## PARCC RESULTS: YEAR ONE

Measuring College and Career Readiness

## NJ STATE BOARD OF EDUCATION NOVEMBER 4, 2015

# "Currently the New Jersey High 

 School Proficiency Assessment (HSPA) does not measure college or work readiness...Further, New Jersey colleges and universities do not use scores from the HSPA for admissions or placement, because the test does not reflect postsecondary placement requirements."NEXT STEPS:
REPLACE HSPA
"Replace HSPA
with a series of end of course assessments in math and science, and a proficiency exam in
language arts
literacy that are aligned with the expectations of
higher
education and the workplace."

## NEW JERSEY'S STATEWIDE ASSESSMENT PROGRAM

- In 2009, the New Jersey State Board of Education adopted new course taking requirements.
- In 2010, the New Jersey State Board of Education adopted higher standards in Language Arts and Mathematics.
- In 2010, New Jersey Department of Education began work with the Partnership for Assessment of Readiness for College and Careers (PARCC)
- In 2015, PARCC replaced HSPA and previous assessments in the elementary and middle school in language arts and mathematics. Students took PARCC English Language Arts and Literacy Assessments (ELA/L) in grades 3 - 11. Students took PARCC Mathematics Assessments in grades 3-8 and End of Course Assessments in Algebra I, Geometry, and Algebra II.


## WHAT IS PERFORMANCE LEVEL SETTING?

- A process of deriving levels of performance on educational or professional assessments, by which decisions or classifications of persons will be made (Cizek, 2006)
-Test scores can be used to group students into meaningful Performance Levels
- Performance Level Setting is the process whereby we "draw the lines" that separate the test scores into various Performance Levels


## EVIDENCE BASED PERFORMANCE LEVEL SETTING

- Integrates empirical data from systematic research with content expert judgment and policy goals in setting performance standards for students



## PERFORMANCE LEVEL SETTING METHOD

- The Extended Modified Angoff Yes/No Method is based on one of the most widely-used methods for setting performance levels
- One of a number of approaches available for setting performance levels
- Judgmental procedure
- Panelists consider characteristics of each item and expectations of students to make item-level judgments that can be aggregated into overall threshold scores for the test form
- Multiple rounds of judgments and delivery of information are designed to optimize decision making


## OVERVIEW OF ITEM-LEVEL JUDGMENT TASK

-The panelists make recommendations as to what students at each performance level would be able to demonstrate in terms of their knowledge, skills, and abilities.
-The panelists do this by evaluating test questions on the PARCC assessments, judging how many points a student would be likely to earn.

## MATH SAMPLE EXAMPLE TASK

- Using the performance level descriptors for grade 4 mathematics, and the following sample item, determine how many points a student performing at each level would likely earn on the item.
- 2 points possible
- Part A: 1 point
- Part B: 1 point
- Students do not need to answer Part A correctly in order to earn points on Part B

How many points would a borderline Level 2 student likely earn if they answered the question? Levels 3, 4, and 5 ?

Jordan places two boards end to end to make one shelf. The first board is $\frac{47}{100}$ meter long. The second board is $\frac{5}{10}$ meter long.

## Part A

What fraction is equivalent to $\frac{5}{10}$ and has a denominator of 100 ?
Enter your answer in the space provided. Enter only your answer.


## Part B

What is the total length, in meters, of the two boards?
Enter your answer in the space provided. Enter only your answer.


|  | Grade 4 Math : Sub-Claim A <br> The student solves problems involving the Major Content for the grade/course with connections to the Standards for Mathematical Practice. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 5 | 4 | 3 | 2 |
| Fractions and Decimals <br> 4.NF.1-2 <br> 4.NF.2-1 <br> 4.NF.A.Int. 1 <br> 4.NF. 5 <br> 4.NF. 6 <br> 4.NF. 7 <br> 4.NF.Int. 1 <br> 4.NF.Int. 2 | Compares decimals to hundredths; uses decimal notations for fractions (tenths and hundredths); compares fractions, with like or unlike numerators and denominators, by creating equivalent fractions with common denominators, comparing to a benchmark fraction and generating equivalent fractions. <br> Demonstrates the use of conceptual understanding of fractional equivalence and ordering when solving simple word problems requiring fraction comparison. <br> Converts a simple fraction to a denominator of 10 or 100 and writes as a decimal (e.g.,1/2 = $5 / 10=0.5,1 / 4=25 / 100=0.25$, $1 / 20=5 / 100=0.05)$. <br> Adds fractions with denominators of 10 and 100. | Compares decimals to hundredths; uses decimal notations for fractions (tenths and hundredths); compares fractions, with like or unlike numerators and denominators, by creating equivalent fractions with common denominators, comparing to a benchmark fraction and generating equivalent fractions. <br> Demonstrates the use of conceptual understanding of fractional equivalence and ordering when solving simple word problems requiring fraction comparison. <br> Adds fractions with denominators of 10 and 100. | Given a visual model and/or manipulatives, compares decimals to hundredths; uses decimal notations for fractions (tenths and hundredths); compares fractions, with like or unlike numerators and denominators, by creating equivalent fractions with common denominators and comparing to a benchmark fraction. <br> Solves simple word problems requiring fraction comparison. | Given a visual model and/or manipulatives, compares decimals to hundredths; uses decimal notations for fractions (tenths and hundredths); compares fractions, with like or unlike numerators and denominators by comparing to a benchmark fraction. <br> Solves simple word problems requiring fraction comparison with scaffolding. |

## RESULTS \& DISCUSSION

- Number of points for student performing at each level:

| Level 2 | Level 3 | Level 4 | Level 5 |
| :--- | :--- | :--- | :--- |
|  |  |  |  |

- How did you approach the task? What factored into your decision?
- Did everyone at your table agree? Did discussion with others change how you thought about the task?


## ACTIVITIES COMPLETED DURING THE PERFORMANCE LEVEL SETTING MEETING

- Experience the PARCC assessments
- Scoring the PARCC assessments
- Review and discuss Performance Level Descriptors
- Develop borderline descriptors
- College and Career Readiness discussion
- Practice item judgments
- 3 rounds of item judgments using actual forms taken by students in spring 2015
- Feedback data after each round
- Table/group discussions
- Final recommended threshold scores for each performance level


## RESOLUTION: ELA/L AND MATH MINIMUM SCORES FOR EACH PERFORMANCE LEVEL

|  | Partially <br> Meeting <br> (Level 2) | Approaching <br> Expectations <br> (Level 3) | Meeting <br> Expectations <br> (Level 4) | Exceeding <br> Expectations <br> (Level 5) |
| :--- | :---: | :---: | :---: | :---: |
| Grade 3 ELA \& Math | 700 | 725 | 750 | 790 |
| Grade 4 ELA \& Math | 700 | 725 | 750 | 790 |
| Grade 5 ELA \& Math | 700 | 725 | 750 | 790 |
| Grade 6 ELA \& Math | 700 | 725 | 750 | 790 |
| Grade 7 ELA \& Math | 700 | 725 | 750 | 790 |
| Grade 8 ELA \& Math | 700 | 725 | 750 | 790 |
| Grade 9 ELA/Algebra I | 700 | 725 | 750 | 790 |
| Grade 10 ELA/Geometry | 700 | 725 | 750 | 790 |
| Grade 11 ELA/Algebra II | 700 | 725 | 750 | 790 |

## DATA PREPARATION PROCESS

## PARCC Consortium

- Spring 2015: Test administration
- Summer 2015: Scoring process
- August/September 2015: PARCC Governing board sets consortium-wide performance levels.
- September/October: Preliminary data files.


## NJ Department of Education

- October: Release of preliminary data
- November $4^{\text {th }}$ : Release of the statewide summaries; State Board approves performance levels.
- Mid-to-Iate November: Districts receive student, school, and district reports.
- Mid-January: Release of school and district-level data and participation rates.


## NEW JERSEY'S 2015 PARCC OUTCOMES ENGLISH LANGUAGE ARTS/LITERACY

|  | Not Yet <br> Meeting <br> (Level 1) | Partially <br> Meeting <br> (Level 2) | Approaching <br> Expectations <br> (Level 3) | Meeting <br> Expectations <br> (Level 4) | Exceeding <br> Expectations <br> (Level 5) | $\%>=$ <br> Level 4 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Grade 3 | $15 \%$ | $18 \%$ | $24 \%$ | $39 \%$ | $5 \%$ | $44 \%$ |
| Grade 4 | $8 \%$ | $15 \%$ | $27 \%$ | $39 \%$ | $12 \%$ | $51 \%$ |
| Grade 5 | $7 \%$ | $15 \%$ | $26 \%$ | $45 \%$ | $6 \%$ | $52 \%$ |
| Grade 6 | $8 \%$ | $16 \%$ | $28 \%$ | $40 \%$ | $9 \%$ | $49 \%$ |
| Grade 7 | $11 \%$ | $15 \%$ | $23 \%$ | $34 \%$ | $18 \%$ | $52 \%$ |
| Grade 8 | $12 \%$ | $15 \%$ | $22 \%$ | $39 \%$ | $13 \%$ | $52 \%$ |
| Grade 9 | $18 \%$ | $19 \%$ | $24 \%$ | $30 \%$ | $10 \%$ | $40 \%$ |
| Grade 10 | $25 \%$ | $18 \%$ | $20 \%$ | $26 \%$ | $11 \%$ | $37 \%$ |
| Grade 11 | $17 \%$ | $19 \%$ | $24 \%$ | $30 \%$ | $11 \%$ | $41 \%$ |

Note: Numbers may not sum to $100 \%$ due to rounding.

## NEW JERSEY'S 2015 PARCC OUTCOMES MATHEMATICS

|  | Not Yet <br> Meeting <br> (Level 1) | Partially <br> Meeting <br> (Level 2) | Approaching <br> Expectations <br> (Level 3) | Meeting <br> Expectations <br> (Level 4) | Exceeding <br> Expectations <br> (Level 5) | $\% ~>=$ <br> Level 4 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Grade 3 | $\mathbf{8 \%}$ | $19 \%$ | $28 \%$ | $37 \%$ | $8 \%$ | $4.5 \%$ |
| Grade 4 | $7 \%$ | $22 \%$ | $30 \%$ | $36 \%$ | $4 \%$ | $41 \%$ |
| Grade 5 | $6 \%$ | $21 \%$ | $32 \%$ | $35 \%$ | $6 \%$ | $41 \%$ |
| Grade 6 | $8 \%$ | $21 \%$ | $30 \%$ | $35 \%$ | $6 \%$ | $41 \%$ |
| Grade 7 | $8 \%$ | $22 \%$ | $33 \%$ | $33 \%$ | $4 \%$ | $37 \%$ |
| Grade 8* | $22 \%$ | $26 \%$ | $28 \%$ | $23 \%$ | $1 \%$ | $24 \%$ |
| Algebra I | $14 \%$ | $25 \%$ | $25 \%$ | $33 \%$ | $3 \%$ | $36 \%$ |
| Geometry | $12 \%$ | $36 \%$ | $30 \%$ | $20 \%$ | $3 \%$ | $22 \%$ |
| Algebra II | $32 \%$ | $25 \%$ | $20 \%$ | $22 \%$ | $2 \%$ | $24 \%$ |

* Note: Approximately 30,000 New Jersey students participated in the PARCC Algebra I assessment while in middle school. Thus, PARCC Math 8 outcomes are not representative of grade 8 performance as a whole.

| 2015 PARCC ELA/L Grade 4 | $51 \%$ |
| :--- | :--- |
| 2013 NAEP Reading Grade 4 | $42 \%$ |

2015 PARCC Math Grade 4 ..... 41\%
2013 NAEP Math Grade 4 ..... 49\%
2015 PARCC ELA/L Grade 8 ..... 52\%
2013 NAEP Reading Grade 8 ..... 46\%
2015 PARCC ELA/L Grade 11 ..... 41\%
2013 NAEP Reading Grade 12 ..... 41\%
2015 PARCC Algebra I ..... 36\%
2011 ADP Algebra I ..... $35 \%$

## PARCC OUTCOMES IN CONTEXT

2015 SAT: $44 \%$ met College and Career Ready
Benchmark

2015 ACT: 43\% met College
and Career
Ready
Benchmark.

## ELA/L RESULTS: \% MEETING/EXCEEDING, BY ECONOMIC DISADVANTAGE



## MATH RESULTS: \% MEETING/EXCEEDING, BY ECONOMIC DISADVANTAGE



## ELA/L RESULTS: \% MEETING/EXCEEDING, BY RACE/ETHNICITY



## MATH RESULTS: \% MEETING/EXCEEDING, BY RACE/ETHNICITY



