–15 scoring session was held at Measured Progress in Dover, New Hampshire. Eight professionally trained scorers and three table leaders participated in the scoring session. The Measured Progress scorers were interviewed, hired (based on MEA/PAAP-established scorer criteria), and trained for PAAP scoring. The 11 participants scored a total of 583 PAAPs.

9.1 TABLE LEADER AND SCORER RECRUITMENT AND QUALIFICATIONS

Table leaders and scorers were handpicked by Measured Progress staff from a pool of experienced table leaders and scorers and were required to pass a qualifying set of sample portfolio entries. Scorers and table leaders were required to sign nondisclosure agreements and agree to maintain the security of PAAP materials at all times. The scorer code of conduct, which details the importance of confidentiality and bias-free scoring, was also reviewed with the scorers.

9.2 TABLE LEADER AND SCORER TRAINING

Measured Progress table leaders and scorers attended a training session at Measured Progress on June 8, 2015. The first half of the training session was held specifically for table leaders. They were trained on their responsibilities as table leaders, which included the online scoring application, the flow of materials at their tables, and monitoring third reads. Readers joined the table leaders for the second half of the training session for an in-depth review of the materials.

The training included a PowerPoint presentation showing the steps required in the scoring process, from checking the student name to entering scores in the online application developed for PAAP scoring. Staff then conducted a hands-on training in the use of the online ProFile scoring application. A sample portfolio for Terry Flynn, a fictitious student, contained entries and was used to illustrate the scoring process. These sample entries, including potential scoring issues, were reviewed and discussed. Next, table leaders and scorers practiced using sample sets before taking online qualifying sets. All prospective table leaders and scorers qualified by earning the required scores on these sets. Prior to any scoring, table leader guidelines were reviewed to assure consistency in their understanding of the expectations. In addition, a table leader debrief occurred at the end of each scoring day to review procedures and address issues that came up during scoring.

Personnel from Measured Progress and the Maine DOE were available to answer questions that arose during both the training and the actual scoring sessions. This was essential as clarifications to any scoring irregularities/rules or Alternate Grade Level Expectations (AGLEs)/Indicators arose as well as some initial

assistance with the online scoring application. Scorers were provided with the 2014–15 AGLEs (see Appendix A), 2015 scoring instructions, 2014–15 task scoring rubric, and 2015 scoring rules.

9.3 SCORING PROCESS

PAAP scoring was conducted using the online ProFile scoring application, which was developed for this contract. The ProFile application allowed teachers' scores and scoring staff scores to be submitted online. Teachers' scores were used for the first score of record, and the scoring staff provided the second score. Teachers were required to complete Task Summary pages electronically for their students through the ProFile Task Bank, while Measured Progress's scoring staff submitted their scores on a similar Task Summary page in the scoring application. Each PAAP was read and scored at least once by a Measured Progress scorer, with some of the PAAPs being scored a third time in a double-blind fashion. (See Section 11.4 for interrater consistency.) A PAAP was scored a third time if scorers 1 (teacher) and 2 (scoring staff) did not have exact agreement for Level of Complexity (LoC), Level of Accuracy, or Level of Assistance on any content standard entry. The third score was the final score of record for each dimension that was discrepant. The third scores were done by Maine DOE, Measured Progress program management personnel, and senior scoring staff.

The scoring process was explained in detail to both the table leaders and the scorers. The following steps were required of all table leaders and scorers.

Step 1. Prescreen the PAAP. Scorers were to ensure that

- the student was not known to the scorer, and
- the PAAP was organized correctly.

Step 2. Log in to the scoring application using the assigned scorer number and password.

The scorer ID was attached to the PAAP, thereby identifying scorer 2.

Step 3. Verify that the student information on the portfolio matches that in the ProFile scoring application. Scorers were instructed to verify that the portfolio demographic information provided on the Verify Demographics screen (student MEDMS number, name, grade, and district and school names) matches the information on the portfolio. If they are the same, then the scorer continued to the next step. If there were any differences, the scorer alerted senior staff to resolve the issue.

Step 4. Verify that all the required components are present. Scorers used the ProFile Verify Entries screens to determine if the portfolio contained all the requisite pieces and if the grade requirements had been met. If an AGLE/Indicator was incorrect or any portfolio pieces were identified as missing, then the scorer would indicate the problem by assigning the associated comment code (refer to Step 6, Provide comment codes.) and finalize that entry.

Step 5. Score each content area entry. If an entry was determined to be scorable, the scorer then read the individual tasks that met the requirements for an entry and scored them in ProFile on three dimensions—LoC, Level of Accuracy, and Level of Assistance.

Step 6. Provide comment codes. Scorers also received instruction on how to complete comment codes, which provide teachers with valuable feedback on the entry scores. At least one comment code must be selected in ProFile for each entry (maximum of two). Based on the totality of the entry and the information provided on the comment code sheet, the second scorer selected one or two comment codes for the entry. Refer to Figure 9-1, 2014–15 PAAP: PAAP Comment Codes.

In the quality-control area, ProFile provided a real-time list of unscored and discrepant portfolios that were then located and distributed appropriately for scoring. As an added measure, Measured Progress personnel tracked the portfolios to ensure that all had been scored and accounted for at the end of the scoring session.

Refer to Appendix C for additional documents that were used during scoring. The PAAP Scoring Instructions 2015 describes the scoring process in greater detail than noted above. The 2015 Task Scoring Rubric provides an overview of the scores related to each dimension—LoC, Level of Accuracy, and Level of Assistance.

Figure 9-1. 2014–15 PAAP: PAAP Comment Codes

Signed in as: (Scorer #1)

Enter Portfolio ID Verify Demographics Verify Entries **Score Entry** Finalize Entry Finalize Portfolio

Score LoC Score Task 1 Score Task 2 Score Task 3 Comments

Working on:
Scott, Liam (Grade 06)

A1 - Word Identification and Vocabulary Knowledge
Comments

Comment Code 1

- 1. All Components/criteria were met for the Entry.
- 2. Entry
 - a. An invalid AGLE/Indicator was submitted.
 - b. Items/tasks were altered.
 - c. Hand-over-Hand was used.
 - d. An Entry was missing.
 - e. An Entry was not from the required blueprint/off grade level.
- 3. Entry contains
 - a. less than the required number of tasks.
 - b. less than the required number of Task Summary pages.
 - c. no Entry Slip/Task Description page.
 - d. student work that was not corrected accurately.
 - e. some or all student work that was not complete.
- 4. Level of Complexity:
 - a. was not grade appropriate.
 - b. one or more tasks submitted was from a different Level of Complexity than the Entry Slip.
- 5. Specific information was not provided and/or inconsistent on the Task Summary page about
 - a. the Level of Accuracy.
 - b. the Level of Assistance.

Comment Code 2

- No second comment for this entry.
- 1. All Components/criteria were met for the Entry.
- 2. Entry
 - a. An invalid AGLE/Indicator was submitted.
 - b. Items/tasks were altered.
 - c. Hand-over-Hand was used.
 - d. An Entry was missing.
 - e. An Entry was not from the required blueprint/off grade level.
- 3. Entry contains
 - a. less than the required number of tasks.
 - b. less than the required number of Task Summary pages.
 - c. no Entry Slip/Task Description page.
 - d. student work that was not corrected accurately.
 - e. some or all student work that was not complete.
- 4. Level of Complexity:
 - a. was not grade appropriate.
 - b. one or more tasks submitted was from a different Level of Complexity than the Entry Slip.
- 5. Specific information was not provided and/or inconsistent on the Task Summary page about
 - a. the Level of Accuracy.
 - b. the Level of Assistance.

Copyright © 2004-2012 by Measured Progress. All Rights Reserved.

9.4 FLOW OF MATERIALS

The scoring teams used the following instructions for the flow of materials in the day-to-day scoring of the PAAPs.

Scorers

- Request a PAAP from the table leader.

- Verify that the student information on the portfolio matches that in the ProFile scoring application.
- Verify that all required contents of the PAAP are inside the binder.
- Score according to 2015 Scoring Instructions sheet (Appendix C).
- Enter scores accurately in ProFile.
- Return scored PAAP to the table leader.
- Repeat this process with each PAAP.

Table Leaders

- Make sure that at least one box of unscored PAAP binders is available.
- Distribute unscored PAAPs to scorers.
- Perform a read-behind of each scorer's first PAAP and any scorer evaluated by a table leader as having difficulty with the process; review random PAAPs throughout the day to validate the scoring.
- Meet with the scorer immediately if any problems with scoring are noticed. If problems persist, notify personnel from the Maine DOE or Measured Progress.
- Place the PAAP in its original envelope.
- Place the envelope in the box from which it came.
- Score additional PAAPs as outlined in the scorer instructions above.

9.5 SECURITY

During scoring workdays, all PAAPs remained in sight of Measured Progress and Maine DOE personnel at all times. During the day, PAAPs were methodically delivered back and forth from the quality-control room to the scoring room. At the end of each day, PAAPs were stored in a locked room.

Measured Progress's distribution personnel delivered the PAAPs directly to the Measured Progress scoring site. After all scoring was completed, the PAAPs were returned to the Measured Progress warehouse, where they were stored until September 8, 2015, when they were shipped back to their original schools with the Individual Student Reports.

9.6 SCORING RUBRIC

During PAAP scoring, the 2015 PAAP task scoring rubric is used to determine the official scores of record for LoC, Level of Accuracy, and Level of Assistance.

Level of Accuracy is scored on a Likert scale of 1–4 based on the overall task percent correct score (e.g., a task percent correct score of 67% would receive an overall Level of Accuracy score of 3). Figure 9-2

demonstrates how a score of 1, 2, 3, or 4 is obtained. When scorers marked each item as correct/incorrect, ProFile automatically calculated the Level of Accuracy scores (1–4) based on the table below.

Figure 9-2. 2014–15 PAAP: Task Score for Level of Accuracy

Task Score for Level of Accuracy			
1	2	3	4
<p>Student work was not corrected.</p> <p>Student work related to the Task was completed with a score of 0 – 19%.</p>	<p>Student work related to the Task was completed with a score of 20 – 60%.</p>	<p>Student work related to the Task was completed with a score of 61 – 84%.</p>	<p>Student work related to the Task was completed with a score of 85 – 100%.</p>

Level of Assistance is scored on a scale of Unscorable (receiving a score of 0) to 3, based on the approved accommodations outlined in Figure 9-3. The scorer entered the Level of Assistance and the type of support provided from the drop-down list below each Level of Assistance.

Figure 9-3. 2014–15 PAAP: Task Score for Level of Assistance

Task Score for Level of Assistance			
Unscorable	1	2	3
<ul style="list-style-type: none"> ➤ Hand-over-hand ➤ Altering items/tasks (task no longer connects to the AGLE) 	<ul style="list-style-type: none"> ➤ Modeling ➤ Demonstrating a response similar to the desired response 	<ul style="list-style-type: none"> ➤ Use of Option 2 (LoC 1 only) to use fewer of the item sets multiple times to match student knowledge ➤ Limiting a student's response (outside of LoC 1 at Option 2) by removing one response option ➤ Use of clarifying questions to stimulate student thought to the specific task without providing clues to specific answers 	<ul style="list-style-type: none"> ➤ Independent ➤ Providing encouragement ➤ Completing tasks by using augmentative/alternate means of communication ➤ Repeating directions ➤ Reacting to a student ➤ Rereading a passage ➤ Reminding a student to stay focused

The 2015 PAAP task scoring rubric is shown in Figure 9-4 below.

Figure 9-4. 2014–15 PAAP: Scoring Rubric



2015 PAAP TASK SCORING RUBRIC

Task Score for Level of Complexity								
Unscorable	1	2	3	4	5	6	7	8
<p>The PAAP Task did not meet all requirements.</p> <p>Reasons for <u>Unscorables</u>:</p> <ul style="list-style-type: none"> ➤ Level of Complexity is not consistent with other Tasks ➤ Level of Complexity is not grade appropriate 								

Task Score for Level of Accuracy			
1	2	3	4
<p>Student work related to the Task was completed with a score of 0 –19%.</p>	<p>Student work related to the Task was completed with a score of 20 – 60%.</p>	<p>Student work related to the Task was completed with a score of 61 – 84%.</p>	<p>Student work related to the Task was completed with a score of 85 – 100%.</p>

Task Score for Level of Assistance			
Unscorable	1	2	3
<ul style="list-style-type: none"> ➤ Hand-over-hand ➤ Altering items/tasks (Task no longer connects to the AGLE) 	<ul style="list-style-type: none"> ➤ Modeling ➤ Demonstrating a response similar to the desired response ➤ Other 	<ul style="list-style-type: none"> ➤ Use of Option 2 (LoC 1 only) to use fewer of the item sets multiple times to match student knowledge ➤ Limiting a student’s response (outside of LoC 1 at Option 2) by removing one response option ➤ Use of clarifying questions to stimulate student thought to the specific Task without providing clues to specific answers ➤ Other 	<ul style="list-style-type: none"> ➤ Independent ➤ Providing encouragement ➤ Completing Tasks by using augmentative/alternate means of communication ➤ Repeating directions ➤ Reacting to a student ➤ Rereading a passage ➤ Reminding a student to stay focused ➤ Other

9.7 SCORING QUALITY CONTROL

After each PAAP was scored, a table leader from Measured Progress removed the PAAP from its envelope to confirm that it corresponded with the student identified on the envelope. The PAAP was then inserted in its envelope and returned to the box.

Then the box of PAAPs was returned to the quality-control room where it remained unless a PAAP was identified via the ProFile scoring application as needing a third score. At this time, the PAAP would have been provided to either a Measured Progress program manager or a member of the Maine DOE for a third read.

When the person doing the third read entered the PAAP identification number in ProFile for a third score, the application displayed the scoring dimension(s) in disagreement on the screen. The score resulting from the third read became the score of record. At this point, the PAAP was considered complete and filed in its box.

9.8 CALCULATION OF REPORTED SCORES

After the scoring process was completed, students' scores on each entry were calculated based on a formula that combines their LoC, Level of Accuracy, and Level of Assistance scores for each of the tasks in that entry. The formula weights the LoC score more heavily than the other two dimension scores. The overall score of record is then the sum of the entry scores. Because of the use of the formula, there may be multiple ways that a student can attain a given total score. Complete details of how reported raw scores are calculated are provided in Appendix I.

CHAPTER 10 CLASSICAL ITEM ANALYSIS

As noted in Brown (1983), “A test is only as good as the items it contains.” A complete evaluation of a test’s quality must include an evaluation of each item. Both *Standards for Educational and Psychological Testing* (AERA et al., 2014) and *Code of Fair Testing Practices in Education* (Joint Committee on Testing Practices, 2004) include standards for identifying quality items. While the specific statistical criteria identified in these publications were developed primarily for general—not alternate—assessment, the principles and some of the techniques apply within the alternate assessment framework as well.

Both qualitative and quantitative analyses were conducted to ensure that Maine PAAP items met these standards. Qualitative analyses are described in earlier sections of this report; this section focuses on the quantitative evaluations. The statistical evaluations discussed are difficulty indices and discrimination (item-test correlations), structural relationships (correlations among the dimensions), and bias and fairness. The item analyses presented here are based on the statewide administration of the 2014–15 PAAP.

10.1 DIFFICULTY AND DISCRIMINATION

For the purpose of calculating item statistics, the two dimension scores on each task (Level of Accuracy and Level of Assistance) can be considered similar to those for traditional test items. *Difficulty* was defined as the average proportion of points achieved on an item and was measured by obtaining the average score on an item and dividing by the maximum score for the item. Using this definition, all items were evaluated in terms of item difficulty according to standard classical test theory practices. PAAP tasks are scored polytomously, such that a student can achieve a score of 1, 2, 3, or 4 for Level of Accuracy and a score of 1, 2, or 3 for Level of Assistance. By computing the difficulty index as the average proportion of points achieved, the items are placed on a scale that ranges from 0.0 to 1.0. Although the p -value is traditionally described as a measure of difficulty (as it is described here), it is properly interpreted as an easiness index, because larger values indicate easier items.

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

It is worth mentioning that using a norm-referenced criterion such as p -values to evaluate test items is somewhat contradictory to the purpose of a criterion-referenced assessment like the PAAP. Criterion-referenced assessments are primarily intended to provide evidence on student progress relative to a standard

rather than to differentiate among students. Thus, the generally accepted criteria regarding classical item statistics are only cautiously applicable to the PAAP.

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

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

A summary of the item difficulty and item discrimination statistics for each grade/content area combination is presented in Table 10-1. The mean difficulty values shown in the table indicate that, overall, students performed well on the items on the PAAP. In contrast to alternate assessments, the difficulty values for assessments designed for the general population tend to be in the 0.4–0.7 range for the majority of items. Because the nature of alternate assessments is different from that of general assessments, and because very few guidelines exist as to criteria for interpreting these values for alternate assessments, the values presented in Table 10-1 should not be interpreted to mean that the students performed better on the PAAP than the students who took general assessments did on those tests. An additional factor, as mentioned above, is that item statistics are calculated from students' Level of Accuracy and Level of Assistance scores. Students' overall scores, on the other hand, are based on the Level of Accuracy and Level of Assistance scores along with the Level of Complexity (LoC). A formula that combines the three dimensions, weighting LoC more heavily, is used to compute the students' score of record. Looking at the *p*-values in isolation would suggest that students' reported scores would all be very high; however, use of the formula results in reported scores that show greater spread across the range of obtainable scores than would be expected based on the *p*-values alone. See Appendix I for complete details on how the score of record is calculated; see Chapter 13 and Appendices L and M for more information about reported scores.

Also shown in Table 10-1 are the mean discrimination values. Because the majority of students received high scores on the tasks, the discrimination indices are somewhat lower than one might expect. This is an artifact of how discrimination is calculated: If all of the students get an item correct, there is little variability in the criterion scores that can be differentiated. As with the item difficulty values, because the nature and use of the PAAP are different from those of a general assessment, and because very few guidelines

exist as to criteria for interpreting these values for alternate assessments, the statistics presented in Table 10-1 should be interpreted with caution.

Table 10-1. 2014–15 PAAP: Summary of Item Difficulty and Discrimination Statistics by Subject and Grade

<i>Subject</i>	<i>Grade</i>	<i>Number of Items</i>	<i>p-Value</i>		<i>Discrimination</i>	
			<i>Mean</i>	<i>Standard Deviation</i>	<i>Mean</i>	<i>Standard Deviation</i>
Science	5	48	0.82	0.08	0.42	0.16
	8	72	0.85	0.07	0.30	0.22
	HS	96	0.85	0.06	0.29	0.27

In addition to the item difficulty and discrimination summaries presented above, item-level classical statistics and item-level score distributions were also calculated. Item-level classical statistics are provided in Appendix D; item difficulty and discrimination values are presented for each item. Item-level score distributions (i.e., the percentage of students who received each score point) are provided in Appendix E for each item.

10.2 STRUCTURAL RELATIONSHIP

By design, the achievement-level classification of the PAAP is based on two of the three dimensions (accuracy and assistance). The third dimension (complexity) is used at the time of administering the assessment to determine the specific sets of tasks appropriate for the student. As with any assessment, it is important that these dimensions be carefully examined. This was achieved by exploring the relationships among student dimension scores with Pearson correlation coefficients. A very low correlation (near 0) would indicate that the dimensions are not related; a low negative correlation (approaching -1.00), that they are inversely related (i.e., that a student with a high score on one dimension had a low score on the other); and a high positive correlation (approaching 1.00), that the information provided by one dimension is similar to that provided by the other dimension.

The average correlations between Level of Accuracy and Level of Assistance by content area and grade are shown in Table 10-2.

Table 10-2. 2014–15 PAAP: Average Correlations Between Level of Accuracy and Level of Assistance by Content Area and Grade

<i>Content Area</i>	<i>Grade</i>	<i>Number of Items</i>	<i>Average Correlation</i>	<i>Correlation Standard Deviation</i>
Science	5	24	0.30	0.26
	8	36	0.34	0.29
	HS	48	0.15	0.28

10.3 BIAS/FAIRNESS

Code of Fair Testing Practices in Education (Joint Committee on Testing Practices, 2004) explicitly states that subgroup differences in performance should be examined when sample sizes permit, and actions should be taken to make certain that differences in performance are due to construct-relevant rather than construct-irrelevant factors. *Standards for Educational and Psychological Testing* (AERA et al., 2014) includes similar guidelines.

When appropriate, the standardization differential item functioning (DIF) procedure (Dorans & Kulick, 1986) is used to identify items for which subgroups of interest perform differently, beyond the impact of differences in overall achievement. However, because of the small number of students who take the PAAP, and because those students take different combinations of tasks, it was not possible to conduct DIF analyses. This is because conducting DIF analyses using groups of fewer than 200 students would result in inflated type I error rates.

Although it is not possible to run quantitative analyses of item bias for PAAP, fairness is addressed through Measured Progress's standard item development and review procedures, described in detail earlier in this report. These procedures, which are modeled on the recommendations laid out in *Standards for Educational and Psychological Testing* (AERA et al., 2014), are designed to ensure that the test is free of any insensitive or offensive material. All tasks that are available to teachers in the standardized Task Bank have been through these comprehensive bias and sensitivity reviews.

Issues of fairness are also addressed in the PAAP scoring procedures. Chapter 9 of this report describes in detail the scoring rubrics used, selection and training of scorers, and scoring quality-control procedures. These processes ensure that bias due to differences in how individual scorers award scores is minimized.

CHAPTER 11 CHARACTERIZING ERRORS ASSOCIATED WITH TEST SCORES

The main use of the PAAP scores is for school-, district-, and state-level accountability in the federal (No Child Left Behind Act) and state accountability systems. The students are classified as Substantially Below Proficient, Partially Proficient, Proficient, and Proficient with Distinction, and they are included in the state's accountability calculation.

As with the classical item statistics presented in the previous chapter, the two dimension scores on each task (Level of Accuracy and Level of Assistance) were used as the item scores for purposes of calculating reliability estimates.

11.1 RELIABILITY

In the previous chapter, individual item characteristics of the 2014–15 Maine PAAP were presented. Although individual item performance is an important focus for evaluation, a complete evaluation of an assessment must also address the way in which items function together and complement one another. Any measurement includes some amount of measurement error. No academic assessment can measure student performance with perfect accuracy; some students will receive scores that underestimate their true ability, and other students will receive scores that overestimate their true ability. Items that function well together produce assessments that have less measurement error (i.e., the error is small on average). Such assessments are described as “reliable.”

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

The split-half method requires psychometricians to select items that contribute to each half-test score. This decision may have an impact on the resulting correlation, since each different possible split of the test halves will result in a different correlation. Another problem with the split-half method of calculating reliability is that it underestimates reliability, because test length is cut in half. All else being equal, a shorter test is less reliable than a longer test. Cronbach (1951) provided a statistic, alpha (α), which avoids the shortcomings of the split-half method by comparing individual item variances to total test variance. Cronbach's α was used to assess the reliability of the 2014–15 Maine PAAP tests. The formula is as follows:

$$\alpha \equiv \frac{n}{n-1} \left[1 - \frac{\sum_{i=1}^n \sigma_{(Y_i)}^2}{\sigma_x^2} \right],$$

where
i indexes the item,
n is the number of items,
 $\sigma_{(Y_i)}^2$ represents individual item variance, and
 σ_x^2 represents the total test variance.

Table 11-1 presents raw score descriptive statistics (maximum possible score, average, and standard deviation), Cronbach’s α coefficient, and raw score standard error of measurement (SEM) for each content area and grade.

Table 11-1. 2014–15 PAAP: Raw Score Descriptive Statistics, Cronbach’s Alpha, and SEM by Subject and Grade

Subject	Grade	Number of Students	Raw Score			Alpha	SEM
			Maximum	Mean	Standard Deviation		
Science	5	190	69	44.99	15.18	0.76	7.44
	8	205	99	66.07	23.37	0.73	12.14
	HS	186	129	74.84	32.19	0.71	17.33

An alpha coefficient toward the high end is taken to mean that the items are likely measuring very similar knowledge or skills (i.e., they complement one another and suggest a reliable assessment).

11.2 SUBGROUP RELIABILITY

The reliability coefficients discussed in the previous section were based on the overall population of students who took the 2014–15 PAAP. Subgroup Cronbach’s α ’s were calculated using the formula defined above with only the members of the subgroup in question included in the computations. These statistics are reported in Appendix F. Note that statistics are only reported for subgroups with at least 10 students.

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

11.3 DECISION ACCURACY AND CONSISTENCY

While related to reliability, the accuracy and consistency of classifying students into performance categories are even more important statistics in a standards-based reporting framework (Livingston & Lewis, 1995). Unlike generalizability coefficients, decision accuracy and consistency (DAC) can usually be computed with the data currently available for most alternate assessments. For every 2014–15 PAAP grade and content area, each student was classified into one of the following achievement levels: Substantially Below Proficient, Partially Proficient, Proficient, and Proficient with Distinction. However, because of the small testing population for the PAAP, it was not possible to calculate DAC based on classification into the four achievement levels; instead, the categories were collapsed into Proficient or Not Proficient. Because the Proficient cut is what is used for state and federal accountability purposes, results of DAC are most critical for these two categories. This section of the report explains the methodologies used to assess the reliability of classification decisions and presents the results.

Accuracy refers to the extent to which decisions based on test scores match decisions that would have been made if the scores did not contain any measurement error. Accuracy must be estimated, because errorless test scores do not exist. Consistency measures the extent to which classification decisions based on test scores match the decisions based on scores from a second, parallel form of the same test. Consistency can be evaluated directly from actual responses to test items if two complete and parallel forms of the test are given to the same group of students. In operational test programs, however, such a design is usually impractical. Instead, techniques have been developed to estimate both the accuracy and consistency of classification decisions based on a single administration of a test. The Livingston and Lewis (1995) technique was used for the 2014–15 PAAP because it is easily adaptable to all types of testing formats, including mixed-format tests.

The accuracy and consistency estimates reported in Appendix G make use of “true scores” in the classical test theory sense. A true score is the score that would be obtained if a test had no measurement error. Of course, true scores cannot be observed and so must be estimated. In the Livingston and Lewis (1995) method, estimated true scores are used to categorize students into their “true” classifications.

For the 2014–15 PAAP, after various technical adjustments (described in Livingston & Lewis, 1995), a two-by-two contingency table of accuracy was created for each content area and grade, where cell $[i, j]$ represented the estimated proportion of students whose true score fell into classification i (where $i = 1$ or 2) and observed score into classification j (where $j = 1$ or 2). The sum of the diagonal entries (i.e., the proportion of students whose true and observed classifications matched) signified overall accuracy.

To calculate consistency, true scores were used to estimate the joint distribution of classifications on two independent, parallel test forms. Following statistical adjustments per Livingston and Lewis (1995), a new two-by-two contingency table was created for each content area and grade and populated by the proportion of students who would be categorized into each combination of classifications according to the

two (hypothetical) parallel test forms. Cell $[i, j]$ of this table represented the estimated proportion of students whose observed score on the first form would fall into classification i (where $i = 1$ or 2) and whose observed score on the second form would fall into classification j (where $j = 1$ or 2). The sum of the diagonal entries (i.e., the proportion of students categorized by the two forms into exactly the same classification) signified overall consistency.

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

$$\kappa = \frac{(\text{Observed agreement}) - (\text{Chance agreement})}{1 - (\text{Chance agreement})} = \frac{\sum_i C_{ii} - \sum_i C_i C_i}{1 - \sum_i C_i C_i},$$

where

C_i is the proportion of students whose observed achievement level would be Level i (where $i = 1$ or 2) on the first hypothetical parallel form of the test;

C_i is the proportion of students whose observed achievement level would be Level i (where $i = 1$ or 2) on the second hypothetical parallel form of the test; and

C_{ii} is the proportion of students whose observed achievement level would be Level i (where $i = 1$ or 2) on both hypothetical parallel forms of the test.

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

The accuracy and consistency analyses described here are provided in Table G-1 of Appendix G. The table includes overall accuracy and consistency indices, including kappa. Accuracy and consistency values conditional on achievement level are also given. For these calculations, the denominator is the proportion of students associated with a given achievement level. For example, the conditional accuracy value is 0.78 for Not Proficient for science grade 5. This figure indicates that among the students whose true scores placed them in this classification, 78% would be expected to be in this classification when categorized according to their observed scores. Similarly, a consistency value of 0.74 indicates that 74% of students with observed scores in the Not Proficient category would be expected to score in this classification again if a second, parallel test form were used.

For some testing situations, the greatest concern may be decisions around level thresholds. For example, if a college gave credit to students who achieved an Advanced Placement test score of 4 or 5, but not to students with scores of 1, 2, or 3, one might be interested in the accuracy of the dichotomous decision of below-4 versus 4-or-above. For the 2014–15 PAAP, Table G-2 in Appendix G provides accuracy and consistency estimates for the proficient cutpoint as well as false positive and false negative decision rates. (A false positive is the proportion of students whose observed scores were above the cut and whose true scores were below the cut. A false negative is the proportion of students whose observed scores were below the cut and whose true scores were above the cut.) Note that because DAC analyses were calculated using only two categories (Proficient/Not Proficient), the accuracy and consistency values conditional on cutpoint are the same as the overall values.

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

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

11.4 INTERRATER CONSISTENCY

Chapter 9 of this report describes in detail the processes that were implemented to monitor the quality of the hand-scoring of student responses for polytomous items. One of these processes was double-blind scoring of all student responses. Results of the double-blind scoring were used during scoring to identify scorers who required retraining or other intervention and are presented here as evidence of the reliability of the PAAP. A summary of the interrater consistency results is presented in Table 11-2. Results in the table are collapsed across the tasks by subject, grade, and number of score categories (3 for Level of Assistance and 4 for Level of Accuracy). The table shows the number of included scores, the percent exact agreement, the percent adjacent agreement, the correlation between the first two sets of scores, and the percent of responses that required a third score. This same information is provided at the item level in Appendix H.

Table 11-2. 2014–15 PAAP: Summary of Interrater Consistency Statistics Collapsed Across Items by Subject and Grade

<i>Subject</i>	<i>Grade</i>	<i>Number of Items</i>	<i>Number of</i>		<i>Percent</i>		<i>Correlation</i>	<i>Percent of Third Scores</i>
			<i>Score Categories</i>	<i>Included Scores</i>	<i>Exact</i>	<i>Adjacent</i>		
Science	5	24	3	1,061	98.77	0.94	0.96	1.23
		24	4	1,061	93.21	5.56	0.90	6.79
	8	36	3	1,190	99.08	0.34	0.93	1.09
		36	4	1,190	92.18	6.47	0.89	8.07
	HS	48	3	1,077	97.96	1.30	0.91	2.14
		48	4	1,077	94.99	4.36	0.93	5.20

CHAPTER 12 COMPARABILITY (SCALING AND EQUATING)

12.1 COMPARABILITY OF SCORES ACROSS YEARS

In administering the PAAP, teachers select tasks from a standardized Task Bank, following the test blueprints. Use of the Task Bank and blueprints ensures that the assessment as it is administered is appropriate for the individual needs of the student being assessed and that the required Alternate Grade Level Expectations (AGLEs) are covered. The process enables teachers to customize the assessment for individual students while ensuring comparability across years through the use of the same blueprints, tasks, and scoring rubrics from year to year. Additionally, comparability is ensured through the scoring process: Scoring occurs at Measured Progress, using the same scoring rubrics each year in addition to Measured Progress's standard scoring quality-control processes, as described in Chapter 9. Additional processes to ensure across-year comparability include calculation of reported scores and categorization into achievement levels, as described in the following.

12.1.1 Reported Scores

Students' entry scores are calculated based on a formula that combines their Level of Complexity (LoC), Level of Accuracy, and Level of Assistance scores for each of the tasks in a given entry. The formula weights the LoC score more heavily than the other two dimension scores. The overall score for a content area is then the sum of the entry scores. Because of the use of the formula, there may be multiple ways that a student can attain a given total score. Complete details of how reported raw scores are calculated are provided in Appendix I. Use of this formula ensures that the meaning of the reported raw scores will remain constant from year to year.

Graphs of the cumulative reported score distributions for 2013, 2014, and 2015 are provided in Appendix J. Note that the graphs show the proportion of students at or below each scaled score; thus, at any given scaled score point, the lowest line in a given graph indicates that the proportion of students scoring above that point is greatest for the year corresponding to that line. For example, in the graph for grade 5 science (top of Figure J-1), at the scaled score point of 45 (i.e., Cut 2), the curve for 2014–15 is the highest, indicating that the proportion of students scoring at or above 45 is smallest for 2014–15.

12.1.2 Standard Setting

A complete standard setting was conducted for the PAAP on June 28–30, 2010. Using a rubric-based process that was supplemented with student work samples (bodies of work), standards were set for science

(grades 5, 8, and 11). Although teachers are required to follow the test blueprint, they can choose which tasks to use from the centralized Task Bank. Therefore, different students take different combinations of tasks. For this reason, a rubric-based method of standard setting was appropriate for the PAAP. Details of the standard-setting procedures can be found in the standard-setting report, which is posted on the Maine DOE website: <http://www.maine.gov/education/>. To ensure continuity of score reporting across years, the cuts that were established at the standard setting meeting will continue to be used in future years, until it is necessary to reset standards. The raw score cutpoints for the PAAP as established via standard setting are presented in Table 12-1.

Table 12-1. 2014–15 PAAP: Cut Scores on the Theta Metric and Reporting Scale by Subject and Grade

<i>Subject</i>	<i>Grade</i>	<i>Raw Score</i>			<i>Raw Score</i>	
		<i>Cut 1</i>	<i>Cut 2</i>	<i>Cut 3</i>	<i>Minimum</i>	<i>Maximum</i>
Science	5	24	45	66	0	69
	8	33	58	93	0	99
	HS	50	87	127	0	129

12.2 LINKAGES ACROSS GRADES

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

As described in Chapter 5, the AGLEs describe the content to be included in students’ instructional programs for each grade level. The AGLEs are based on the standards/grade-level expectations assessed by Maine’s general assessments (MEA for science) but have been reduced in depth and breadth. The AGLEs are designed to follow a continuum of skills that increase across grades. The tasks, in turn, have been designed to map onto the AGLEs by measuring grade-specific content and skills. These tasks, along with blueprints, which have also been designed to reflect the continuum reflected in the AGLEs, ensure that each portfolio builds upon the appropriate knowledge and skills, thereby reflecting the desired continuity across grades.

During administration, the blueprint serves as a guide to teachers as to how to select tasks that are appropriate for a given student. As with other aspects of the development and administration of the PAAP, use of the blueprints and the LoCs ensures that the student is being assessed at a level that is appropriate for his or her grade level and individual needs and that the tasks to which a student is exposed follow a continuum from year to year. Thus, linkages across grades are built into the design of the portfolio.

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

Following the standard setting meeting, the resulting cutpoints were critically evaluated by experts at the Maine DOE to ensure that proficiency reflected the desired increase in cognition across grades. In addition, the percentages of students scoring at or above Proficient in each grade were examined for coherence from one grade to the next.

CHAPTER 13 SCORE REPORTING

13.1 PRIMARY REPORTS

Measured Progress created the following primary reports for the PAAP:

- Individual Student Reports
- School Analysis Reports
- School, SAU, and State Summary Reports

For 2014–15, all reports were modified to reflect that science, at grades 5, 8, and 3rd year high school, was the only content area assessed. Individual Student Reports, School Analysis Reports, and Summary Reports were posted online via a secure website in August 2015. Individual Student Reports and student labels were printed and shipped to schools in September 2015, to be kept with student records. Sample reports are included in Appendix L.

Maine DOE created the *Report Interpretation Guide*, available at <http://www.maine.gov/doe/paap/results/index.html>, and a parent/guardian brochure, available at <http://www.maine.gov/doe/paap/resources/index.html> to assist educators in sharing results with parents/guardians.

13.1.1 Individual Student Reports

An Individual Student Report was sent to each student’s school to be given to parent(s)/guardians(s). The report was also posted online via a secure website for school personnel. The front cover contained a letter from the Maine commissioner of education and an explanation of what the PAAP is, who should participate, how results should be used, and how students benefit from participating in the PAAP. Content area results included Level of Accuracy, Level of Assistance, and Level of Complexity (LoC) for the submitted Alternate Grade Level Expectations (AGLEs)/Indicators. The results also included the student’s overall content area achievement level, a chart showing where the student’s scores placed him or her along an achievement-level continuum, and achievement-level score ranges. A student label with the student’s achievement level in each content area was also provided to schools for placement in the student’s file.

13.1.2 School Analysis Reports

School Analysis Reports were posted online via a secure website for school, SAU, and state personnel. The School Analysis Reports provided a detailed roster of information on the portfolio entries submitted for each student, including the AGLE/Indicator at which the student was assessed, LoC, Level of Accuracy, Level of Assistance, a total entry score, entry comment codes collected at scoring, and the overall content area score and achievement level for each content area assessed.

13.1.3 School, SAU, and State Summary Reports

School, SAU, and State Summary Reports were posted online via a secure website for school, SAU, and state personnel. These confidential reports summarized data on all PAAP students at the school, SAU, and state levels, comparing performance at each grade level by content area, gender, ethnicity, limited English proficiency (LEP), identified disability, economic disadvantage, migrant status, Title 1, and 504 plan.

13.2 SCORE OF RECORD AND DECISION RULES

Score of record and decision rules were formulated by the Maine DOE and Measured Progress to detail rules for analysis and reporting for achievement reports. To ensure that reported results for the PAAP are accurate relative to collected data and other pertinent information, documents that delineate analysis and reporting rules were created. These documents were observed in the analyses of PAAP test data and in reporting the test results. Moreover, these rules are the main reference for quality-assurance checks.

The score of record primarily describes the calculation of students' scores. The decision rules document primarily describes the inclusion/exclusion of students at the school, SAU, and state levels of aggregations. The decision rules also describe rules as they pertain to individual reports and the classification of students based on their school type or other information provided by the state through the student demographic file.

These documents can be found in Appendices I and M.

13.3 QUALITY ASSURANCE

Quality-assurance measures are embedded throughout the entire process of analysis and reporting. The data processor, data analyst, and psychometrician assigned to work on the PAAP implement quality-control checks of their respective computer programs and intermediate products. Moreover, when data are handed off to different functions within the Data and Reporting Services and Psychometrics and Research Departments, the sending function verifies that the data are accurate before handoff. Additionally, when a function receives a dataset, the first step is to verify the data for accuracy.

Another type of quality-assurance measure is parallel processing. Different exclusions that determine whether each student receives scaled scores or is included in different levels of aggregation are parallel processed. Using the decision rules document, two data analysts independently write a computer program that assigns students' exclusions. For each content area and grade combination, the exclusions assigned by each data analyst are compared across all students. Only when 100% agreement is achieved can the rest of the data analysis be completed.

Another level of quality assurance involves the procedures implemented by the quality-assurance group to check the accuracy of reported data. Using a sample of schools and SAUs, the quality-assurance group verifies that reported information is correct. The step is conducted in two parts: 1) Verify that the computed information was obtained correctly through appropriate application of different decision rules, and 2) verify that the correct data points populate each cell in the PAAP reports. The selection of sample schools and systems for this purpose is very specific and can affect the success of the quality-control efforts. There are two sets of samples selected that may not be mutually exclusive. The first set includes those that satisfy the following criteria:

- one-school SAU
- two-school SAU
- multi-school SAU

The second set of samples includes systems or schools that have unique reporting situations as indicated by the decision rules. This second set is necessary to ensure that each rule is applied correctly. The second set includes the following criteria:

- school for each school type
- school with excluded students as defined by decision rules

The quality-assurance group uses a checklist to implement its procedures. After the checklist is completed, sample reports are circulated for psychometric checks and program management review.

CHAPTER 14 VALIDITY

The purpose of this report is to describe several technical aspects of the PAAP in an effort to contribute to the accumulation of validity evidence to support PAAP score interpretations. Because the combination of a test and its scores, not just the test itself, is evaluated for validity, this report presents documentation to substantiate intended interpretations (AERA et al., 2014). Each of the chapters in this report contributes important information to the validity argument by addressing one or more of the following aspects of the PAAP: test development, test administration, scoring, item analyses, reliability, achievement levels, and reporting.

The PAAP assessment is based on, and aligned to, Maine’s content standards and Alternate Grade Level Expectations (AGLEs) in science. The PAAP results are intended to provide inferences about student achievement on Maine’s science standards and AGLEs; these achievement inferences are meant to be useful for program and instructional improvement and as a component of school accountability.

Standards for Educational and Psychological Testing (AERA et al., 2014) provide a framework for describing sources of evidence that should be considered when constructing a validity argument. These sources include evidence based on the following five general areas: test content, response processes, internal structure, relationship to other variables, and consequences of testing. Although each of these sources may speak to a different *aspect* of validity, they are not distinct *types* of validity. Instead, each contributes to a body of evidence about the comprehensive validity of score interpretations.

14.1 EVIDENCE BASED ON TEST DEVELOPMENT AND STRUCTURE

A measure of test content validity is how well the assessment tasks represent the curriculum and standards for each content area and grade level. This is informed by the task development process, including how the AGLEs and test blueprints align to the curriculum and standards. Viewed through this lens provided by the content standards, evidence based on test content was extensively described in Chapters 5–7. Item alignment with Maine’s content standards, AGLEs, and Levels of Complexity (LoC), as well as review processes for item bias, sensitivity, and content appropriateness, are components of validity evidence based on test content. As discussed earlier, all PAAP tasks are aligned by Maine educators to specific Maine content standards, AGLEs, and LoCs, and all undergo several rounds of review for content fidelity and appropriateness.

Evidence based on internal structure is presented in the discussions of item analyses and reliability in Chapters 10 and 11. Technical characteristics of the internal structure of the assessments are presented in terms of classical item statistics (item difficulty, item-test correlation), correlations between the dimensions (Level of Accuracy and Level of Assistance), fairness/bias, and reliability, including alpha coefficients, interrater consistency, and decision accuracy and consistency (DAC).

14.2 OTHER EVIDENCE

The training and administration information in Chapter 8 describes the steps taken to train the teachers/test administrators on procedures for constructing and administering the PAAP. Tests are constructed and administered according to state-mandated standardized procedures, as described in the *2014–15 PAAP Administration Handbook*. These efforts to provide thorough training opportunities and materials help maximize consistency among teachers, which enhances the quality of test scores and, in turn, contributes to validity.

Evidence on scoring the PAAP is provided in Chapter 9. Procedures for training and monitoring hand-scoring of the PAAP maximize scoring consistency and thus contribute to validity.

Evidence on comparability of scores, both across years and across grades, is provided in Chapter 12. Information is provided on the calculation of students' reported scores as well as the establishment of performance standards that enabled reporting of achievement-level scores. In addition, information about consistency and meaningfulness of test score information across grade levels is provided. All of these processes maximize accuracy and clarity of score information that is provided to the public and, in this way, enhance validity.

Evidence on the consequences of testing is addressed in the reporting information provided in Chapter 13. This chapter speaks to efforts undertaken to provide the public with accurate and clear test score information. Achievement levels give reference points for mastery at each grade level, a useful and simple way to interpret scores. Several different standard reports were provided to stakeholders.

14.3 FUTURE DIRECTIONS

To further support the validity argument, additional studies to provide evidence regarding the relationship of PAAP results to other variables might include an analysis of the extent to which scores from the PAAP assessments converge with other measures of similar constructs and the extent to which they diverge from measures of different constructs. Relationships among measures of the same or similar constructs can sharpen the meaning of scores and appropriate interpretations by refining the definition of the construct.

The evidence presented in this manual supports inferences related to student achievement on the content represented on the AGLs for reading, mathematics, science, and writing for the purposes of program and instructional improvement, and as a component of school accountability.

REFERENCES

- American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. (2014). *Standards for educational and psychological testing*. Washington, DC: American Educational Research Association.
- Brown, F. G. (1983). *Principles of educational and psychological testing* (3rd ed.). Fort Worth: Holt, Rinehart and Winston.
- Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement, 20*, 37–46.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika, 16*, 297–334.
- Dorans, N. J., & Kulick, E. (1986). Demonstrating the utility of the standardization approach to assessing unexpected differential item performance on the Scholastic Aptitude Test. *Journal of Educational Measurement, 23*, 355–368.
- Draper, N. R., & Smith, H. (1998). *Applied regression analysis* (3rd ed.). New York: John Wiley and Sons, Inc.
- Joint Committee on Testing Practices. (2004). *Code of fair testing practices in education*. Washington, DC: Retrieved from www.apa.org/science/programs/testing/fair-code.aspx.
- Livingston, S. A., & Lewis, C. (1995). Estimating the consistency and accuracy of classifications based on test scores. *Journal of Educational Measurement, 32*, 179–197.

APPENDICES

APPENDIX A—2015 ALTERNATE GRADE LEVEL EXPECTATIONS

Alternate Grade Level Expectations

For

MEA (Alternate) - Science

PAAP

**Personalized Alternate
Assessment Portfolio**

Based on Maine's Accountability Standards, Chapter 131

Science

Maine's 2007 Learning Results

TABLE OF CONTENTS

SECTION	PAGE
Blueprint of Required AGLE Indicators.....	2
Science AGLE D — The Physical Setting	
D1 — Universe and Solar System	
Levels of Complexity 1–8.....	3
D2 — Earth	
Levels of Complexity 1–8.....	4
D3 — Matter and Energy	
Levels of Complexity 1–8.....	5
D4 — Force and Motion	
Levels of Complexity 1–8.....	6
Science AGLE E — The Living Environment	
E1 — Biodiversity	
Levels of Complexity 1–8.....	7
E2 — Ecosystems	
Levels of Complexity 1–8.....	8
E3 — Cells	
Levels of Complexity 1–8.....	9
E4 — Heredity and Reproduction	
Levels of Complexity 1–8.....	10
E5 — Evolution	
Levels of Complexity 1–8.....	11

The PAAP Blueprint of Required AGLE Indicators

Grade Level	Science
3	
4	
5	D1, D2, E2
6	
7	
8	D4, E3, E4
3rd Year High School	D3, E1, E5

**Maine’s Accountability Standards, Chapter 131
The Physical Setting – Universe and Solar System**

Science AGLE/Indicator — D1

Student understands the universal nature of matter, energy, force, and motion, and identifies how these relationships are exhibited in Earth Systems, in the solar system, and throughout the universe by:

Level of Complexity 1	Level of Complexity 2	Level of Complexity 3	Level of Complexity 4
describing or otherwise demonstrating understanding of the positions or apparent motions of different objects in our solar system and what these objects look like from Earth by...			
<p>doing the following:</p> <ul style="list-style-type: none"> identifying night and day. 	<p>doing <u>both</u> of the following:</p> <ul style="list-style-type: none"> identifying pictures of night and day, <p>AND</p> <ul style="list-style-type: none"> identifying the Sun and Earth’s Moon. 	<p>doing the following:</p> <ul style="list-style-type: none"> identifying the position of the Sun at different times by drawing or otherwise describing the movement of the Sun across the sky. 	<p>doing <u>both</u> of the following:</p> <ul style="list-style-type: none"> identifying the position of the Sun at different times by drawing or otherwise describing the movement of the Sun across the sky, <p>AND</p> <ul style="list-style-type: none"> drawing or identifying different phases of the Moon.
Level of Complexity 5	Level of Complexity 6	Level of Complexity 7	Level of Complexity 8
<p>See Extended Learning AGLEs</p>	<p>See Extended Learning AGLEs</p>	<p>See Extended Learning AGLEs</p>	<p>See Extended Learning AGLEs</p>

Maine's Accountability Standards, Chapter 131

The Physical Setting – Earth

Science AGLE/Indicator — D2

Student understands the universal nature of matter, energy, force, and motion, and identifies how these relationships are exhibited in Earth Systems, in the solar system, and throughout the universe by:

Level of Complexity 1	Level of Complexity 2	Level of Complexity 3	Level of Complexity 4
describing the properties of Earth's surface materials, the processes that change them, and cycles that affect Earth by...			
<p>doing the following:</p> <ul style="list-style-type: none"> identifying sunny, rainy, snowy, and/or windy weather through observation. 	<p>doing the following:</p> <ul style="list-style-type: none"> matching pictures to the type of weather they depict. 	<p>doing the following:</p> <ul style="list-style-type: none"> identifying the different forms that water can take in the weather. 	<p>doing <u>one</u> of the following:</p> <ul style="list-style-type: none"> matching weather to the effects it can have on the surface of Earth (erosion or weathering), and/or identifying factors that can influence temperature in the environment (day/night cycle, cloud cover, and presence of a star).
Level of Complexity 5	Level of Complexity 6	Level of Complexity 7	Level of Complexity 8
See Extended Learning AGLEs	See Extended Learning AGLEs	See Extended Learning AGLEs	See Extended Learning AGLEs

Maine's Accountability Standards, Chapter 131

The Physical Setting – Matter and Energy

Science AGLE/Indicator — D3

Student understands the universal nature of matter, energy, force, and motion, and identifies how these relationships are exhibited in Earth Systems, in the solar system, and throughout the universe by:

Level of Complexity 1		Level of Complexity 2		Level of Complexity 3		Level of Complexity 4	
describing properties of objects and materials before and after they undergo a change or interaction by...							
<p>doing the following:</p> <ul style="list-style-type: none"> matching objects based on one physical property. 		<p>doing the following:</p> <ul style="list-style-type: none"> identifying which object in a group has a specific physical property. 		<p>doing the following:</p> <ul style="list-style-type: none"> sorting objects into groups using one or more physical properties. 		<p>doing <u>both</u> of the following:</p> <ul style="list-style-type: none"> describing the physical properties of objects and materials <p>AND</p> <ul style="list-style-type: none"> using observable characteristics to describe changes in the physical properties of materials when mixed, heated, frozen, or cut. 	
Level of Complexity 5		Level of Complexity 6		Level of Complexity 7		Level of Complexity 8	
describing physical and chemical properties of matter, interactions and changes in matter, and transfer of energy through matter by...				describing the structure, behavior, and interactions of matter at the atomic level and the relationship between matter and energy by...			
<p>doing <u>both</u> of the following:</p> <ul style="list-style-type: none"> identifying chemical changes <p>AND</p> <ul style="list-style-type: none"> identifying physical changes. 		<p>doing <u>both</u> of the following:</p> <ul style="list-style-type: none"> comparing the properties of original materials and their properties after undergoing chemical or physical change <p>AND</p> <ul style="list-style-type: none"> observing and drawing conclusions about how the weight of an object compares to the sum of the weights of its parts. 		<p>doing <u>both</u> of the following:</p> <ul style="list-style-type: none"> explaining that all materials are made of small particles <p>AND</p> <ul style="list-style-type: none"> identifying examples of chemical and physical changes. 		<p>doing <u>both</u> of the following:</p> <ul style="list-style-type: none"> explaining that adding heat causes the small particles in matter to move faster <p>AND</p> <ul style="list-style-type: none"> demonstrating understanding that the properties of a material may change but the total amount of material remains the same. 	

Maine's Accountability Standards, Chapter 131

The Physical Setting – Force and Motion

Science AGLE/Indicator — D4

Student understands the universal nature of matter, energy, force, and motion, and identifies how these relationships are exhibited in Earth Systems, in the solar system, and throughout the universe by:

Level of Complexity 1		Level of Complexity 2		Level of Complexity 3		Level of Complexity 4	
summarizing how various forces affect the motion of objects by...							
<p>doing the following:</p> <ul style="list-style-type: none"> identifying or demonstrating one way (e.g., forward, backward, straight, zigzag, up, down, fast, slow) an object can move. 		<p>doing the following:</p> <ul style="list-style-type: none"> identifying or demonstrating two ways (e.g., forward, backward, straight, zigzag, up, down, fast, slow) an object can move. 		<p>doing <u>both</u> of the following:</p> <ul style="list-style-type: none"> describing or demonstrating three ways (e.g., forward, backward, straight, zigzag, up, down, fast, slow) an object can move <p>AND</p> <ul style="list-style-type: none"> identifying that the way an object moves can be changed by pushing or pulling it. 		<p>doing the following:</p> <ul style="list-style-type: none"> demonstrating understanding of how given objects move. 	
Level of Complexity 5		Level of Complexity 6		Level of Complexity 7		Level of Complexity 8	
describing the force of gravity, the motion of objects, the properties of waves, and the wavelike property of energy in light waves by...				See Extended Learning AGLEs		See Extended Learning AGLEs	
<p>doing the following:</p> <ul style="list-style-type: none"> identifying or describing wave motions, earthquakes, vibrations, and/or water waves. 		<p>doing <u>one</u> or more of the following:</p> <ul style="list-style-type: none"> giving examples of how gravity pulls objects, giving examples of how magnets pull and push objects, and/or describing similarities in motion of sound vibration and earthquakes, and water waves. 					

Maine's Accountability Standards, Chapter 131

The Living Environment — Biodiversity

Science AGLE/Indicator — E1

Student understands that cells are the basic unit of life, that all life as we know it has evolved through genetic transfer and natural selection to create a great diversity of organisms, and that these organisms create interdependent webs through which matter and energy flow. Student understands the similarities and differences between humans and other organisms and the interconnections of these interdependent webs by:

Level of Complexity 1		Level of Complexity 2		Level of Complexity 3		Level of Complexity 4	
comparing living things based on their behaviors, external features, and environmental needs by...							
<p>doing the following:</p> <ul style="list-style-type: none"> identifying pictures or descriptions of given animals or plants. 		<p>doing the following:</p> <ul style="list-style-type: none"> identifying given organisms as plants or animals based on external features 		<p>doing the following:</p> <ul style="list-style-type: none"> identifying organisms that are similar and different based on external features, behaviors, and/or needs. 		<p>doing <u>two</u> of the following:</p> <ul style="list-style-type: none"> describing how plants and/or animals look, and/or describing the things that plants and/or animals do, and/or describing ways in which the needs of a plant and/or animal are met by its environment. 	
Level of Complexity 5		Level of Complexity 6		Level of Complexity 7		Level of Complexity 8	
differentiating among organisms based on biological characteristics and identifying patterns of similarity by...				describing and analyzing the evidence for relatedness among and within diverse populations of organisms and the importance of biodiversity by...			
<p>doing both of the following:</p> <ul style="list-style-type: none"> sorting living things based on external features or behaviors. 		<p>doing <u>one</u> or more of the following:</p> <ul style="list-style-type: none"> identifying how external (or internal) features can influence how an animal or plant gets food and/or differentiating among living things that make their food, living things that eat their food, and those that do not clearly belong in one group or the other. 		<p>doing <u>both</u> of the following:</p> <ul style="list-style-type: none"> describing environments that have many different types of organisms and those that have fewer types of organisms, <p>AND</p> <ul style="list-style-type: none"> identifying ways that organisms are related using physical evidence, such as presence or absence of a backbone. 		<p>doing the following:</p> <ul style="list-style-type: none"> predicting possible changes that could result if the numbers of different types of organisms were to be drastically reduced. 	

**Maine’s Accountability Standards, Chapter 131
The Living Environment — Ecosystems**

Science AGLE/Indicator — E2

Student understands that cells are the basic unit of life, that all life as we know it has evolved through genetic transfer and natural selection to create a great diversity of organisms, and that these organisms create interdependent webs through which matter and energy flow. Student understands the similarities and differences between humans and other organisms and the interconnections of these interdependent webs by:

Level of Complexity 1	Level of Complexity 2	Level of Complexity 3	Level of Complexity 4
describing ways organisms depend upon, interact within, and change the living and nonliving environment as well as ways the environment affects organisms by...			
<p>doing the following:</p> <ul style="list-style-type: none"> identifying pictures or descriptions of given animals or plants. 	<p>doing the following:</p> <ul style="list-style-type: none"> identifying animals or plants that live in given environments 	<p>doing the following:</p> <ul style="list-style-type: none"> identifying plants, animals, and/or components of their environments in which given animals depend on for food and shelter. 	<p>doing <u>one</u> of the following:</p> <ul style="list-style-type: none"> comparing animals and plants that live in different environments to demonstrate understanding of how animals and plants depend on each other and the environments in which they live.
Level of Complexity 5	Level of Complexity 6	Level of Complexity 7	Level of Complexity 8
<p>See Extended Learning AGLEs</p>	<p>See Extended Learning AGLEs</p>	<p>See Extended Learning AGLEs</p>	<p>See Extended Learning AGLEs</p>

**Maine’s Accountability Standards, Chapter 131
The Living Environment — Cells**

Science AGLE/Indicator — E3

Student understands that cells are the basic unit of life, that all life as we know it has evolved through genetic transfer and natural selection to create a great diversity of organisms, and that these organisms create interdependent webs through which matter and energy flow. Student understands the similarities and differences between humans and other organisms and the interconnections of these interdependent webs by:

Level of Complexity 1		Level of Complexity 2		Level of Complexity 3		Level of Complexity 4	
describing how living things are made up of one or more cells and the ways cells help organisms meet their basic needs by...							
<p>doing the following:</p> <ul style="list-style-type: none"> identifying given parts of the human body. 		<p>doing the following:</p> <ul style="list-style-type: none"> matching animals and/or plants to their parts. 		<p>doing the following:</p> <ul style="list-style-type: none"> identifying parts that allow living things to meet basic needs. 		<p>doing the following:</p> <ul style="list-style-type: none"> identifying structures and/or processes that help given organisms stay alive. 	
Level of Complexity 5		Level of Complexity 6		Level of Complexity 7		Level of Complexity 8	
describing the hierarchy of organization and function in organisms, and the similarities and differences in structure, function, and needs among and within organisms by...				See Extended Learning AGLEs		See Extended Learning AGLEs	
<p>doing <u>one</u> of the following:</p> <ul style="list-style-type: none"> identifying that some living things are made of one cell and some living things are made of many cells, and/or identifying that all living things (single-celled and multi-celled) must have ways to get food and get rid of wastes. 		<p>doing <u>both</u> of the following:</p> <ul style="list-style-type: none"> identifying that some living things are made of one cell and some living things are made of many cells <p>AND</p> <ul style="list-style-type: none"> identifying that all living things (single-celled and multi-celled) must have ways to get food and get rid of wastes. 					

Maine's Accountability Standards, Chapter 131

The Living Environment — Hereditary and Reproduction

Science AGLE/Indicator — E4

Student understands that cells are the basic unit of life, that all life as we know it has evolved through genetic transfer and natural selection to create a great diversity of organisms, and that these organisms create interdependent webs through which matter and energy flow. Student understands the similarities and differences between humans and other organisms and the interconnections of these interdependent webs by:

Level of Complexity 1	Level of Complexity 2	Level of Complexity 3	Level of Complexity 4
describing characteristics of organisms and the reason why organisms differ from or are similar to their parents by...			
<p>doing the following:</p> <ul style="list-style-type: none"> identifying parents and their offspring by matching pictures of a baby organism to an adult of the same organism. 	<p>doing the following:</p> <ul style="list-style-type: none"> identifying things about offspring that are like and not like their parents. 	<p>doing the following:</p> <ul style="list-style-type: none"> demonstrating understanding of life cycles by explaining, drawing, or otherwise communicating knowledge of stages in given life cycles. 	<p>doing <u>both</u> of the following:</p> <ul style="list-style-type: none"> naming similarities between the adults and offspring of varied organisms <p>AND</p> <ul style="list-style-type: none"> identifying and describing, drawing, or otherwise communicating knowledge of stages in a life cycle
Level of Complexity 5	Level of Complexity 6	Level of Complexity 7	Level of Complexity 8
describing the general characteristics and mechanisms of reproduction and heredity in organisms, including humans, and ways in which organisms are affected by their genetic traits by...		See Extended Learning AGLEs	See Extended Learning AGLEs
<p>doing <u>one</u> of the following:</p> <ul style="list-style-type: none"> identifying the characteristics of offspring and parents based on similarities and differences. 	<p>doing <u>both</u> of the following:</p> <ul style="list-style-type: none"> identifying living things that reproduce by getting all their inherited information from one parent <p>AND</p> <ul style="list-style-type: none"> identifying living things that reproduce by getting all their inherited information from two parents. 		

Maine's Accountability Standards, Chapter 131

The Living Environment — Evolution

Science AGLE/Indicator — E5

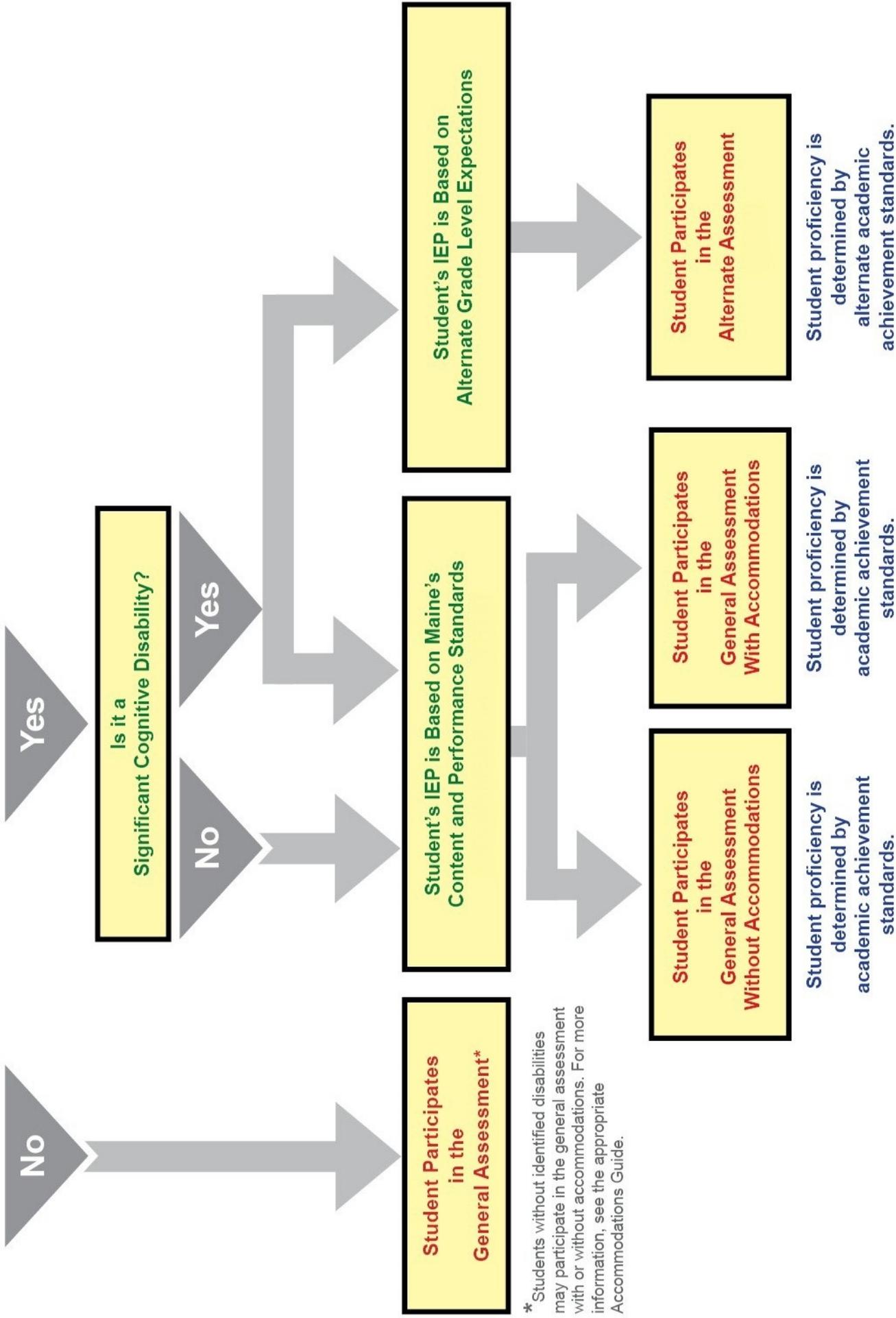
Student understands that cells are the basic unit of life, that all life as we know it has evolved through genetic transfer and natural selection to create a great diversity of organisms, and that these organisms create interdependent webs through which matter and energy flow. Student understands the similarities and differences between humans and other organisms and the interconnections of these interdependent webs by:

Level of Complexity 1		Level of Complexity 2		Level of Complexity 3		Level of Complexity 4	
describing fossil evidence and present explanations that help us understand why there are differences among and between present and past organisms by...							
<p>doing the following:</p> <ul style="list-style-type: none"> identifying organisms from the local environment. 		<p>doing the following:</p> <ul style="list-style-type: none"> matching pictures of organisms to the environment in which they live. 		<p>doing <u>both</u> of the following:</p> <ul style="list-style-type: none"> identifying organisms that no longer live today <p>AND</p> <ul style="list-style-type: none"> describing features that organisms no longer living today share with organisms now alive and features that differ from those of organisms now alive. 		<p>doing <u>both</u> of the following:</p> <ul style="list-style-type: none"> describing features that allow or allowed present and past organisms to live in their environment <p>AND</p> <ul style="list-style-type: none"> identifying organisms that once lived on Earth but no longer exist. 	
Level of Complexity 5		Level of Complexity 6		Level of Complexity 7		Level of Complexity 8	
describing the evidence that evolution occurs over many generations, allowing species to acquire many of their unique characteristics or adaptations, by...				describing the interactions between and among species, populations, and environments that lead to natural selection and evolution, by...			
<p>doing <u>both</u> of the following:</p> <ul style="list-style-type: none"> identifying examples of fossils <p>AND</p> <ul style="list-style-type: none"> demonstrating understanding of how fossils are formed. 		<p>doing the following:</p> <ul style="list-style-type: none"> explaining how fossils are used to help us understand the past. 		<p>doing the following:</p> <ul style="list-style-type: none"> presenting explanations that help us understand similarities and differences among and between past and present organisms. 		<p>doing <u>both</u> of the following:</p> <ul style="list-style-type: none"> explaining why some organisms survive to the next generation <p>AND</p> <ul style="list-style-type: none"> explaining why some organisms have traits that provide no apparent survival advantage. 	

APPENDIX B— PROCESS FOR DETERMINING THE APPROPRIATE AVENUE FOR PARTICIPATION

Flow Chart for Determining Appropriate Avenue of Assessment

Does the Student Have an Identified Disability?



* Students without identified disabilities may participate in the general assessment with or without accommodations. For more information, see the appropriate Accommodations Guide.

APPENDIX C—2015 SCORING INSTRUCTIONS

2015 PAAP

SCORING INSTRUCTIONS USING PROFILE

Step 1. Enter Portfolio ID

Step 1.a. Enter the 15-digit portfolio identification number (PID) found on the back of the portfolio envelope. This number begins with 753400000.

Step 1.b. Click **Continue**.

SIGN OUT

measured progress | PROFILE

PAAP Task Bank

Signed in as: Sarah Greene (Scorer #2)

Enter Portfolio ID | Verify Demographics | Verify Entries | Score Entry | Finalize Entry | Finalize Portfolio

Enter Portfolio ID:

Continue

Copyright © 2004-2013 by Measured Progress. All Rights Reserved.

Step 2. Verify Demographics

Does the portfolio demographic information provided on the **Verify Demographics** screen match the login information on the portfolio? Compare the student ID number, name, grade, district name, and school name.

- If **YES**, click **Yes** and then click on **Continue Scoring** in the dark blue banner.
- If **NO**, click **No** notify your Table Leader. Once the Table Leader has approved, click on **Continue Scoring** in the dark blue banner.

Enter Portfolio ID | **Verify Demographics** | Verify Entries | Score Entry | Finalize Entry | Finalize Portfolio

Cancel - Enter Another PID

Portfolio Demographic Information Found
(PID #: 88811100100100)

Login Data	ProFile™ Data
Student ID: 100100100	100100100
Student First Name: Liam	Liam
Student Middle Initial:	
Student Last Name: Scott	Scott
D.O.B.: 01/01/2001	01/01/2001
Grade: 08	08
District Code: TD03	TD03
District: Test District	Test District
School Code: TS11	TS11
School: Compass Middle School	Compass Middle School

Scorer Alerts
(Inform your table leader or scoring administrator if any information is displayed below. If the administrator needs to update this student, please log out before the update is made.)

Does the information above match the physical Portfolio?

Yes - All of the data matches.

No - The Table Leader has approved continuing the scoring process.

If the Login data does not match the physical portfolio, please obtain permission from your Table Leader or the Administrator before scoring this portfolio.

Copyright © 2004-2015 by Measured Progress. All Rights Reserved.

NOTE: Navigate through ProFile by using the links within the application **ONLY**. Do **NOT** use the browsers back and forward buttons.

Step 3. Verify Entries

Step 3.a. Use the **Verify Entries** screen which lists the required entries and the Entry Slip to verify that the AGLE/Indicators on the screen match the circled AGLE/Indicator on the bottom of the Entry Slip.

In the example below, the AGLE/Indicators are D4, E3, & E4.

Enter Portfolio ID Verify Demographics **Verify Entries** Score Entry Finalize Entry Finalize Portfolio

Working on:
Scott, Liam (Grade 08)

The entries listed below are required in the portfolio:

Science

- ◆ D4 - Force and Motion
- ◆ E3 - Cells
- ◆ E4 - Heredity and Reproduction

KEY: → Current Entry ◆ To Do Entry ✓ Done Entry ✗ Omitted Entry

Copyright © 2004-2015 by Measured Progress. All Rights Reserved.

Science		
D.	Universe and Solar System	D1
	Earth	D2
	Matter and Energy	D3
	Force and Motion	(D4)

Step 3.b. Select the first Entry by clicking on the yellow diamond. Then a blue arrow will appear to indicate you have selected this Entry. Click the blue arrow to begin scoring the entry.

Enter Portfolio ID Verify Demographics **Verify Entries** Score Entry Finalize Entry Finalize Portfolio

Working on:
Scott, Liam (Grade 08)

The entries listed below are required in the portfolio:

Science

- D4 - Force and Motion
- ◆ E3 - Cells
- ◆ E4 - Heredity and Reproduction

KEY: → Current Entry ◆ To Do Entry ✓ Done Entry ✗ Omitted Entry

Step 4. Score Entry

Step 4.a. Does the content area submitted in the portfolio match what is shown on the screen? If you are not sure, check with your table leader before continuing.

- If **YES**, click **Yes** for “Was the Entry Submitted?”, and continue scoring.
- If **NO**, click **No** for “Was the Entry Submitted?”, and click on **Comments** to assign comment code **2.e** and then **Finalize the Entry** (see page 8) before moving on to the next Entry.

The screenshot shows the 'Score Entry' interface. At the top, there are navigation tabs: 'Enter Portfolio ID', 'Verify Demographics', 'Verify Entries', 'Score Entry' (highlighted), 'Finalize Entry', and 'Finalize Portfolio'. Below the tabs, there are links for 'Score LoC' and 'Comments'. On the right, it says 'Working on: Scott, Liam (Grade 08)'. The main content area has a header 'Scoring' followed by 'Science' and 'D4 - Force and Motion'. Below this is a question: '1 Was the Entry Submitted?' with radio buttons for 'Yes' and 'No'. At the bottom, there is a copyright notice: 'Copyright © 2004-2015 by Measured Progress. All Rights Reserved.'

Step 4.b Level of Complexity (LoC)

The LoCs displayed on the screen are the only ones available for the student’s grade level. Verify that the LoC circled in the middle of the Entry Slip page matches one of the LoCs on the screen. The LoC is also located on the bottom right corner of each page’s footer within an Entry. In the examples below, the LoC is 4. Does the LoC circled on the Entry Slip match one of the LoCs on the screen?

- If **YES**, select the LoC indicated on the Entry Slip or within the pages of the Entry.
- If **NO**, then the Entry is unscorable and does not meet PAAP requirements. Do not enter anything for the LoC section and continue to **Step 4.c**.

The screenshot shows the 'Score Entry' interface with the 'Level of Complexity (LoC)' section highlighted. The question '1 Was the Entry Submitted?' is still visible with 'Yes' selected. Below it, the 'Level of Complexity (LoC)' section has radio buttons for LoC 1 through LoC 6, with LoC 4 selected. Below that is question '2 Does the Entry meet PAAP Requirements?' with 'Yes' selected. The navigation tabs and user information are the same as in the previous screenshot.

The screenshot shows a grid of Level of Complexity (LoC) options. The text reads: 'Level of Complexity aligned to the student work for this AGLE:'. The options are: 'Level of Complexity 1', 'Level of Complexity 2', 'Level of Complexity 3', 'Level of Complexity 4' (circled), 'Level of Complexity 5', 'Level of Complexity 6', 'Level of Complexity 7', and 'Level of Complexity 8'.

Step 4.c. Does the Entry Meet PAAP Requirements? Verify that the LoC submitted is grade-appropriate. Only the grade-appropriate LoCs should appear on this screen. If you are not sure, check with your table leader before continuing.

- If **YES**, click **Yes** for “Does the Entry Meet PAAP Requirements?”
- If **NO**, click **No** for “Does the Entry Meet PAAP Requirements?”, and click **Comments** in the dark blue banner. Assign comment code **4.a** or **4.b** and click **Finalize the Entry**.

Step 5. Score the Entry/Score Task X

Step 5.a. Is the Task Scorable?

Verify that the Task is scorable. **Both criteria below must be met.**

- There is evidence of student work on the work template for each task.
- The Level of Assistance was completed on the Task Summary page.
 - If “Other” was completed by the teacher, flag your table leader to verify that the Level of Assistance was selected accurately. Some of these issues are noted below.

A Task is unscorable for any one of the following conditions:

- 3e - Student work was not completed on the work template.
- 5b - The Level of Assistance was not completed.
- 2c - Hand-over-hand was used.
- 2b - An item or items were altered.
- 3b - A Task or Task Summary page(s) is (are) missing.
- 4a - The LoC is above the student’s grade level.

Special circumstances to consider:

- 4b - Two Entries for one AGLE/Indicator with different LoCs are submitted.
 - Score the Entry with the higher LoC.
 - The other Entry is not scorable.
- If **YES**, click **Yes** for “Is Task 1 Scorable?”, and continue scoring.
- If **No**, click **No** for “Is Task 1 Scorable?”, and move to the next task by clicking on **Score Task X** in the dark blue banner.

Enter Portfolio ID	Verify Demographics	Verify Entries	Score Entry	Finalize Entry	Finalize Portfolio
Score LoC	Score Task 1	Score Task 2	Comments	Working on: Scott, Liam (Grade 08)	
D4 - Force and Motion					
Task 1					
Force and Motion					
Is Task 1 Scorable?				<input type="radio"/> Yes	<input type="radio"/> No

Copyright © 2004-2015 by Measured Progress. All Rights Reserved.

Step 5.b. Level of Accuracy

Use the *Level of Accuracy Grid* on the Task Summary page to identify the accuracy of the student work for each item. Refer to the “Responses Expected from Student” key on the Task Description page to score the Task.

- Click on **C** if the response is correct.
- Click on **X** if the response is incorrect.
- Verify that the “% Correct” increases when you click on **C**.

Note: If the percent correct reported by the teacher does not match your percent, do not change your score. Discrepancies will be handled by the third read process.

Enter Portfolio ID		Verify Demographics		Verify Entries		Score Entry		Finalize Entry		Finalize Portfolio			
Score LoC		Score Task 1		Score Task 2		Comments		Working on: Scott, Liam (Grade 08)					
D4 - Force and Motion													
Task 1													
Force and Motion													
Is Task 1 Scorable?										<input checked="" type="radio"/> Yes		<input type="radio"/> No	
Level of Accuracy													
Item	Correct/Incorrect	Data Key: C = Correct X = Incorrect											
1	<input checked="" type="radio"/> C <input type="radio"/> X (2 points)	% Correct = <u>33%</u>											
2	<input type="radio"/> C <input type="radio"/> X (2 points)												
3	<input type="radio"/> C <input type="radio"/> X (2 points)												

Level of Accuracy		
Item	Correct/Incorrect (Circle One)	Data Key: C = Correct X = Incorrect
		2 of 6 = 33% 4 of 6 = 67% 6 of 6 = 100%
1	<input checked="" type="radio"/> C <input type="radio"/> X (2 points)	% Correct = <u>33%</u>
2	<input type="radio"/> C <input type="radio"/> X (2 points)	
3	<input type="radio"/> C <input type="radio"/> X (2 points)	

Step 5.c. Level of Assistance

Refer to the Task Summary page in the PAAP to complete the *Level of Assistance Grid*. If Applicable, compare the teacher’s score and details provided under “Other” by the teacher to ensure there are no discrepancies. If you have a question about the “Other,” check with your Table Leader before continuing. Is the Level of Assistance provided correct?

- If **YES**, click the corresponding number 1, 2, or 3 in the Level of Assistance section of the screen.
- If **NO**, flag your table leader to determine the correct Level of Assistance. After the revised Level of Assistance is determined, click this number in the Level of Assistance grid.
 - If the task is truly determined to be unscorable, return to the question at the top of the page “Is Task X Scorable?” and change your answer to “NO”. Do not use the “Unscorable” option under Level of Assistance.

Enter Portfolio ID		Verify Demographics		Verify Entries		Score Entry		Finalize Entry		Finalize Portfolio	
Score LoC		Score Task 1		Score Task 2		Comments		Working on: Scott, Liam (Grade 08)			
D4 - Force and Motion											
Task 1											
Force and Motion											
Is Task 1 Scorable?								<input checked="" type="radio"/> Yes <input type="radio"/> No			
Level of Accuracy											
Item	Correct/Incorrect	Data Key: C = Correct X = Incorrect									
1	<input checked="" type="radio"/> C <input type="radio"/> X (2 points)	% Correct = <u>33%</u>									
2	<input type="radio"/> C <input type="radio"/> X (2 points)										
3	<input type="radio"/> C <input type="radio"/> X (2 points)										
Determine the Level of Assistance in the box below.											
Level of Assistance											
<input type="radio"/> Unscorable Select the type of assistance based on the list below			<input type="radio"/> LoA 1 Select the type of assistance based on the list below			<input checked="" type="radio"/> LoA 2 Select the type of assistance based on the list below			<input type="radio"/> LoA 3 Select the type of assistance based on the list below		
<ul style="list-style-type: none"> Hand-over-hand Altering items/tasks beyond removing a choice (task no longer connects to the AGLE) 			<ul style="list-style-type: none"> Modeling Demonstrating a response similar to the desired response 			<ul style="list-style-type: none"> Use of Option 2 (LoC 1 only) to use fewer of the item sets multiple times to match student knowledge Limiting a student's response (outside of LoC 1 at Option 2) by removing one response option Use of clarifying questions to stimulate student thought to the specific task without providing clues to specific answers 			<ul style="list-style-type: none"> Independent Providing encouragement Completing tasks by using augmentative/alternate means of communication Repeating directions Reacting to a student Rereading a passage Reminding a student to stay focused 		
Copyright © 2004-2015 by Measured Progress. All Rights Reserved.											

Level of Assistance		
Level of Assistance 1 <input type="checkbox"/> Circle the type of assistance from the list below.	Level of Assistance 2 <input checked="" type="checkbox"/> Circle the type of assistance from the list below.	Level of Assistance 3 <input type="checkbox"/> Circle the type of assistance from the list below.
<ul style="list-style-type: none"> Modeling Demonstrating a response similar to that desired Other: _____ 	<ul style="list-style-type: none"> Use of Option 2 Limiting student's response by removing one option Asking clarifying questions Prompting Cueing Other: _____ 	<ul style="list-style-type: none"> Independent Encouragement Use of augmentative/alternative communication Repeating directions Reacting to student Re-reading passage Reminding student to focus Other: _____

Step 5.d. Score the remaining Tasks for this Entry by clicking on **Score Task X** in the dark blue banner.

Step 5.e. Comment Codes

Comment codes are based on the totality of the Entry. They provide teachers valuable feedback on the Entry scores.

- Click on **Comments** in the dark blue banner.
- Select at least one comment code, but no more than two, as you score each Entry.

The screenshot shows a web interface for scoring an entry. At the top, there is a navigation bar with tabs: 'Enter Portfolio ID', 'Verify Demographics', 'Verify Entries', 'Score Entry' (which is active), 'Finalize Entry', and 'Finalize Portfolio'. Below this is a sub-navigation bar with 'Score LoC', 'Score Task 1', 'Score Task 2', and 'Comments' (which is active). On the right side of the sub-navigation bar, it says 'Working on: Scott, Liam (Grade 08)'. The main content area is titled 'D4 - Force and Motion' and 'Comments'. It is divided into two columns: 'Comment Code 1' and 'Comment Code 2'. Each column contains a list of comment codes with radio buttons next to them. The first code in each column is '1. All Components/criteria were met for the Entry.' The second code in each column is '2. Entry' followed by sub-points a through e. The third code is '3. Entry contains' followed by sub-points a through e. The fourth code is '4. Level of Complexity' followed by sub-points a and b. The fifth code is '5. Specific information was not provided and/or inconsistent on the Task Summary page about' followed by sub-points a and b. The second code in the 'Comment Code 2' column is 'No second comment for this entry.' At the bottom of the page, there is a copyright notice: 'Copyright © 2004-2015 by Measured Progress. All Rights Reserved.'

Step 5.f. When you have scored all the Tasks and selected appropriate comment codes, **Finalize Entry** will appear in the dark blue banner. If it does not appear, double check that all the Tasks were completed appropriately and comment codes were entered.

- Click on **Finalize Entry** and review the data that you entered for this Entry.
- If you notice an error, click on **Return to Entry** to verify that the data is correct for each Task. **Do NOT use the browser's back button.**
- Once it is determined that all data is accurate, click **Accept and Finalize**.

The screenshot shows a software interface for finalizing an entry. At the top, there is a navigation bar with tabs: 'Enter Portfolio ID', 'Verify Demographics', 'Verify Entries', 'Score Entry', 'Finalize Entry' (which is highlighted), and 'Finalize Portfolio'. Below the navigation bar, there are links for 'Return to Entry' and 'Accept and Finalize'. On the right side of the navigation bar, it says 'Working on: Scott, Liam (Grade 08)'. The main content area is titled 'Finalize Entry' and displays the following information:

- Portfolio ID: 888111100100100
- Student: Scott, Liam
- Entry: D4 - Force and Motion
- Was the Entry Submitted?: Y
- LoC: 4
- Did the Entry Meet PAAP Requirements?: Y
- Was Task 1 Scorable?: Y
 - Task 1: Force and Motion
 - Accuracy: Score: 2 (33%)
 - Assistance: 2
- Was Task 2 Scorable?: Y
 - Task 2: Force and Motion
 - Accuracy: Score: 4 (100%)
 - Assistance: 3
- Comment 1: All Components/criteria were met for the Entry.
- Comment 2: Comment not found.

Note: Once you click **Accept and Finalize**, you **CANNOT CHANGE OR REVIEW ANY DATA.**

Step 5.g. This Entry is now complete. Continue scoring the remaining Entries starting at **Step 3.a.** on page 2.

Step 6. Finalize the Portfolio

When you have scored all the Entries for the portfolio, ProFile will bring you to the [Finalize Portfolio](#) screen.



Enter Portfolio ID Verify Demographics Verify Entries Score Entry Finalize Entry **Finalize Portfolio**

Finalize Portfolio Working on:
Scott, Liam (Grade 08)

The entries listed below are required in the portfolio:

Science

-  D4 - Force and Motion
-  E3 - Cells
-  E4 - Heredity and Reproduction

KEY:  Current Entry  To Do Entry  Done Entry  Omitted Entry

Copyright © 2004-2015 by Measured Progress. All Rights Reserved.

Verify that all Entries within the portfolio are completed in ProFile. If an Entry has not been completed, a yellow diamond will be displayed. Have all of the Entries been scored/reviewed?

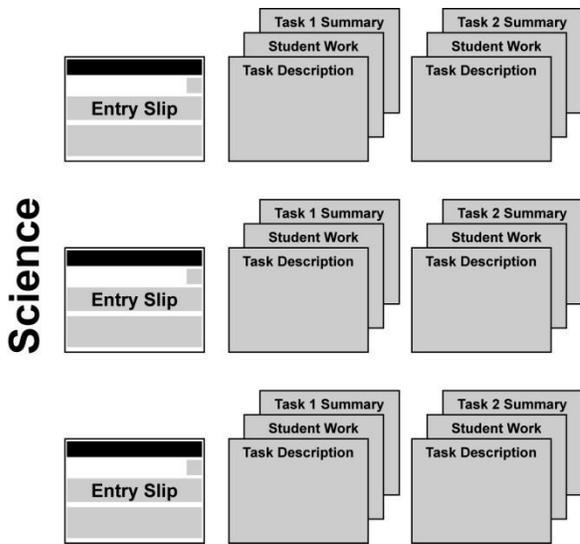
- If **YES**, click [Finalize Portfolio](#) in the dark blue banner. You will then be prompted to enter the PID for the next portfolio to be scored.
- If **NO**, flag your Table Leader.

Step 7. Flow of Materials

Once the scoring of the PAAP is complete:

- Place the PAAP back in the Tyvek envelope.
- Verify that you have indicated your scorer number in the proper place on the scoring label on the envelope.
- Return the PAAP to your table leader.

Visual Guide to the PAAP



ProFile Website

<https://profile.measuredprogress.org/ProfileMEScoring/Login.aspx>

Maine PAAP Blueprint

Grade	LoC	Science
5	1-4	D1, D2, E2
8	1-6	D4, E3, E4
3 rd Yr. High School	1-8	D3, E1, E5

APPENDIX D—ITEM-LEVEL CLASSICAL STATISTICS

**Table D-1. 2014–15 PAAP: Item-Level Classical Test Theory Statistics—
Science Grade 5**

<i>Item Number</i>	<i>Difficulty</i>	<i>Discrimination</i>	<i>Item Number</i>	<i>Difficulty</i>	<i>Discrimination</i>
D111LAC	0.63	0.39	D231LAS	0.93	0.55
D111LAS	0.79	0.34	D232LAC	0.84	0.48
D112LAC	0.68	0.48	D232LAS	0.93	0.54
D112LAS	0.80	0.55	D241LAC	0.76	0.24
D121LAC	0.68	0.47	D241LAS	0.87	0.22
D121LAS	0.68	0.46	D242LAC	0.76	0.18
D122LAC	0.89	0.66	D242LAS	0.85	0.19
D122LAS	0.92	0.43	E211LAC	0.82	0.50
D131LAC	0.85	0.53	E211LAS	0.88	0.56
D131LAS	0.83	0.46	E212LAC	0.76	0.52
D132LAC	0.87	0.43	E212LAS	0.88	0.56
D132LAS	0.84	0.46	E221LAC	0.82	0.17
D141LAC	0.78	0.18	E221LAS	0.83	0.71
D141LAS	0.92	0.16	E222LAC	0.77	0.43
D142LAC	0.85	0.12	E222LAS	0.86	0.60
D142LAS	0.87	0.06	E231LAC	0.90	0.49
D211LAC	0.67	0.32	E231LAS	0.87	0.55
D211LAS	0.75	0.62	E232LAC	0.91	0.52
D212LAC	0.64	0.21	E232LAS	0.86	0.57
D212LAS	0.72	0.54	E241LAC	0.76	0.55
D221LAC	0.86	0.53	E241LAS	0.91	0.31
D221LAS	0.90	0.29	E242LAC	0.76	0.52
D222LAC	0.87	0.53	E242LAS	0.86	0.14
D222LAS	0.90	0.32			
D231LAC	0.79	0.45			

Note: Statistics are presented only for items that were taken by 10 or more students.

**Table D-2. 2014–15 PAAP: Item-Level Classical Test Theory Statistics—
Science Grade 8**

<i>Item Number</i>	<i>Difficulty</i>	<i>Discrimination</i>	<i>Item Number</i>	<i>Difficulty</i>	<i>Discrimination</i>
D411LAC	0.76	0.62	D442LAS	0.92	0.01
D411LAS	0.76	0.37	D451LAC	0.92	0.24
D412LAC	0.74	0.56	D451LAS	0.91	0.13
D412LAS	0.76	0.37	D452LAC	0.83	0.08
D421LAC	0.88	0.32	D452LAS	0.91	0.34
D421LAS	0.92	0.27	D461LAC	0.79	0.23
D422LAC	0.85	0.01	D461LAS	0.83	0.56
D422LAS	0.90	0.11	D462LAC	0.79	0.36
D431LAC	0.77	0.21	D462LAS	0.87	0.36
D431LAS	0.90	0.41	E311LAC	0.69	0.48
D432LAC	0.90	0.30	E311LAS	0.75	0.61
D432LAS	0.88	0.38	E312LAC	0.67	0.45
D441LAC	0.95	-0.02	E312LAS	0.73	0.62
D441LAS	0.88	0.01	E321LAC	0.83	0.21
D442LAC	0.95	0.09	E321LAS	0.88	0.15

continued

<i>Item Number</i>	<i>Difficulty</i>	<i>Discrimination</i>
E322LAC	0.80	0.23
E322LAS	0.86	-0.06
E331LAC	0.90	0.00
E331LAS	0.77	0.30
E332LAC	0.88	-0.13
E332LAS	0.83	0.31
E341LAC	0.82	0.53
E341LAS	0.92	0.72
E342LAC	0.79	0.48
E342LAS	0.91	0.62
E351LAC	0.88	0.15
E351LAS	0.95	0.11
E352LAC	0.84	0.50
E352LAS	0.92	0.39
E361LAC	0.71	-0.03
E361LAS	0.90	0.50
E362LAC	0.64	0.12
E362LAS	0.86	0.34
E411LAC	0.76	0.74
E411LAS	0.85	0.46
E412LAC	0.81	0.61
E412LAS	0.84	0.54

<i>Item Number</i>	<i>Difficulty</i>	<i>Discrimination</i>
E421LAC	0.86	0.06
E421LAS	0.95	-0.06
E422LAC	0.85	0.17
E422LAS	0.95	-0.01
E431LAC	0.91	0.59
E431LAS	0.87	0.46
E432LAC	0.83	0.52
E432LAS	0.90	0.46
E441LAC	0.78	0.28
E441LAS	0.86	0.20
E442LAC	0.79	0.21
E442LAS	0.86	0.25
E451LAC	0.90	0.32
E451LAS	0.92	0.35
E452LAC	0.89	0.52
E452LAS	0.90	0.37
E461LAC	0.74	0.05
E461LAS	0.94	0.19
E462LAC	0.78	-0.03
E462LAS	0.91	0.09

Note: Statistics are presented only for items that were taken by 10 or more students.

**Table D-3. 2014–15 PAAP: Item-Level Classical Test Theory Statistics—
Science High School**

<i>Item Number</i>	<i>Difficulty</i>	<i>Discrimination</i>
D311LAC	0.82	0.44
D311LAS	0.79	0.54
D312LAC	0.81	0.43
D312LAS	0.81	0.58
D321LAC	0.74	0.45
D321LAS	0.86	0.35
D322LAC	0.75	0.17
D322LAS	0.84	0.35
D331LAC	0.77	0.11
D331LAS	0.79	0.34
D332LAC	0.88	0.38
D332LAS	0.88	0.51
D341LAC	0.86	0.25
D341LAS	0.82	0.33
D342LAC	0.92	0.07
D342LAS	0.81	0.39
D351LAC	0.85	-0.06
D351LAS	0.96	0.17
D352LAC	0.96	-0.01
D352LAS	0.93	0.31
D361LAC	0.95	-0.08
D361LAS	0.87	0.01

<i>Item Number</i>	<i>Difficulty</i>	<i>Discrimination</i>
D362LAC	0.91	0.39
D362LAS	0.78	0.19
D371LAC	0.84	0.08
D371LAS	0.91	-0.22
D372LAC	0.77	0.37
D372LAS	0.85	0.16
D381LAC	0.92	0.12
D381LAS	0.86	0.63
D382LAC	0.91	-0.13
D382LAS	0.83	0.34
E111LAC	0.69	0.83
E111LAS	0.77	0.44
E112LAC	0.69	0.84
E112LAS	0.78	0.53
E121LAC	0.89	-0.17
E121LAS	0.82	0.45
E122LAC	0.89	0.36
E122LAS	0.82	0.45
E131LAC	0.94	0.52
E131LAS	0.90	0.09
E132LAC	0.84	0.25
E132LAS	0.90	0.28

continued

<i>Item Number</i>	<i>Difficulty</i>	<i>Discrimination</i>
E141LAC	0.85	0.49
E141LAS	0.84	0.63
E142LAC	0.88	0.61
E142LAS	0.84	0.64
E151LAC	0.84	0.26
E151LAS	0.92	-0.01
E152LAC	0.93	0.76
E152LAS	0.97	0.11
E161LAC	0.88	-0.08
E161LAS	0.87	-0.04
E162LAC	0.90	-0.03
E162LAS	0.91	0.20
E171LAC	0.89	0.43
E171LAS	0.81	0.32
E172LAC	0.80	0.13
E172LAS	0.87	0.23
E181LAC	0.93	0.15
E181LAS	0.88	0.59
E182LAC	0.90	0.37
E182LAS	0.90	0.66
E511LAC	0.76	0.56
E511LAS	0.80	0.56
E512LAC	0.71	0.63
E512LAS	0.77	0.54
E521LAC	0.84	0.59
E521LAS	0.86	0.54
E522LAC	0.85	0.58

<i>Item Number</i>	<i>Difficulty</i>	<i>Discrimination</i>
E522LAS	0.87	0.56
E531LAC	0.81	0.13
E531LAS	0.85	0.47
E532LAC	0.86	-0.08
E532LAS	0.81	0.42
E541LAC	0.90	0.28
E541LAS	0.88	0.52
E542LAC	0.84	0.55
E542LAS	0.88	0.52
E551LAC	0.91	0.09
E551LAS	0.94	0.20
E552LAC	0.79	0.04
E552LAS	0.81	0.11
E561LAC	0.93	-0.11
E561LAS	0.87	-0.19
E562LAC	0.78	-0.22
E562LAS	0.84	-0.17
E571LAC	0.77	0.23
E571LAS	0.86	-0.18
E572LAC	0.71	-0.30
E572LAS	0.79	-0.20
E581LAC	0.90	0.17
E581LAS	0.89	0.35
E582LAC	0.89	0.57
E582LAS	0.85	0.42

Note: Statistics are presented only for items that were taken by 10 or more students.

APPENDIX E—ITEM-LEVEL SCORE DISTRIBUTION

**Table E-1. 2014–15 PAAP: Item-Level Score Distributions for Constructed Response Items—
Science Grade 5**

Item Number	Total Possible Points	Percent of Students at Score Point				
		0	1	2	3	4
D111LAC	4	3.33	3.33	50.00	23.33	20.00
D111LAS	3	3.33	16.67	20.00	60.00	
D112LAC	4	0.00	10.00	43.33	10.00	36.67
D112LAS	3	0.00	16.67	26.67	56.67	
D121LAC	4	26.83	1.22	0.00	17.07	54.88
D121LAS	3	26.83	3.66	7.32	62.20	
D122LAC	4	1.22	0.00	9.76	20.73	68.29
D122LAS	3	1.22	6.10	8.54	84.15	
D131LAC	4	3.45	0.00	6.90	31.03	58.62
D131LAS	3	3.45	10.34	20.69	65.52	
D132LAC	4	3.45	0.00	10.34	17.24	68.97
D132LAS	3	3.45	6.90	24.14	65.52	
D141LAC	4	0.00	0.00	34.69	18.37	46.94
D141LAS	3	0.00	0.00	24.49	75.51	
D142LAC	4	8.16	0.00	8.16	12.24	71.43
D142LAS	3	8.16	0.00	14.29	77.55	
D211LAC	4	0.00	17.24	27.59	24.14	31.03
D211LAS	3	0.00	24.14	27.59	48.28	
D212LAC	4	3.45	10.34	34.48	31.03	20.69
D212LAS	3	3.45	24.14	24.14	48.28	
D221LAC	4	0.00	0.00	14.29	25.71	60.00
D221LAS	3	0.00	11.43	5.71	82.86	
D222LAC	4	0.00	0.00	11.43	28.57	60.00
D222LAS	3	0.00	14.29	2.86	82.86	
D231LAC	4	1.01	2.02	10.10	52.53	34.34
D231LAS	3	1.01	4.04	11.11	83.84	
D232LAC	4	1.01	1.01	4.04	47.47	46.46
D232LAS	3	1.01	3.03	11.11	84.85	
D241LAC	4	0.00	7.69	23.08	26.92	42.31
D241LAS	3	0.00	11.54	15.38	73.08	
D242LAC	4	0.00	7.69	19.23	34.62	38.46
D242LAS	3	0.00	11.54	23.08	65.38	
E211LAC	4	0.00	2.63	13.16	39.47	44.74
E211LAS	3	0.00	13.16	10.53	76.32	
E212LAC	4	0.00	7.89	7.89	55.26	28.95
E212LAS	3	0.00	13.16	10.53	76.32	
E221LAC	4	0.00	0.00	8.33	54.17	37.50
E221LAS	3	0.00	16.67	16.67	66.67	
E222LAC	4	0.00	0.00	20.83	50.00	29.17
E222LAS	3	0.00	12.50	16.67	70.83	
E231LAC	4	3.57	0.00	1.19	21.43	73.81
E231LAS	3	3.57	5.95	15.48	75.00	
E232LAC	4	3.57	1.19	1.19	14.29	79.76
E232LAS	3	3.57	7.14	16.67	72.62	
E241LAC	4	0.00	11.36	18.18	25.00	45.45
E241LAS	3	0.00	0.00	27.27	72.73	
E242LAC	4	2.27	6.82	22.73	22.73	45.45
E242LAS	3	2.27	0.00	36.36	61.36	

**Table E-2. 2014–15 PAAP: Item-Level Score Distributions for Constructed Response Items—
Science Grade 8**

Item Number	Total Possible Points	Percent of Students at Score Point					Item Number	Total Possible Points	Percent of Students at Score Point				
		0	1	2	3	4			0	1	2	3	4
D411LAC	4	0.00	22.22	11.11	5.56	61.11	E321LAS	3	7.69	0.00	11.54	80.77	
D411LAS	3	0.00	33.33	5.56	61.11		E322LAC	4	7.69	0.00	7.69	34.62	50.00
D412LAC	4	0.00	27.78	5.56	11.11	55.56	E322LAS	3	7.69	3.85	11.54	76.92	
D412LAS	3	0.00	33.33	5.56	61.11		E331LAC	4	3.57	0.00	3.57	17.86	75.00
D421LAC	4	0.00	11.76	0.00	11.76	76.47	E331LAS	3	3.57	3.57	50.00	42.86	
D421LAS	3	0.00	5.88	11.76	82.35		E332LAC	4	3.57	3.57	3.57	14.29	75.00
D422LAC	4	0.00	11.76	5.88	11.76	70.59	E332LAS	3	3.57	3.57	32.14	60.71	
D422LAS	3	0.00	5.88	17.65	76.47		E341LAC	4	2.44	0.00	14.63	31.71	51.22
D431LAC	4	0.00	6.45	16.13	38.71	38.71	E341LAS	3	2.44	0.00	17.07	80.49	
D431LAS	3	0.00	6.45	16.13	77.42		E342LAC	4	4.88	0.00	7.32	48.78	39.02
D432LAC	4	0.00	3.23	9.68	12.90	74.19	E342LAS	3	4.88	0.00	12.20	82.93	
D432LAS	3	0.00	9.68	16.13	74.19		E351LAC	4	0.00	0.00	4.08	38.78	57.14
D441LAC	4	1.89	0.00	1.89	9.43	86.79	E351LAS	3	0.00	0.00	16.33	83.67	
D441LAS	3	1.89	3.77	22.64	71.70		E352LAC	4	4.08	0.00	14.29	20.41	61.22
D442LAC	4	0.00	1.89	1.89	9.43	86.79	E352LAS	3	4.08	0.00	12.24	83.67	
D442LAS	3	0.00	1.89	20.75	77.36		E361LAC	4	0.00	4.55	31.82	38.64	25.00
D451LAC	4	0.00	0.00	6.52	19.57	73.91	E361LAS	3	0.00	2.27	25.00	72.73	
D451LAS	3	0.00	2.17	21.74	76.09		E362LAC	4	4.55	9.09	27.27	43.18	15.91
D452LAC	4	0.00	8.70	10.87	19.57	60.87	E362LAS	3	4.55	0.00	27.27	68.18	
D452LAS	3	0.00	4.35	17.39	78.26		E411LAC	4	0.00	8.00	12.00	48.00	32.00
D461LAC	4	0.00	10.00	10.00	35.00	45.00	E411LAS	3	0.00	16.00	12.00	72.00	
D461LAS	3	0.00	7.50	37.50	55.00		E412LAC	4	0.00	8.00	12.00	28.00	52.00
D462LAC	4	0.00	2.50	22.50	32.50	42.50	E412LAS	3	0.00	16.00	16.00	68.00	
D462LAS	3	0.00	2.50	35.00	62.50		E421LAC	4	0.00	0.00	5.00	45.00	50.00
E311LAC	4	0.00	18.75	18.75	31.25	31.25	E421LAS	3	0.00	0.00	15.00	85.00	
E311LAS	3	0.00	31.25	12.50	56.25		E422LAC	4	0.00	0.00	10.00	40.00	50.00
E312LAC	4	0.00	12.50	31.25	31.25	25.00	E422LAS	3	0.00	0.00	15.00	85.00	
E312LAS	3	0.00	31.25	18.75	50.00		E431LAC	4	2.22	0.00	8.89	11.11	77.78
E321LAC	4	7.69	0.00	3.85	30.77	57.69	E431LAS	3	2.22	4.44	22.22	71.11	

continued

Item Number	Total Possible Points	Percent of Students at Score Point				
		0	1	2	3	4
E432LAC	4	2.22	0.00	20.00	17.78	60.00
E432LAS	3	2.22	4.44	15.56	77.78	
E441LAC	4	5.88	17.65	0.00	11.76	64.71
E441LAS	3	5.88	0.00	23.53	70.59	
E442LAC	4	5.88	17.65	0.00	5.88	70.59
E442LAS	3	5.88	0.00	23.53	70.59	
E451LAC	4	0.00	3.92	5.88	17.65	72.55

Item Number	Total Possible Points	Percent of Students at Score Point				
		0	1	2	3	4
E451LAS	3	0.00	0.00	25.49	74.51	
E452LAC	4	1.96	1.96	7.84	15.69	72.55
E452LAS	3	1.96	0.00	23.53	74.51	
E461LAC	4	0.00	0.00	13.04	76.09	10.87
E461LAS	3	0.00	0.00	17.39	82.61	
E462LAC	4	2.17	0.00	2.17	73.91	21.74
E462LAS	3	2.17	0.00	21.74	76.09	

**Table E-3. 2014–15 PAAP: Item-Level Score Distributions for Constructed Response Items—
Science High School**

Item Number	Total Possible Points	Percent of Students at Score Point				
		0	1	2	3	4
D311LAC	4	0.00	4.76	14.29	28.57	52.38
D311LAS	3	0.00	14.29	33.33	52.38	
D312LAC	4	0.00	4.76	9.52	42.86	42.86
D312LAS	3	0.00	14.29	28.57	57.14	
D321LAC	4	0.00	0.00	36.84	31.58	31.58
D321LAS	3	0.00	5.26	31.58	63.16	
D322LAC	4	0.00	0.00	21.05	57.89	21.05
D322LAS	3	0.00	5.26	36.84	57.89	
D331LAC	4	7.14	0.00	7.14	50.00	35.71
D331LAS	3	7.14	7.14	28.57	57.14	
D332LAC	4	0.00	0.00	0.00	50.00	50.00
D332LAS	3	0.00	0.00	35.71	64.29	
D341LAC	4	0.00	0.00	18.18	21.21	60.61
D341LAS	3	0.00	9.09	36.36	54.55	
D342LAC	4	0.00	0.00	6.06	18.18	75.76
D342LAS	3	0.00	12.12	33.33	54.55	
D351LAC	4	0.00	2.86	5.71	40.00	51.43
D351LAS	3	0.00	0.00	11.43	88.57	
D352LAC	4	0.00	0.00	0.00	14.29	85.71

Item Number	Total Possible Points	Percent of Students at Score Point				
		0	1	2	3	4
D352LAS	3	0.00	2.86	14.29	82.86	
D361LAC	4	0.00	0.00	0.00	20.00	80.00
D361LAS	3	0.00	0.00	40.00	60.00	
D362LAC	4	0.00	0.00	5.00	25.00	70.00
D362LAS	3	0.00	15.00	35.00	50.00	
D371LAC	4	0.00	0.00	9.09	45.45	45.45
D371LAS	3	0.00	4.55	18.18	77.27	
D372LAC	4	4.55	9.09	13.64	18.18	54.55
D372LAS	3	4.55	4.55	22.73	68.18	
D381LAC	4	0.00	0.00	0.00	31.82	68.18
D381LAS	3	0.00	4.55	31.82	63.64	
D382LAC	4	0.00	0.00	4.55	27.27	68.18
D382LAS	3	0.00	4.55	40.91	54.55	
E111LAC	4	0.00	5.00	35.00	40.00	20.00
E111LAS	3	0.00	10.00	50.00	40.00	
E112LAC	4	0.00	10.00	25.00	45.00	20.00
E112LAS	3	0.00	10.00	45.00	45.00	
E121LAC	4	0.00	0.00	0.00	45.45	54.55
E121LAS	3	0.00	9.09	36.36	54.55	

continued

Item Number	Total Possible Points	Percent of Students at Score Point				
		0	1	2	3	4
E122LAC	4	0.00	0.00	0.00	45.45	54.55
E122LAS	3	0.00	9.09	36.36	54.55	
E131LAC	4	0.00	0.00	2.86	20.00	77.14
E131LAS	3	0.00	5.71	20.00	74.29	
E132LAC	4	0.00	0.00	2.86	57.14	40.00
E132LAS	3	0.00	2.86	22.86	74.29	
E141LAC	4	0.00	0.00	17.65	23.53	58.82
E141LAS	3	0.00	5.88	35.29	58.82	
E142LAC	4	0.00	0.00	17.65	11.76	70.59
E142LAS	3	0.00	5.88	35.29	58.82	
E151LAC	4	5.00	0.00	5.00	35.00	55.00
E151LAS	3	5.00	0.00	10.00	85.00	
E152LAC	4	0.00	0.00	5.00	20.00	75.00
E152LAS	3	0.00	0.00	10.00	90.00	
E161LAC	4	0.00	2.33	4.65	30.23	62.79
E161LAS	3	0.00	4.65	30.23	65.12	
E162LAC	4	0.00	0.00	2.33	34.88	62.79
E162LAS	3	0.00	2.33	20.93	76.74	
E171LAC	4	0.00	0.00	8.70	26.09	65.22
E171LAS	3	0.00	8.70	39.13	52.17	
E172LAC	4	0.00	8.70	8.70	34.78	47.83
E172LAS	3	0.00	4.35	30.43	65.22	
E181LAC	4	0.00	0.00	5.88	17.65	76.47
E181LAS	3	0.00	11.76	11.76	76.47	
E182LAC	4	0.00	0.00	11.76	17.65	70.59
E182LAS	3	0.00	11.76	5.88	82.35	
E511LAC	4	0.00	10.00	10.00	45.00	35.00
E511LAS	3	0.00	15.00	30.00	55.00	
E512LAC	4	0.00	10.00	20.00	45.00	25.00
E512LAS	3	0.00	20.00	30.00	50.00	
E521LAC	4	0.00	0.00	10.71	42.86	46.43

Item Number	Total Possible Points	Percent of Students at Score Point				
		0	1	2	3	4
E521LAS	3	0.00	3.57	35.71	60.71	
E522LAC	4	0.00	0.00	3.57	53.57	42.86
E522LAS	3	0.00	3.57	32.14	64.29	
E531LAC	4	0.00	3.70	11.11	40.74	44.44
E531LAS	3	0.00	3.70	37.04	59.26	
E532LAC	4	0.00	0.00	14.81	25.93	59.26
E532LAS	3	0.00	11.11	33.33	55.56	
E541LAC	4	0.00	0.00	4.17	33.33	62.50
E541LAS	3	0.00	4.17	29.17	66.67	
E542LAC	4	0.00	0.00	12.50	37.50	50.00
E542LAS	3	0.00	4.17	29.17	66.67	
E551LAC	4	0.00	0.00	0.00	34.62	65.38
E551LAS	3	0.00	3.85	11.54	84.62	
E552LAC	4	0.00	3.85	19.23	34.62	42.31
E552LAS	3	0.00	11.54	34.62	53.85	
E561LAC	4	0.00	0.00	4.00	20.00	76.00
E561LAS	3	0.00	4.00	32.00	64.00	
E562LAC	4	0.00	4.00	20.00	36.00	40.00
E562LAS	3	0.00	4.00	40.00	56.00	
E571LAC	4	0.00	7.14	21.43	28.57	42.86
E571LAS	3	0.00	0.00	42.86	57.14	
E572LAC	4	7.14	0.00	21.43	42.86	28.57
E572LAS	3	7.14	0.00	42.86	50.00	
E581LAC	4	0.00	0.00	0.00	40.91	59.09
E581LAS	3	0.00	9.09	13.64	77.27	
E582LAC	4	0.00	0.00	0.00	45.45	54.55
E582LAS	3	0.00	9.09	27.27	63.64	

APPENDIX F—SUBGROUP RELIABILITY

Table F-1. 2014–15 PAAP: Subgroup Reliabilities—Science

Grade	Group	Number of Students	Raw Score			Alpha	SEM
			Maximum	Mean	Standard Deviation		
5	All Students	190	69	44.99	15.18	0.76	7.44
	Male	122	69	44.93	15.36	0.75	7.68
	Female	68	69	45.12	14.96	0.77	7.17
	Gender Not Reported	0	69				
	Hispanic or Latino	6	69				
	American Indian or Alaskan Native	2	69				
	Asian	2	69				
	Black or African American	10	69	36.30	16.10	0.79	7.38
	Native Hawaiian or Pacific Islander	0	69				
	White (non-Hispanic)	168	69	45.65	14.70	0.74	7.50
	Two or more races	2	69				
	No Primary Race/Ethnicity Reported	0	69				
	Currently receiving LEP services	9	69				
	Former LEP student – monitoring year 1	0	69				
	Former LEP student – monitoring year 2	0	69				
	LEP: All Other Students	181	69	45.29	14.94	0.76	7.32
	Students with an IEP	190	69	44.99	15.18	0.76	7.44
	IEP: All Other Students	0	69				
	Economically Disadvantaged Students	141	69	46.49	14.60	0.72	7.73
	SES: All Other Students	49	69	40.69	16.11	0.83	6.64
	Migrant Students	0	69				
	Migrant: All Other Students	190	69	44.99	15.18	0.76	7.44
	Students receiving Title 1 Services	13	69	40.15	17.85	0.87	6.44
	Title 1: All Other Students	177	69	45.35	14.96	0.74	7.63
	Plan 504	0	69				
	Plan 504: All Other Students	190	69	44.99	15.18	0.76	7.44
8	All Students	205	99	66.07	23.37	0.73	12.14
	Male	132	99	67.00	23.64	0.74	12.05
	Female	73	99	64.38	22.94	0.72	12.14

continued

Grade	Group	Number of Students	Raw Score			Alpha	SEM
			Maximum	Mean	Standard Deviation		
8	Gender Not Reported	0	99				
	Hispanic or Latino	10	99	67.90	18.78	0.70	10.29
	American Indian or Alaskan Native	4	99				
	Asian	1	99				
	Black or African American	6	99				
	Native Hawaiian or Pacific Islander	1	99				
	White (non-Hispanic)	181	99	65.77	23.57	0.73	12.25
	Two or more races	2	99				
	No Primary Race/Ethnicity Reported	0	99				
	Currently receiving LEP services	9	99				
	Former LEP student – monitoring year 1	0	99				
	Former LEP student – monitoring year 2	0	99				
	LEP: All Other Students	196	99	65.80	23.50	0.73	12.21
	Students with an IEP	205	99	66.07	23.37	0.73	12.14
	IEP: All Other Students	0	99				
	Economically Disadvantaged Students	138	99	66.68	22.36	0.75	11.18
	SES: All Other Students	67	99	64.81	25.45	0.68	14.40
	Migrant Students	0	99				
	Migrant: All Other Students	205	99	66.07	23.37	0.73	12.14
	Students receiving Title 1 Services	4	99				
	Title 1: All Other Students	201	99	66.15	23.44	0.73	12.18
	Plan 504	0	99				
	Plan 504: All Other Students	205	99	66.07	23.37	0.73	12.14
	All Students	186	129	74.84	32.19	0.71	17.33
	Male	124	129	72.92	32.88	0.71	17.71
	Female	62	129	78.68	30.67	0.68	17.35
Gender Not Reported	0	129					
HS	Hispanic or Latino	4	129				
	American Indian or Alaskan Native	1	129				
	Asian	2	129				
	Black or African American	7	129				
	Native Hawaiian or Pacific Islander	0	129				

continued

Grade	Group	Number of Students	Raw Score			Alpha	SEM
			Maximum	Mean	Standard Deviation		
HS	White (non-Hispanic)	169	129	74.07	32.64	0.71	17.58
	Two or more races	3	129				
	No Primary Race/Ethnicity Reported	0	129				
	Currently receiving LEP services	7	129				
	Former LEP student – monitoring year 1	0	129				
	Former LEP student – monitoring year 2	0	129				
	LEP: All Other Students	179	129	75.55	31.95	0.72	16.91
	Students with an IEP	186	129	74.84	32.19	0.71	17.33
	IEP: All Other Students	0	129				
	Economically Disadvantaged Students	115	129	81.88	32.10	0.66	18.72
	SES: All Other Students	71	129	63.44	29.11	0.77	13.96
	Migrant Students	0	129				
	Migrant: All Other Students	186	129	74.84	32.19	0.71	17.33
	Students receiving Title 1 Services	5	129				
	Title 1: All Other Students	181	129	73.87	31.85	0.72	16.85
	Plan 504	0	129				
	Plan 504: All Other Students	186	129	74.84	32.19	0.71	17.33

APPENDIX G—DECISION ACCURACY AND CONSISTENCY RESULTS

Table G-1. 2014–15 PAAP: Summary of Decision Accuracy (and Consistency) Results by Subject and Grade—Overall and Conditional on Performance Level

<i>Subject</i>	<i>Grade</i>	<i>Overall</i>	<i>Kappa</i>	<i>Conditional on Level</i>	
				<i>Not Proficient</i>	<i>Proficient</i>
Science	5	0.85 (0.80)	0.65	0.78 (0.74)	0.78 (0.67)
	8	0.86 (0.82)	0.64	0.74 (0.69)	0.73 (0.66)
	HS	0.82 (0.76)	0.61	0.79 (0.78)	0.69 (0.56)

Table G-2. 2014–15 PAAP: Summary of Decision Accuracy (and Consistency) Results by Subject and Grade—Conditional on Cut Point

<i>Subject</i>	<i>Grade</i>	<i>Not Proficient / Proficient</i>		
		<i>Accuracy (consistency)</i>	<i>False</i>	
			<i>Positive</i>	<i>Negative</i>
Science	5	0.85 (0.80)	0.1	0.06
	8	0.86 (0.82)	0.09	0.05
	HS	0.82 (0.76)	0.14	0.05

APPENDIX H—INTERRATER CONSISTENCY

**Table H-1. 2014–15 PAAP: Item-Level Interrater Consistency Statistics—
Science Grade 5**

<i>Item</i>	<i>Number of</i>		<i>Percent</i>		<i>Correlation</i>	<i>Percent of Third Scores</i>
	<i>Score Categories</i>	<i>Responses Scored Twice</i>	<i>Exact</i>	<i>Adjacent</i>		
D111LAC	4	28	89.29	10.71	0.93	10.71
D111LAS	3	28	100.00	0.00	1.00	0.00
D112LAC	4	29	93.10	3.45	0.92	6.90
D112LAS	3	29	100.00	0.00	1.00	0.00
D121LAC	4	58	94.83	3.45	0.66	5.17
D121LAS	3	58	100.00	0.00	1.00	0.00
D122LAC	4	77	94.81	3.90	0.90	5.19
D122LAS	3	77	98.70	0.00	0.92	1.30
D131LAC	4	25	92.00	8.00	0.87	8.00
D131LAS	3	25	100.00	0.00	1.00	0.00
D132LAC	4	25	100.00	0.00	1.00	0.00
D132LAS	3	25	100.00	0.00	1.00	0.00
D141LAC	4	49	81.63	12.24	0.79	18.37
D141LAS	3	49	95.92	4.08	0.90	4.08
D142LAC	4	45	97.78	2.22	0.97	2.22
D142LAS	3	45	100.00	0.00	1.00	0.00
D211LAC	4	27	92.59	3.70	0.85	7.41
D211LAS	3	27	100.00	0.00	1.00	0.00
D212LAC	4	25	92.00	4.00	0.77	8.00
D212LAS	3	25	96.00	4.00	0.97	4.00
D221LAC	4	33	100.00	0.00	1.00	0.00
D221LAS	3	33	100.00	0.00	1.00	0.00
D222LAC	4	33	96.97	3.03	0.98	3.03
D222LAS	3	33	100.00	0.00	1.00	0.00
D231LAC	4	96	95.83	4.17	0.96	4.17
D231LAS	3	96	100.00	0.00	1.00	0.00
D232LAC	4	96	97.92	2.08	0.97	2.08
D232LAS	3	96	97.92	1.04	0.80	2.08
D241LAC	4	26	88.46	3.85	0.72	11.54
D241LAS	3	26	100.00	0.00	1.00	0.00
D242LAC	4	26	84.62	11.54	0.83	15.38
D242LAS	3	26	100.00	0.00	1.00	0.00
E211LAC	4	36	97.22	2.78	0.97	2.78
E211LAS	3	36	100.00	0.00	1.00	0.00
E212LAC	4	36	94.44	2.78	0.89	5.56
E212LAS	3	36	97.22	2.78	0.97	2.78
E221LAC	4	23	100.00	0.00	1.00	0.00
E221LAS	3	23	95.65	4.35	0.97	4.35
E222LAC	4	23	95.65	4.35	0.96	4.35
E222LAS	3	23	95.65	4.35	0.96	4.35
E231LAC	4	79	91.14	8.86	0.84	8.86
E231LAS	3	79	100.00	0.00	1.00	0.00
E232LAC	4	79	94.94	5.06	0.89	5.06
E232LAS	3	79	100.00	0.00	1.00	0.00

continued

<i>Item</i>	<i>Number of</i>		<i>Percent</i>		<i>Correlation</i>	<i>Percent of Third Scores</i>
	<i>Score Categories</i>	<i>Responses Scored Twice</i>	<i>Exact</i>	<i>Adjacent</i>		
E241LAC	4	44	84.09	15.91	0.91	15.91
E241LAS	3	44	95.45	4.55	0.89	4.55
E242LAC	4	43	81.40	16.28	0.88	18.60
E242LAS	3	43	95.35	2.33	0.66	4.65

**Table H-2. 2014–15 PAAP: Item-Level Interrater Consistency Statistics—
Science Grade 8**

<i>Item</i>	<i>Number of</i>		<i>Percent</i>		<i>Correlation</i>	<i>Percent of Third Scores</i>
	<i>Score Categories</i>	<i>Responses Scored Twice</i>	<i>Exact</i>	<i>Adjacent</i>		
D411LAC	4	17	88.24	5.88	0.90	11.76
D411LAS	3	17	100.00	0.00	1.00	0.00
D412LAC	4	17	88.24	0.00	0.79	11.76
D412LAS	3	17	100.00	0.00	1.00	0.00
D421LAC	4	17	94.12	0.00	0.70	5.88
D421LAS	3	17	100.00	0.00	1.00	0.00
D422LAC	4	17	100.00	0.00	1.00	0.00
D422LAS	3	17	100.00	0.00	1.00	0.00
D431LAC	4	30	76.67	23.33	0.89	23.33
D431LAS	3	30	100.00	0.00	1.00	0.00
D432LAC	4	30	100.00	0.00	1.00	0.00
D432LAS	3	30	100.00	0.00	1.00	0.00
D441LAC	4	51	98.04	1.96	0.94	3.92
D441LAS	3	51	100.00	0.00	1.00	1.96
D442LAC	4	52	92.31	7.69	0.89	9.62
D442LAS	3	52	100.00	0.00	1.00	3.85
D451LAC	4	45	93.33	4.44	0.82	8.89
D451LAS	3	45	97.78	0.00	0.80	2.22
D452LAC	4	45	68.89	24.44	0.62	31.11
D452LAS	3	45	97.78	0.00	0.75	2.22
D461LAC	4	39	82.05	10.26	0.83	17.95
D461LAS	3	39	100.00	0.00	1.00	0.00
D462LAC	4	39	82.05	17.95	0.88	17.95
D462LAS	3	39	100.00	0.00	1.00	0.00
E311LAC	4	14	100.00	0.00	1.00	0.00
E311LAS	3	14	100.00	0.00	1.00	0.00
E312LAC	4	14	100.00	0.00	1.00	0.00
E312LAS	3	14	100.00	0.00	1.00	0.00
E321LAC	4	24	91.67	8.33	0.88	8.33
E321LAS	3	24	95.83	0.00	0.60	4.17
E322LAC	4	24	100.00	0.00	1.00	0.00
E322LAS	3	24	100.00	0.00	1.00	0.00
E331LAC	4	27	88.89	3.70	0.61	11.11
E331LAS	3	27	100.00	0.00	1.00	0.00
E332LAC	4	27	96.30	3.70	0.97	3.70
E332LAS	3	27	100.00	0.00	1.00	0.00
E341LAC	4	40	95.00	5.00	0.95	5.00

continued

<i>Item</i>	<i>Number of</i>		<i>Percent</i>		<i>Correlation</i>	<i>Percent of Third Scores</i>
	<i>Score Categories</i>	<i>Responses Scored Twice</i>	<i>Exact</i>	<i>Adjacent</i>		
E341LAS	3	40	100.00	0.00	1.00	0.00
E342LAC	4	40	97.50	2.50	0.97	2.50
E342LAS	3	40	97.50	0.00	0.54	0.00
E351LAC	4	49	100.00	0.00	1.00	0.00
E351LAS	3	49	100.00	0.00	1.00	0.00
E352LAC	4	47	97.87	2.13	0.98	2.13
E352LAS	3	47	100.00	0.00	1.00	0.00
E361LAC	4	44	93.18	6.82	0.96	6.82
E361LAS	3	44	100.00	0.00	1.00	0.00
E362LAC	4	42	95.24	4.76	0.97	4.76
E362LAS	3	42	100.00	0.00	1.00	0.00
E411LAC	4	25	92.00	8.00	0.95	8.00
E411LAS	3	25	100.00	0.00	1.00	0.00
E412LAC	4	25	100.00	0.00	1.00	0.00
E412LAS	3	25	96.00	4.00	0.97	4.00
E421LAC	4	19	89.47	10.53	0.87	10.53
E421LAS	3	19	94.74	0.00	0.41	5.26
E422LAC	4	19	100.00	0.00	1.00	0.00
E422LAS	3	19	100.00	0.00	1.00	0.00
E431LAC	4	44	97.73	2.27	0.98	2.27
E431LAS	3	44	100.00	0.00	1.00	0.00
E432LAC	4	44	100.00	0.00	1.00	0.00
E432LAS	3	44	97.73	2.27	0.98	2.27
E441LAC	4	16	93.75	6.25	0.98	6.25
E441LAS	3	16	100.00	0.00	1.00	0.00
E442LAC	4	16	87.50	0.00	0.59	12.50
E442LAS	3	16	93.75	6.25	0.83	6.25
E451LAC	4	50	80.00	18.00	0.80	20.00
E451LAS	3	50	98.00	2.00	0.95	2.00
E452LAC	4	50	80.00	20.00	0.73	20.00
E452LAS	3	50	100.00	0.00	1.00	0.00
E461LAC	4	46	97.83	2.17	0.95	2.17
E461LAS	3	46	97.83	0.00	0.62	2.17
E462LAC	4	45	97.78	2.22	0.95	2.22
E462LAS	3	45	97.78	0.00	0.65	2.22

**Table H-3. 2014–15 PAAP: Item-Level Interrater Consistency Statistics—
Science High School**

<i>Item</i>	<i>Number of</i>		<i>Percent</i>		<i>Correlation</i>	<i>Percent of Third Scores</i>
	<i>Score Categories</i>	<i>Responses Scored Twice</i>	<i>Exact</i>	<i>Adjacent</i>		
D311LAC	4	21	100.00	0.00	1.00	0.00
D311LAS	3	21	95.24	4.76	0.96	4.76
D312LAC	4	21	100.00	0.00	1.00	0.00
D312LAS	3	21	95.24	4.76	0.96	4.76
D321LAC	4	16	100.00	0.00	1.00	0.00
D321LAS	3	16	100.00	0.00	1.00	0.00

continued

<i>Item</i>	<i>Number of</i>		<i>Percent</i>		<i>Correlation</i>	<i>Percent of Third Scores</i>
	<i>Score Categories</i>	<i>Responses Scored Twice</i>	<i>Exact</i>	<i>Adjacent</i>		
D322LAC	4	16	93.75	6.25	0.94	6.25
D322LAS	3	16	93.75	6.25	0.97	6.25
D331LAC	4	13	100.00	0.00	1.00	7.69
D331LAS	3	13	100.00	0.00	1.00	7.69
D332LAC	4	14	100.00	0.00	1.00	0.00
D332LAS	3	14	100.00	0.00	1.00	0.00
D341LAC	4	33	90.91	6.06	0.85	9.09
D341LAS	3	33	100.00	0.00	1.00	0.00
D342LAC	4	33	93.94	6.06	0.90	6.06
D342LAS	3	33	100.00	0.00	1.00	0.00
D351LAC	4	33	90.91	9.09	0.88	9.09
D351LAS	3	33	96.97	0.00	0.50	3.03
D352LAC	4	33	96.97	3.03	0.88	3.03
D352LAS	3	33	100.00	0.00	1.00	0.00
D361LAC	4	20	85.00	15.00	0.49	15.00
D361LAS	3	20	100.00	0.00	1.00	0.00
D362LAC	4	20	85.00	0.00	0.39	15.00
D362LAS	3	20	90.00	5.00	0.67	10.00
D371LAC	4	22	100.00	0.00	1.00	0.00
D371LAS	3	22	100.00	0.00	1.00	0.00
D372LAC	4	21	100.00	0.00	1.00	0.00
D372LAS	3	21	100.00	0.00	1.00	0.00
D381LAC	4	22	95.45	4.55	0.90	4.55
D381LAS	3	22	100.00	0.00	1.00	0.00
D382LAC	4	22	100.00	0.00	1.00	0.00
D382LAS	3	22	100.00	0.00	1.00	0.00
E111LAC	4	20	90.00	10.00	0.94	10.00
E111LAS	3	20	90.00	5.00	0.56	10.00
E112LAC	4	20	100.00	0.00	1.00	0.00
E112LAS	3	20	95.00	5.00	0.95	5.00
E121LAC	4	10	100.00	0.00	1.00	0.00
E121LAS	3	10	100.00	0.00	1.00	0.00
E122LAC	4	10	90.00	10.00	0.82	10.00
E122LAS	3	10	100.00	0.00	1.00	0.00
E131LAC	4	35	100.00	0.00	1.00	0.00
E131LAS	3	35	100.00	0.00	1.00	0.00
E132LAC	4	35	100.00	0.00	1.00	0.00
E132LAS	3	35	100.00	0.00	1.00	0.00
E141LAC	4	16	87.50	12.50	0.94	12.50
E141LAS	3	16	93.75	6.25	0.92	6.25
E142LAC	4	16	87.50	6.25	0.80	18.75
E142LAS	3	16	100.00	0.00	1.00	0.00
E151LAC	4	19	100.00	0.00	1.00	0.00
E151LAS	3	19	100.00	0.00	1.00	0.00
E152LAC	4	20	100.00	0.00	1.00	0.00
E152LAS	3	20	100.00	0.00	1.00	0.00
E161LAC	4	42	92.86	7.14	0.93	7.14
E161LAS	3	42	100.00	0.00	1.00	0.00

continued

<i>Item</i>	<i>Number of</i>		<i>Percent</i>		<i>Correlation</i>	<i>Percent of Third Scores</i>
	<i>Score Categories</i>	<i>Responses Scored Twice</i>	<i>Exact</i>	<i>Adjacent</i>		
E162LAC	4	41	92.68	7.32	0.88	7.32
E162LAS	3	41	100.00	0.00	1.00	0.00
E171LAC	4	22	90.91	4.55	0.78	9.09
E171LAS	3	22	95.45	4.55	0.95	4.55
E172LAC	4	22	90.91	4.55	0.83	9.09
E172LAS	3	22	100.00	0.00	1.00	0.00
E181LAC	4	17	100.00	0.00	1.00	0.00
E181LAS	3	17	100.00	0.00	1.00	0.00
E182LAC	4	17	100.00	0.00	1.00	0.00
E182LAS	3	17	100.00	0.00	1.00	0.00
E511LAC	4	19	94.74	5.26	0.97	5.26
E511LAS	3	19	89.47	5.26	0.64	10.53
E512LAC	4	19	100.00	0.00	1.00	0.00
E512LAS	3	19	89.47	5.26	0.66	10.53
E521LAC	4	26	100.00	0.00	1.00	0.00
E521LAS	3	26	96.15	0.00	0.64	3.85
E522LAC	4	26	100.00	0.00	1.00	0.00
E522LAS	3	26	92.31	3.85	0.60	7.69
E531LAC	4	26	92.31	7.69	0.94	7.69
E531LAS	3	26	100.00	0.00	1.00	0.00
E532LAC	4	26	88.46	11.54	0.92	11.54
E532LAS	3	26	100.00	0.00	1.00	0.00
E541LAC	4	21	100.00	0.00	1.00	0.00
E541LAS	3	21	100.00	0.00	1.00	0.00
E542LAC	4	21	100.00	0.00	1.00	0.00
E542LAS	3	21	95.24	0.00	0.85	4.76
E551LAC	4	26	92.31	7.69	0.84	7.69
E551LAS	3	26	100.00	0.00	1.00	0.00
E552LAC	4	26	84.62	15.38	0.90	15.38
E552LAS	3	26	96.15	3.85	0.96	3.85
E561LAC	4	25	96.00	4.00	0.93	4.00
E561LAS	3	25	96.00	4.00	0.94	4.00
E562LAC	4	25	100.00	0.00	1.00	0.00
E562LAS	3	25	100.00	0.00	1.00	0.00
E571LAC	4	13	84.62	15.38	0.88	15.38
E571LAS	3	13	100.00	0.00	1.00	0.00
E572LAC	4	12	83.33	16.67	0.90	16.67
E572LAS	3	12	100.00	0.00	1.00	0.00
E581LAC	4	22	100.00	0.00	1.00	0.00
E581LAS	3	22	100.00	0.00	1.00	0.00
E582LAC	4	22	86.36	13.64	0.78	13.64
E582LAS	3	22	95.45	4.55	0.95	4.55

APPENDIX I—SCORE OF RECORD

Maine Alt (PAAP) 1415 Score of Record

I. PAAP Portfolio- Complete Content Areas

All entries must be submitted with AGLE/Performance Indicators consistent with those listed in *2014-15_PAAP_Blueprint.pdf*. Each entry must have a unique AGLE/Performance Indicator.

- 1. Science: 3 entries submitted
 Grades 05, 08, 11 (3rd year HS)

All students must reported in grade 05, 08, or 3rd year HS to be reported. Discrepancies will be resolved during data processing clean up.

II. Portfolio Data Points

Each portfolio will be scored at least twice. Some data points will require a third score. For each content area, the scored data points are listed below.

- 1. PAAP Submitted: Content Area PAAP Submitted (Y, N)
- 2. Entry data points:
 - a. Entry Submitted (Y, N, blank)
 - b. AGLE (A, B, C, D, E, blank) (For non blank, see section I for valid values)
 - c. Performance Indicators (1, 2, 3, 4, 5, blank) (For non blank, see section I for valid values)
 - d. Level of Complexity (1-8, blank)
 - i) Table of Valid Values

<u>Grades</u>	<u>Level of Complexity</u>
5	1, 2, 3, 4
8	1, 2, 3, 4, 5, 6
11	1, 2, 3, 4, 5, 6, 7, 8

- e. Entry Meets PAAP Requirements (Y, N, blank)

3. Task data points (Number of tasks depends on content area)
 - a. Scorable (Y, N, blank)
 - b. Level of Accuracy (1-4, blank)
 - c. Level of Assistance (1-3, blank)
4. Comment Codes (1, 2, 3, 4, 5, A, B, C, D, E, F)
 - a. Valid value are 1, 2a, 2b, 2c, 2d,2e, 3a, 3b, 3c, 3d, 3e, 4a, 4b, 5a, 5b

III. Calculation of Final Score of Record for PAAP Submitted and Entry Data Points for Each Content Area

1. Calculate Final PAAP Submitted
 - a. If Scid_3 PAAP Submitted is not blank then Scid_3 PAAP Submitted is the Final PAAP Submitted. Else Scid_1 PAAP Submitted is the Final PAAP Submitted.
 - b. If Final PAAP Submitted = 'N' then all entry data points are set to blank.
 - c. If Final PAAP Submitted = 'Y' then calculate Final Entry data points and Comment Codes (as outlined below).
2. Calculate Final Entry Submitted, AGLE, Performance Indicator, Level of Complexity and Entry Meets PAAP Requirements
 - a. If Scid_3 Entry Submitted is not blank then Scid_3 Entry Submitted is the Final Entry Submitted. Else Scid_1 Entry Submitted is the Final Entry Submitted.
 - b. If Final Entry Submitted = 'N' then the AGLE, Performance Indicator, Level of Complexity, Entry Meets PAAP Requirements and all tasks data points are set to blank.
 - c. If Final Entry Submitted = 'Y' then
 - i. If Scid_3 AGLE is not blank then Scid_3 AGLE is the Final AGLE. Else Scid_1 AGLE is the Final AGLE.
 - ii. If Scid_3 Performance Indicator is not blank then Scid_3 Performance Indicator is the Final Performance Indicator. Else Scid_1 Performance Indicator is the Final Performance Indicator.
 - iii. If Scid_3 Level of Complexity is not blank then Scid_3 Level of Complexity is the Final Level of Complexity. Else Scid_1 Level of Complexity is the Final Level of Complexity.
 - iv. If Scid_3 Entry Meets PAAP Requirements is not blank then Scid_3 Entry Meets PAAP Requirements is the Final Entry Meets PAAP Requirements. Else Scid_1 Entry Meets PAAP Requirements is the Final Entry Meets PAAP Requirements.
 - v. If Final Entry Meets PAAP Requirements = 'N' then all task data points are set to blank.
 - vi. If Final Entry Meets PAAP Requirements = 'Y' then for each task calculate Final Scorable.
3. Calculate Final Scorable, Level of Accuracy and Level of Assistance
 - a. If Scid_3 Scorable is not blank then Scid_3 Scorable is the Final Scorable. Else Scid_1 Scorable is the Final Scorable.

- b. If Scorable = 'N' then the Level of Accuracy and Level of Assistance data points are set to 'U' (unscorable).
 - c. If Scorable = 'Y' then
 - i. If Scid_3 Level of Accuracy is not blank then Scid_3 Level of Accuracy is the Final Level of Accuracy. Else Scid_1 Level of Accuracy is the Final Level of Accuracy.
 - d. If Scid_3 Level of Assistance is not blank then Scid_3 Level of Assistance is the final Level of Assistance. Else Scid_1 Level of Assistance is the Final Level of Assistance.
4. Calculate Final Comment Code(s)
 - a. If Final PAAP Submitted = 'Y' then if Scid_3 Comment Code(s) is not blank then Scid_3 Comment Code(s) is/are the Final Comment code(s). Else Scid_1 Comment code(s) is/are the Final Comment Code.
 - b. If Final PAAP Submitted = 'N' then set the Final Comment Codes to blank.
 5. For entries within a content area with at least one scorable task, if the unique rule for AGLE/performance indicator described in section "I. PAAP Portfolio – Complete Content Areas" is violated, then for the entry (entries) with the second (third) occurrence of the duplicate AGLE/performance indicator the final score of record must be Entry Submitted=Y, AGLE as calculated, Performance Indicator as calculated, Meets PAAP Requirements=N and all task data points must be blank.

V. Calculation of Final Overall Achievement Scores based on Final Score of Record for PAAP Submitted and Entry Data Points

1. For each content area where Final Content Area PAAP Submitted = Y a student will be assigned an Achievement Based Overall Content Area Score and a Content Area Achievement Level.
2. For each content area where Final Content Area PAAP Submitted = N, scores will be reported as No PAAP Submitted.
3. For each entry where Final Entry Submitted = N or Final Entry Meets Requirements = N or all tasks are unscorable then Final Entry Score = 0 and Final Entry Level of Accuracy (Assistance) = 'U'.
4. Final Entry Score = (5 * Final Level of Complexity) + Final Entry Level of Accuracy + Final Entry Level of Assistance – 4, where the following tables are used to calculate the Final Entry Scores for Level of Accuracy and Level of Assistance based on the number of tasks and total points across all tasks. For example, if an entry has 2 tasks (e.g. math) and the sum of the Level of Accuracy points across all tasks is 7 then the Final Entry Level of Accuracy score is 4. An unscorable task ('U') is assigned a score of 0 for calculation purposes.

		<u>Total Level of Accuracy Points</u>											
		1	2	3	4	5	6	7	8	9	10	11	12
Number of	2	1	1	2	2	3	3	4	4				
<u>Tasks</u>	3	1	1	1	1	2	2	2	3	3	3	4	4

		<u>Total Level of Assistance Points</u>								
		1	2	3	4	5	6	7	8	9
Number of	2	1	1	2	2	3	3			
<u>Tasks</u>	3	1	1	1	2	2	2	3	3	3

5. Overall Content Area Score = Sum of the Final Entry Scores
6. Overall Content Area Achievement Level will be determined based on the ranges of Overall Content Area Score. The ranges will be determined in standard setting and will be set by grade.

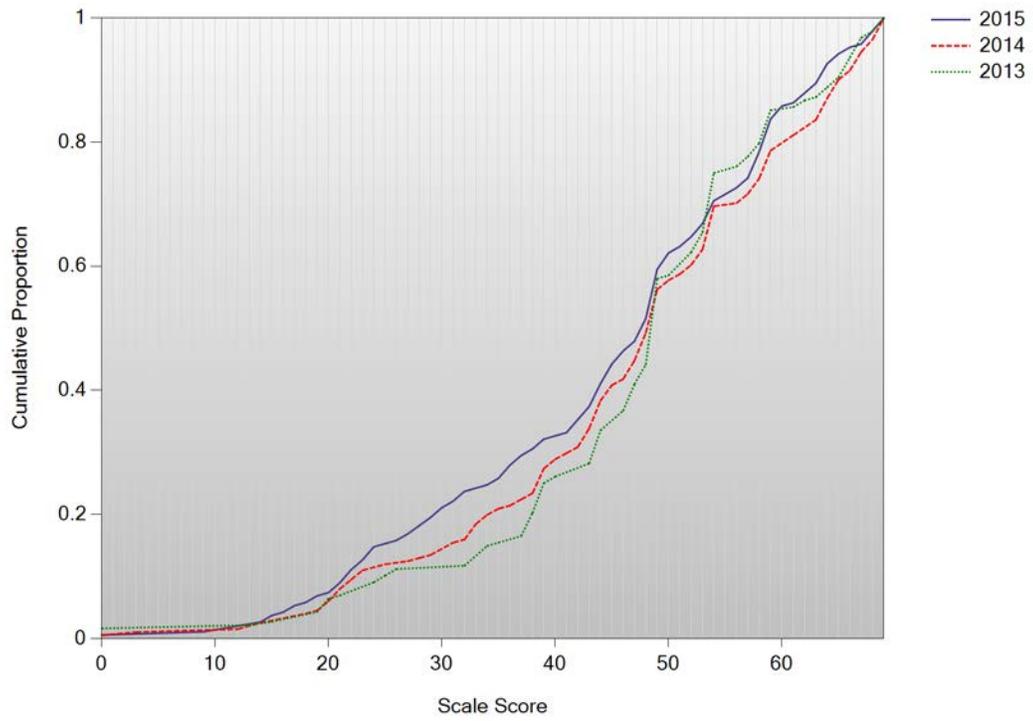
VII. Valid Overall Content Area Score, Overall Content Area Achievement Level

1. For students identified as submitting a portfolio for the content area
 - a. Overall Content Area Achievement Level: 1 (Substantially Below Proficient), 2 (Partially Proficient), 3 (Proficient), 4 (Proficient with distinction)
 - b. Overall Content Area Score = 0 to max possible points which varies based on grade and subject
2. For students identified as not submitting a portfolio for the content area or the content area does not exist at the grade level
 - a. No overall scores. Student reported as No PAAP Submitted as detailed in decision rules.

APPENDIX J—CUMULATIVE SCORE DISTRIBUTIONS

Figure J-1. 2014–15 PAAP: Cumulative Distributions
Top: Science Grade 5 **Bottom: Science Grade 8**

Cumulative Scale Score Distributions: Science Grade 5



Cumulative Scale Score Distributions: Science Grade 8

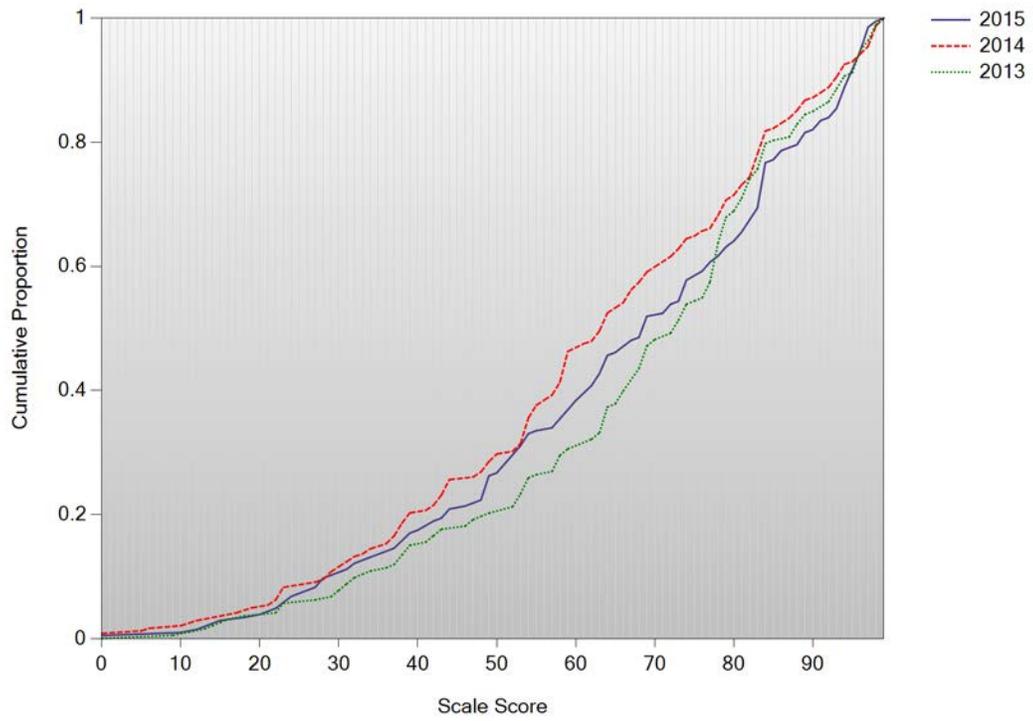
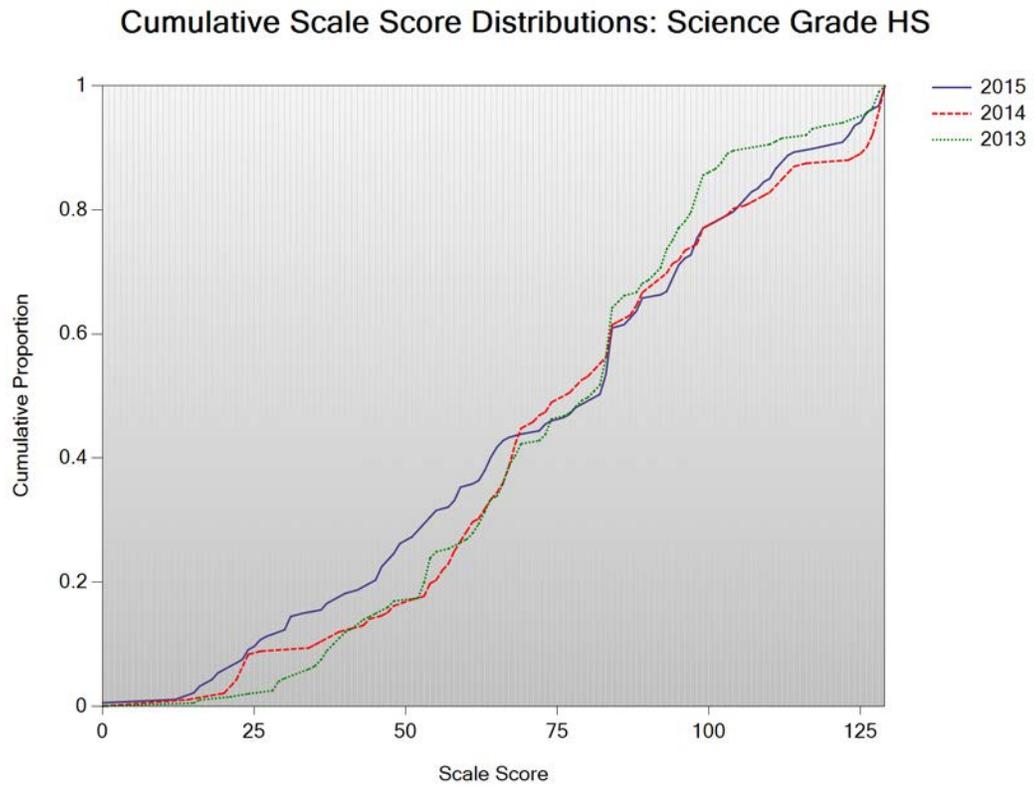


Figure J-2. 2014–15 PAAP: Cumulative Distributions
Top: Science High School



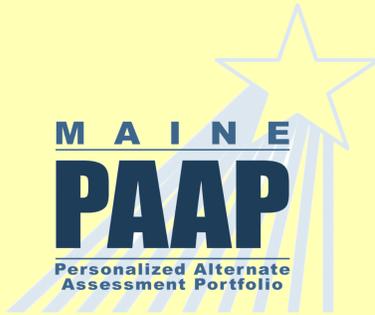
APPENDIX K—ACHIEVEMENT-LEVEL DISTRIBUTIONS

**Table K-1. 2014–15 PAAP: Achievement-Level Distributions
by Subject and Grade**

<i>Subject</i>	<i>Grade</i>	<i>Achievement Level</i>	<i>Percent at Level</i>		
			<i>2014–15</i>	<i>2013–14</i>	<i>2012–13</i>
Science	5	4	5.79	9.95	9.57
		3	53.16	51.74	56.91
		2	28.42	27.36	26.60
		1	12.63	10.95	6.91
	8	4	16.02	11.16	13.47
		3	50.00	49.59	59.59
		2	21.84	26.03	17.10
		1	12.14	13.22	9.84
	HS	4	4.28	9.9	4.48
		3	34.22	28.13	29.35
		2	35.29	45.83	49.25
		1	26.20	16.15	16.92

APPENDIX L—SAMPLE REPORTS

Personalized Alternate Assessment Portfolio Student Report



2015 Maine PAAP Results for

Joshua Hufford

**Grade 8
Demonstration School 1**

Dear Parents and Guardians,

As you review this report, you will learn how your child scored on the Personalized Alternate Assessment Portfolio (PAAP) and what the results mean. The PAAP consists of a yearlong collection of student work done during daily instruction and designed to provide evidence of progress on alternate achievement standards and is a required State assessment.

These results should be used together with your child's IEP goals and progress in their daily schoolwork to gain a complete picture of how well your child is learning concepts. If you have any questions about your child's progress, I encourage you to meet with your child's teacher(s) to discuss these results and identify ways that you can continue to partner with your school to support your child's education.

Sincerely,

A handwritten signature in black ink, appearing to read "Tom Desjardin".

Thomas A. Desjardin
Acting Commissioner of Education

Personalized Alternate Assessment Portfolio (PAAP) General Information

What is the PAAP?

The PAAP is one part of Maine's Comprehensive Assessment System, which is required by state and federal law to assess student learning of state academic achievement standards. Students with the most significant cognitive disabilities are provided this alternate measure based on alternate academic achievement standards called Alternate Grade Level Expectations (AGLEs). The PAAP assesses the same content areas as their same age/grade peers.

Do all students take the PAAP?

All students in grades 5, 8, and in the 3rd year of high school who attend publicly funded schools/programs, including students with disabilities and English language learners, are required to participate in a science assessment. The standard versions of these tests are taken by most students, and some students receive accommodations to be able to participate. A relatively small number of students with significant cognitive disabilities who cannot take the standard test even with accommodations take the MEA (Alternate) Science (PAAP).

How are my child's PAAP results used?

The results should be used by the school and IEP team to help:

- Make decisions about daily instruction.
- Identify challenging academic goals and plan instruction for the following year.
- Establish whether the school and SAU are making progress in educating your child.
- Gather baseline data for progress in achieving the AGLEs.

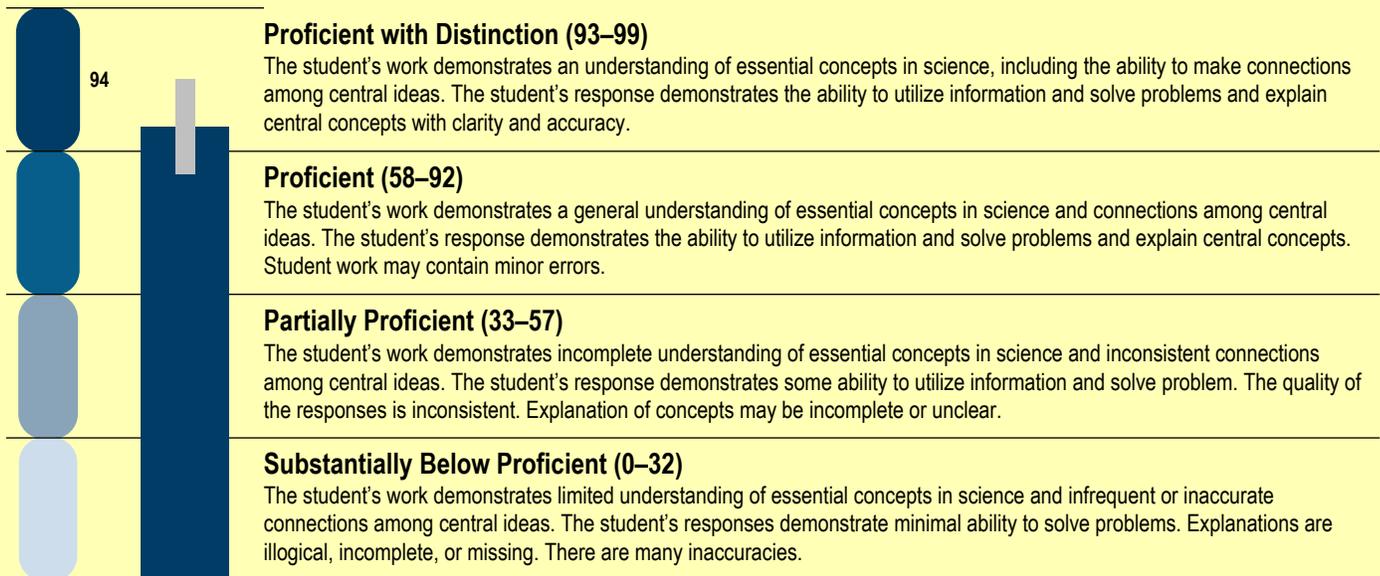
How does participation in the PAAP help my child?

The alternate assessment allows students with significant cognitive disabilities to "show what they know" and to receive instruction at a level that is challenging and attainable.

- **The PAAP helps to determine how much a student is learning.** A PAAP shows some of what a student has learned during the school year. Scores provide feedback that can be used to identify challenging goals and instruction for the following school year.
- **The PAAP ensures that all children will be taught.** Instruction is a key component of the PAAP. The design of the PAAP ensures that students are being taught the same content as their same age/grade peers.
- **Learning improves and expectations are raised.** Evidence shows that students learn more than expected when they are engaged in instruction based on the state's learning standards.

For more information about the PAAP: <http://www.maine.gov/education/lsalt/paap/index.html>

Your child's score is **94**.
Your child's achievement level is **Proficient with Distinction**.



Scores on the PAAP fall into one of four achievement levels listed above. These levels describe the quality of a student's work compiled in the portfolio. If you would like more information about the achievement levels, go to www.maine.gov/education/salt/paap/index.htm

The gray bar represents the probable range of scores (92-96) your child could earn if he or she took the test multiple times.

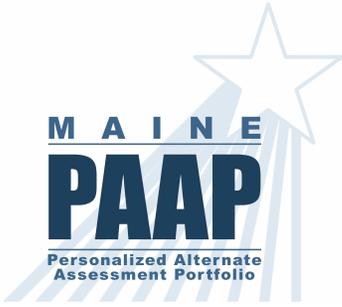
AGLE/ Indicator	The Physical Setting – D4	The Living Environment – E3	The Living Environment – E4
Level of Accuracy	Student work related to this AGLE/Indicator was completed with an average score of 85-100%	Student work related to this AGLE/Indicator was completed with an average score of 85-100%	Student work related to this AGLE/Indicator was completed with an average score of 85-100%
Level of Assistance*	Level of Assistance Score of 3 <ul style="list-style-type: none"> Independent Providing encouragement Completing tasks by using augmentative/alternate means of communication Repeating directions Reacting to a student Rereading a passage Reminding a student to stay focused 	Level of Assistance Score of 3 <ul style="list-style-type: none"> Independent Providing encouragement Completing tasks by using augmentative/alternate means of communication Repeating directions Reacting to a student Rereading a passage Reminding a student to stay focused 	Level of Assistance Score of 3 <ul style="list-style-type: none"> Independent Providing encouragement Completing tasks by using augmentative/alternate means of communication Repeating directions Reacting to a student Rereading a passage Reminding a student to stay focused
Level of Complexity**	Level of Complexity Score of 5 describing the force of gravity, the motion of objects, the properties of waves, and the wavelike property of energy in light waves by doing the following: <ul style="list-style-type: none"> identifying or describing wave motions, earthquakes, vibrations, and/or water waves. 	Level of Complexity Score of 6 describing the hierarchy of organization and function in organisms, and the similarities and differences in structure, function, and needs among and within organisms by doing the following: <ul style="list-style-type: none"> identifying that some living things are made of one cell and some living things are made of many cells AND identifying that all living things (single-celled and multi-celled) must have ways to get food and get rid of wastes. 	Level of Complexity Score of 6 describing the general characteristics and mechanisms of reproduction and heredity in organisms, including humans, and ways in which organisms are affected by their genetic traits by doing the following: <ul style="list-style-type: none"> identifying living things that reproduce by getting all their inherited information from one parent AND identifying living things that reproduce by getting all their inherited information from two parents.

* Level of Assistance: The amount of assistance that the teacher provided to your child that was beyond what was part of the task but did not change what was being assessed.

** Level of Complexity: Tasks are created so that students may complete them according to where they are in their learning.

PAAP • Personalized Alternate Assessment Portfolio • 2015 School Analysis Report

Grade: 05
School: Demonstration School 1
SAU: Demonstration District A



Student Name	MEDMS ID	Science																		Content Area Overall Results	
		AGLE/Indicator Entry 1						AGLE/Indicator Entry 2						AGLE/Indicator Entry 3							
		AGLE/Indicator	Level of Complexity	Level of Accuracy	Level of Assistance	Entry Score	Comment Codes	AGLE/Indicator	Level of Complexity	Level of Accuracy	Level of Assistance	Entry Score	Comment Codes	AGLE/Indicator	Level of Complexity	Level of Accuracy	Level of Assistance	Entry Score	Comment Codes	Total Score	Achievement Level
Calder, Stephen	D05100017	D1	2	4	3	13	1	D2	2	4	3	13	1	E2	4	4	2	22	1	48	3
Frey, David D	D05100015	D1	1	2	1	4	1	D2	1	3	1	5	1	E2	1	3	1	5	1	14	1
Pewonka, Brant D	D05100006	D1	1	3	3	7	1	D2	1	4	3	8	1 3d	E2	1	4	3	8	1	23	1
Snyder, Geoffrey W	D05100001	D1	2	2	1	9	1 3e	D2	1	3	2	6	3e 3d	E2	1	4	2	7	1	22	1

* Incomplete portfolio: Score is based on less than the required number of AGLE/Indicator entries.



Maine Personalized Alternate Assessment Portfolio 2015

School Analysis Report Legend

Achievement Level

- 1 = Substantially Below Proficient
- 2 = Partially Proficient
- 3 = Proficient
- 4 = Proficient With Distinction

Level of Accuracy

- 1 = Student work related to the Task was completed with a score of 0 - 19%
- 2 = Student work related to the Task was completed with a score of 20 - 60%
- 3 = Student work related to the Task was completed with a score of 61 - 84%
- 4 = Student work related to the Task was completed with a score of 85 - 100%
- = If the entry did not meet requirements
- U = If all tasks were unscorable

Level of Assistance

Level of Assistance Score of 1:

- Modeling
- Demonstrating a response similar to that desired

Level of Assistance Score of 2:

- Use of Option 2
- Limiting a student's response by removing one response option
- Use of clarifying questions to stimulate student thought without providing clues to specific answers
- Prompting
- Cueing

Level of Assistance Score of 3:

- Independent
- Administering the task following the directions outlined on the Task Description page
- Providing encouragement
- Completing task by using augmentative/ alternative means of communication
- Repeating directions
- Reacting to student
- Re-reading a passage
- Reminding a student to stay focused
- = If the entry did not meet requirements
- U = If all tasks were unscorable

Comment Code #	Comment
1.	All components/criteria were met for the Entry.
2.	<ul style="list-style-type: none"> a. An invalid AGLE/Indicator was submitted for the Entry. b. Items/tasks were altered for the Entry. c. Hand-over-Hand was used for the Entry. d. An Entry was missing. e. An Entry was not from the required blueprint/off grade level.
3.	<ul style="list-style-type: none"> a. Entry contains less than the required number of tasks. b. Entry contains less than the required number of Task Summary pages. c. No Entry Slip or Task Description Page was used. d. Entry contains student work that was not corrected accurately. e. Entry contains some or all student work that was not complete.
4.	<ul style="list-style-type: none"> a. Level of Complexity was not grade appropriate. b. Level of Complexity included one or more tasks from a different Level of Complexity than the Entry Slip.
5.	<ul style="list-style-type: none"> a. Specific information was not provided and/or inconsistent on the Task Summary page about the Level of Accuracy. b. Specific information was not provided and/or inconsistent on the Task Summary page about the Level of Assistance.

PAAP • Personalized Alternate Assessment Portfolio • 2015

SAU Report: Demonstration District A

Grade: 05



Reporting Categories	Science								
	Tested	Level 1		Level 2		Level 3		Level 4	
	n	n	%	n	%	n	%	n	%
All Students	17	8	47	1	6	6	35	2	12
Gender									
Male	11	5	45	0	0	4	36	2	18
Female	6	3	50	1	17	2	33	0	0
Not Reported	0	0		0		0		0	
Race/Ethnicity									
Hispanic or Latino	1	0	0	0	0	1	100	0	0
Not Hispanic or Latino									
American Indian or Alaskan Native	1	0	0	0	0	1	100	0	0
Asian	1	0	0	1	100	0	0	0	0
Black or African American	1	1	100	0	0	0	0	0	0
Native Hawaiian or Pacific Islander	0	0		0		0		0	
White	12	7	58	0	0	4	33	1	8
Two or more races	1	0	0	0	0	0	0	1	100
No Race/Ethnicity Reported	0	0		0		0		0	
LEP Status									
Current LEP student	2	1	50	0	0	1	50	0	0
Former LEP student: monitoring year 1	0	0		0		0		0	
Former LEP student: monitoring year 2	0	0		0		0		0	
All Other Students	15	7	47	1	7	5	33	2	13
IEP									
Students with an IEP	17	8	47	1	6	6	35	2	12
All Other Students	0	0		0		0		0	
SES									
Economically Disadvantaged Students	12	5	42	0	0	5	42	2	17
All Other Students	5	3	60	1	20	1	20	0	0
Migrant									
Migrant Students	0	0		0		0		0	
All Other Students	17	8	47	1	6	6	35	2	12
Title I									
Students Receiving Title I Services	1	1	100	0	0	0	0	0	0
All Other Students	16	7	44	1	6	6	38	2	13
504 Plan									
Students with a 504 Plan	0	0		0		0		0	
All Other Students	17	8	47	1	6	6	35	2	12

Level 1 = Substantially Below Proficient; Level 2 = Partially Proficient; Level 3 = Proficient; Level 4 = Proficient with Distinction
 © 2015 Maine Department of Education. All rights reserved.

This report contains confidential data. Data for public sharing may be located at:
http://dw.education.maine.gov/DirectoryManager/Web/Maine_report/DTHome.aspx.

APPENDIX M—ANALYSIS AND REPORTING DECISION RULES

**Analysis and Reporting Decision Rules
Maine Alternate Assessment (PAAP)
Spring 14-15 Administration**

This document details rules for analysis and reporting. The final student level data set used for analysis and reporting is described in the “Data Processing Specifications.” This document is considered a draft until the Maine State Department of Education (DOE) signs off. If there are rules that need to be added or modified after said sign-off, DOE sign off will be obtained for each rule. Details of these additions and modifications will be in the Addendum section.

I. General Information

A. *Tests administered:*

Subject	Grades	Test Type
Science	05, 08, 11 (Third Year HS)	Portfolio

B. *Reports Produced:*

1. Individual Student Report (ISR)
 - Parent Copy (Print)
 - School Copy (Web)
2. Student PAAP Results Label
3. School Analysis report (Roster) for Science
4. Summary Report
 - School
 - SAU
 - State

C. *Files Produced:*

1. School Level Data (Summary)
2. State Student Overall Data
3. State Student Entry Scores
4. State Level of Complexity Data
5. LCI Data (Not Applicable in 14-15)

D. *School Type:*

SchType	Source: ICORE SubTypeID	Description
'PUB'	1	Public
'PSP'	19	Public Special Purpose
'PSE'	15	Public Special Ed
'BIG'	6	Private with 60% or more Publicly Funded (Big 11)
'PSN'	23	Private Special Purpose
'CHA'	11	Public Charter

School Type impact on Data Analysis and Reporting		
Level	Impact on Analysis	Impact on Reporting
Student	n/a	Report students based on discode and schcode provided in student demographic file.
School	Do not exclude any students based on school type using testing school code for aggregations	Generate a report for each school with at least one student enrolled using the tested school aggregate denominator. SAU data will be blank for BIG and PSN schools. Always print tested year state data.
SAU	For BIG and PSN schools, aggregate using the sending SAU. If BIG or PSN student does not have a sending SAU, do not include in aggregations.	Generate a report for each SAU with at least one student enrolled using the tested SAU aggregate denominator. Always report tested year state data.
State	Include all students.	Always report testing year state data.

E. *Stustatus:*

StuStatus	Description
1	Home Schooled
2	Privately Funded
3	Exchange Student
4	Excluded State
0	Publicly Funded

StuStatus impact on Data Analysis and Reporting		
Level	Impact on Analysis	Impact on Reporting
Student	n/a	School and SAU data will be blank for students with a StuStatus value of 1. Always print tested year state data. For StuStatus values of 1 School name is 'Home Schooled' and SAU name is the name of the student's reported SAU.
School	Exclude all students with a StuStatus value of 1, 2 or 3.	n/a
SAU	Exclude all students with a StuStatus value of 1, 2 or 3.	n/a
State	Exclude all students with a StuStatus value of 1, 2, 3, 4.	n/a.

F. *Other Information*

1. Public School districts are districts containing at least one school with a school sub-type-id of 1, 11, 15, or 19.
2. Home Schooled Students(Stustatus = '1')
 - Home schooled students only appear on Parent Letter reports.
3. Student Demographic File Linking
 - All alternately assessed students link to the Student Demographic File.
 - All demographic data of record are pulled from the Student Demographic File for alternately assessed students.
4. Non-Maine Residents (Stustatus = '4')
 - Students are included in school and SAU aggregations, but not state aggregations.
 - Students will receive an ISR and will be listed on the school analysis report.
5. Third Year HS
 - The Student Demographic File Grade is the student's grade used in reporting. Students identified as Third Year HS (Active = '2') will be treated as Third Year HS regardless of grade.
 - Third Year HS students are stored internally as Grade 11.
6. Only students in 5, 8, and Third Year HS are expected to test Science in 14-15. Data processing will provide discrepancy reports for all students submitting a Science PAAP that are not identified as grade 5, 8, or Third Year HS for resolution.

7. Only students in 5, 8, and Third Year HS after resolution/clean up with a submitted PAAP are included in the Maine Alt reporting. Students that do not submit a PAAP are reported through Maine Science.

II. Student Participation / Exclusions

A. Test Attempt Rules

1. Attempt PAAP: Participated in PAAP
 - All students included in the Data Processing views for PAAP reporting have met the requirements for participation/attemptedness in PAAP Science for 14-15. See the Maine Alt Data Processing Specifications and the MaineAlt1415ScoreofRecord.pdf for details.

B. Not Tested Reasons by content area

1. There are no Not Tested reasons for PAAP Science in 14-15. Not Tested students are handled through Maine Science reporting.

C. Student Participation Status by content area

1. Tested
 - Incomplete Portfolio: a required entry was submitted, but at least one required entry was not submitted
 - Complete Portfolio: all required entries were submitted

D. Student Participation Summary by Content Area

Participation Status	Part. Flag	Raw Score	Ach. Level	Parent Letter Report
Tested: Alternate Assessment	C	✓	✓	✓

III. Calculations

A. Raw scores

Refer to [MaineAlt1415ScoreofRecord.pdf](#)

B. Scaling by content area

Achievement levels are assigned using a look-up table based on the student's raw score and grade.

IV. Report Specific Rules

A. Individual Student Report

1. All students included in the Data Processing view for PAAP reporting receive a Science PAAP Student Report.
2. Print the student's Student Demographic File school information (DisCode, SchCode)
3. Print the student's Student Demographic File Grade (StuGrade)
4. Do not print (display) the raw score range text (bar) for students receiving either the highest or the lowest possible score.
5. If an entry was not submitted print "AGLE/Indicator was not submitted" as the AGLE/Indicator. Level of Accuracy, Assistance and Complexity will be left blank.
6. If an entry did not meet the requirements OR all tasks were unscorable, print "Entry submitted did not meet PAAP requirements." for Level of Accuracy (Assistance).
7. For students identified as testing incomplete in Science print '+' next to the Achievement level.
8. Web pdfs are produced by grade and school; MP naming convention: `MaineAltYYYYStudentSchoolGG_[8-digit school code].pdf`, where GG = 05, 08, or 11 (Third Year High School).

B. Student PAAP Results Label

1. All students included in the Data Processing view for PAAP reporting, except Home Schooled Students, receive a Science PAAP Results Label.

C. School Analysis Report (Roster) by content area and grade

1. All students included in the Data Processing view for PAAP reporting are included on their Student Demographic File school roster.
2. "Third Year HS" students are listed on the same grade level roster. For Grade in header print "Third Year High School". The "Grade" column after student name indicates the individual Student Demographic file grade (StuGrade).

3. Students identified as testing incomplete place an '*' next to the achievement level
4. For entries that did not meet requirements, print:
 - The AGLE/Indicator, Level of Complexity, Comments code(s),
 - '-' (en-dash) for Level of Accuracy and Level of Assistance and
 - '0' for Entry Score
5. For entries where all tasks are unscorable print:
 - The AGLE/Indicator, Level of Complexity, Comments code(s),
 - 'U' for Level of Accuracy and Level of Assistance and
 - '0' for Entry Score
6. For entries not submitted: AGLE/Indicator, Level of Complexity, Level of Accuracy and Level of Assistance and Entry Score will be left blank. Comments code(s) will be printed.
7. Web pdfs are produced by grade and school; MP naming convention: MaineAltYYYYRosterStudentGG_[8-digit school code].pdf. where GG = 05, 08, or 11 (Third Year High School).

D. Summary Report

1. All "Third Year HS" students are aggregated together. Print Grade as "Third Year High School".
2. ~~If the total number of students is less than 10 in a category then print '-' for achievement level data.~~ As of 6/3/2015 this rule is no longer applicable. See Addenda.
3. If at least one student exists in a subcategory, but the percentage rounds to 0 as the nearest whole number, it is reported as '<1', not 0.
4. Web pdfs are produced by grade and school, district, and state, MP naming convention: MaineAltYYYYSummaryReportGG_[code].pdf where GG = 05, 08 or 11 (Third Year High School), and Code = 8-digit school code, 4-digit discode, or "ME".

V. Data File Rules

A. School Level Data File (Summary)

1. State level CSV file containing PAAP the number of students tested, and the number and percent of tested students at each achievement level; aggregated to the school level.
2. The file only includes 'PUB', 'CHA', 'PSP', 'BIG' and 'PSE' schools.
3. Schools that have less than 10 tested students will only include data for the number of students tested.

- B. State Student Overall Data
 - 1. State level CSV file containing student demographic data and performance information.
 - 2. Only students from 'PUB', 'CHA', 'PSP', and 'PSE' schools are included, or if they have a sending SAU.
 - 3. Non-Maine (StuStatus = 4) and Home school (StuStatus = 1) students are excluded.
 - 4. There are two files per grade; one with student names and one without.

- C. District Student Overall Data
 - 1. District level CSV file containing student demographic data and performance information for each public school district, delivered via the web release.
 - 2. Students from 'BIG' and 'PSN' schools are included in their sending SAU's data file, if they have a sending SAU.
 - 3. Home school (StuStatus = 1) students are excluded.
 - 4. 1 file including student names is produced per grade.

- D. School Student Overall Data
 - 1. School level CSV file containing student demographic data and performance information for each school, delivered via the Web release.
 - 2. Home school (StuStatus = 1) students are excluded.
 - 3. 1 file including student names is produced per grade.

- E. State Student Entry Scores
 - 1. A state level CSV file will contain student entry level scores.
 - 2. Only students from 'PUB', 'CHA', 'PSP', and 'PSE' schools are included, or if they have a sending SAU.
 - 3. Non-Maine (StuStatus = 4) and Home school (StuStatus = 1) students are excluded.

- F. State Level of Complexity Data
 - 1. An Excel file will contain the number of entries submitted at each level of complexity aggregated by grade and content area.
 - 2. Only Students who submitted a content area PAAP are included.

- G. LCI Data – Not Applicable in 14-15.
 - 1. LCI Student Data
 - A CSV will contain student demographic and LCI questionnaire responses

2. LCI Not Submitted Data
3. LCI FreqDis Data
 - A CSV will contain, for each LCI question, the number and percent of each response endorsed at the school, district and state level. Aggregation rules as described in section I are applied
4. LCI Percent Data
 - A CSV will contain the number and percent of students who did and did not submit LCI questionnaire at the district level.

VI. Data File Table
(YYYY indicates year)

File	Delivery	Layout	Naming Convention
School Level Data File (Summary)	State	MaineAlt YYYYSchoolSummaryLayout.xls	MaineAlt YYYYSchoolSummaryData.csv
State Student Overall Data	State	MaineAlt YYYYStateStudentScoredDataLayout.xls (Worksheet: "Overall")	MaineAlt YYYYStateStudentScoredData.csv MaineAlt YYYYStateStudentScoredDataNoNames.csv
District Student Overall Data	Web	MaineAlt YYYYStudentResultsLayout.xls	MaineAlt YYYYDistrictSlice_[SAU Code].CSV
School Student Overall Data	Web	MaineAlt YYYYStudentResultsLayout.xls	MaineAlt YYYYSchoolSlice_[School code].CSV
State Student Entry Scores	State	MaineAlt YYYYStateStudentScoredDataLayout.xls (Worksheet: "EntryScores")	MaineAlt YYYYStateStudentEntryScoresData.csv
State Level of Complexity Data	State	MaineAlt YYYYLOCLayout.xls	MaineAlt YYYYLOCdist.xls
LCI Data (Not Applicable in 14-15)	State	MaineAlt YYYYLCILayout.xls	MaineAlt YYYYFreqDist.csv MaineAlt YYYYNotSubmitted.csv MaineAlt YYYYStudentData.csv MaineAlt YYYYPercent.csv MaineAlt YYYYLCILayout.xls

VII. Shipping Information – Printed Reports

A. School Products(ReportFor=1)

1. Parent reports will be individually packed by school.

Report Description	Grade	Report Type	Content Code	Subject	Quantity
Parent Report – School Copy	00	01	00	Science	Variable
Student Results Labels – School copy	00	07	00	Science	Variable

Addenda: 6/15/2015

The Summary Report (school, district, state) is confidential. Do not suppress any data due to minimum n requirements moving forward.