# Delaware System of Student Assessments (DeSSA) Executive State Summary 

## 2016-2017 Administration

July 2017

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## Delaware System of Student Assessments (DeSSA) Overview

Delaware's assessment program is called the Delaware System of Student Assessments (DeSSA). DeSSA assessments include Smarter English Language Arts/Literacy (ELA) and Mathematics assessments for grades 3-8; the SAT Evidence-Based Reading and Writing, Essay and Math assessments for high school; the Delaware Comprehensive Assessments System (DCAS) Science assessment for grades 5, 8 and 10; and the Delaware Comprehensive Assessment System-Alt1 (DCAS-Alt1) in Reading, Mathematics, and Science for students with the most significant intellectual disabilities; as well as some national assessments such as NAEP. Together, these assessments satisfy the assessment requirements of the United States Every Student Succeeds Act (ESSA). Each DeSSA assessment administration provides specific information in each content area and grade.

This report summarizes the participation and performance results of the 2017 DeSSA assessments. The percentages listed in each of the accompanying figures may not equal $100 \%$ at each grade level due to rounding.

All Students are required to be included in the statewide assessment program, regardless of classification. The Accessibility Guidelines for Delaware System of Student Assessments (DeSSA) describe permissible test accommodations and supports and the conditions under which students classified as students with disabilities, students with 504 plans, and English language learners are included (available at http://de.portal.airast.org/resources/dcas-alt1/).

The Students with Disabilities subgroup includes all students with IEPs. During the spring 2017 Smarter assessment, students who had the disability code label "Speech Only" were included in the SWDs reporting group.

To preserve student confidentiality, all Delaware Department of Education (DDOE) reports must adhere to the following suppression rules:

- For state level data:
- If a group or subgroup count of "number tested" is between one (1) and fifteen (15), the number of students is represented by " $<=15$ " and the percentages and averages are reported for that group.
- If a group or subgroup count of "number tested" is zero (0), the number of students is reported as zero $(0)$ and an asterisk $\left({ }^{*}\right)$ appears in the columns where a percentage or average would otherwise appear.
- Complementary suppression of one or more non-sensitive cells in a table may be required so that the values of the suppressed cells may not be calculated by subtracting the reported values from the row and column totals. The symbol that is used to represent data suppressed as a result of complementary data suppression is " $\sim$ ".
- For district and school level data, counts for groups or subgroups are not included. If a group or subgroup has zero (0) students it will be represented with a "*".
- Any percentage above 95 or below five (5) will be reported as $>95 \%$ and $<5 \%$ respectively.

A subgroup included in some reports is "Student Gap Group." The Student Gap Group is a combined, unduplicated count of students that are in groups that have historically had achievement gaps. This information is used for accountability. The groups include:

- Ethnicity/Race (African American, Hispanic, American Indian)
- Students with Disabilities (SWD)
- Low Income
- English Language Learners (ELL)
*The Hawaiian and American Indian groups are excluded from the report narratives due to small numbers of students tested in these groups.


## DeSSA 2017 Participation Rate

## Participation Rate - Definitions and Calculations

The participation rate is reported by content area and grade level for all assessments, Smarter ELA/Literacy and Math, DCAS Science, SAT, and DCAS-Alt1. The participation rate is also reported by subgroups in the participation tables.
The following is the method used to calculate participation rate in this report. The calculation method used for this report is not the same method used for calculating participation rates for accountability purposes; therefore, the participation rates will not match those used for accountability.

$$
\text { Participation Rate }=100 \times \text { Eleghere N }
$$

Tested $\mathbf{N}$ - Referred to as "Tested N ," this is the numerator of the participation rate calculation. It is the number of students who had valid scores and tested on grade level.
Eligible $\mathbf{N}$ - Referred to as "Eligible N," this is the denominator of the participation rate calculation for a particular content area and is equal to the number of students who are eligible to test. This is equal to the sum of Tested N and Invalid.
All students enrolled in a public school for the entire assessment window for the respective content area will be counted as eligible to take assessments unless granted an exemption. Any student who is not enrolled in the same public school for the entire assessment window, but is in the same district for the entire assessment window, will be eligible for district/state participation only, not school participation.
Invalid Scores - If an improper departure from testing procedures occurred during the administration of a student's test, DOE can make the determination that it resulted in an invalid score. Students with invalid scores are counted as non-participants in the calculation of participation rates. Their scale score and Achievement Level are not included in the results tables within this report.
Not Tested - Students are counted as not tested if they met the requirements to be counted as "eligible" to take assessments, but fail to test at any time during the spring test window in a given content area.

Exempt - An exemption causes the student scores to be excluded from performance calculations and from participation rate calculations. Some students are granted a "special" exemption from assessments due to physical or mental health conditions or due to other circumstances that were beyond the control of the student and school staff. ELL students in the U.S. for less than one year may receive an ELL exemption from the Smarter ELA/Literacy assessment.

## Participation Rate - Subgroups

The assessment subgroup participation rates for all grade levels and content areas were calculated based on the following subgroups:

- Students with Disabilities (SWDs)
- English language learners (ELLs)
- Low-income
- White
- Hispanic/Latino
- American Indian or Alaska Native
- Black or African American
- Asian
- Native Hawaiian or Other Pacific Islander
- Multi-Racial
- Student Gap Group


## I. Smarter State Assessment Summary

## Smarter Overview

The Smarter assessments are designed to measure the progress of Delaware students in ELA/Literacy and Mathematics standards in grades 3-8. The first operational administration of the Smarter assessments in grades 3-8 occurred during spring 2015. Spring 2017 represents the third year of implementation of the Smarter ELA/Literacy and Smarter Mathematics assessments. See below for the assessment windows available for administration:

## Smarter Assessment Window Dates

| Dates of Window | Tests Administered |
| :---: | :---: |
| March 8, 2017 - June 1, 2017 | Smarter ELA/Literacy and <br> Mathematics grades 3-8 |

These assessments require deeper thinking and application of real world skills in English Language Arts (ELA)/Literacy and Mathematics.
The Smarter ELA/Literacy assessments include:

- Reading;
- Listening;
- Writing;
- Research \& Inquiry.

The Smarter Mathematics assessments include:

- Concepts \& Procedures;
- Problem Solving and Modeling \& Data Analysis;
- Communicating Reasoning.

The Smarter assessment scores reported in this summary are based on the scale scores and the Achievement Levels for the state, the districts, and the schools. The scores are reported on a developmental scale for grades 3-8 ranging from approximately 2000 to 3100 . The overall achievement was delineated into the following four levels (with the defining phrases bolded):

- The Level 4 student demonstrates thorough understanding of and ability to apply the English language arts and literacy (mathematics) knowledge and skills needed for success in college and career, as specified in the Common Core State Standards.
- The Level 3 student demonstrates adequate understanding of and ability to apply the English language arts and literacy (mathematics) knowledge and skills needed for success in college and career, as specified in the Common Core State Standards.
- The Level 2 student demonstrates partial understanding of and ability to apply the English language arts and literacy (mathematics) knowledge and skills needed for success in college and career, as specified in the Common Core State Standards.
- The Level 1 student demonstrates minimal understanding of and ability to apply the English language arts and literacy (mathematics) knowledge and skills needed for success in college and career, as specified in the Common Core State Standards.

In this report and the attachments, the achievement level is reported as the percentage of students who are proficient, that is, the percentage of students who are in Achievement Level 3 and Achievement Level 4 combined.

It is important to note that the participation rate and the percent proficient follow different business rules and are generated differently in this report than those generated for accountability purposes. The following is the method used to calculate percent proficient rates in this report.

$$
\text { Percent Proficient Rate }=100 \times \frac{\text { Number Proficient }}{}
$$

The students proficient are identified by any students receiving an AL3 or AL4 in connection with their scale score.

Located below are the Smarter cut scores and Achievement Levels for all grades and both contents.

## Smarter Cut Scores

## Smarter ELA/Literacy Performance Standards

| Grade | Achievement <br> Level 1 | Achievement <br> Level 2 | Achievement <br> Level 3 | Achievement <br> Level 4 |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{3}$ | 2366 and below | $2367-2431$ | $2432-2489$ | 2490 and above |
| $\mathbf{4}$ | 2415 and below | $2416-2472$ | $2473-2532$ | 2533 and above |
| $\mathbf{5}$ | 2441 and below | $2442-2501$ | $2502-2581$ | 2582 and above |
| $\mathbf{6}$ | 2456 and below | $2457-2530$ | $2531-2617$ | 2618 and above |
| $\mathbf{7}$ | 2478 and below | $2479-2551$ | $2552-2648$ | 2649 and above |
| $\mathbf{8}$ | 2486 and below | $2487-2566$ | $2567-2667$ | 2668 and above |

## Smarter Mathematics Performance Standards

| Grade | Achievement <br> Level 1 | Achievement <br> Level 2 | Achievement <br> Level 3 | Achievement <br> Level 4 |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{3}$ | 2380 and below | $2381-2435$ | $2436-2500$ | 2501 and above |
| $\mathbf{4}$ | 2410 and below | $2411-2484$ | $2485-2548$ | 2549 and above |
| $\mathbf{5}$ | 2454 and below | $2455-2527$ | $2528-2578$ | 2579 and above |
| $\mathbf{6}$ | 2472 and below | $2473-2551$ | $2552-2609$ | 2610 and above |
| $\mathbf{7}$ | 2483 and below | $2484-2566$ | $2567-2634$ | 2635 and above |
| $\mathbf{8}$ | 2503 and below | $2504-2585$ | $2586-2652$ | 2653 and above |

## About Achievement Level Setting

The process of Achievement Level setting, also known as standard setting, was utilized to establish threshold scores, allowing for the development of categories of performance on Smarter assessments. Smarter Balanced governing states approved a three-phase plan for the Achievement Level setting process incorporating an adaptation of the Bookmark procedure (Lewis, Mitzel, Mercado, \& Schulz, 2012). This plan included:

1. An Online Panel (October 6-17, 2014) allowed thousands of K-12 educators, higher education faculty, parents, and other interested parties to participate virtually in recommending Achievement Levels.
2. An In-Person Panel (October 13-19, 2014) with educators and other stakeholders working in grade-level teams deliberated and made recommendations for the threshold scores of the four Achievement Levels.
3. The Cross-Grade Review Committee, a subset of the In-Person Panel, examined recommendations across all grades to consider the reasonableness of the system of cut scores.

Delaware participants were involved in both the virtual and face-to-face achievement setting process. Additionally, on November 14, 2014, states voted to endorse an approved set of Achievement Level scores for Smarter during a meeting of chief education officials. The Delaware State Board of Education approved the Achievement Level scores at the January 2015 State Board session. The states also approved a statement on the interpretation and use of scores and Achievement Levels. The standard setting activities were conducted by contractors Measurement Incorporated (MI) and CTB/McGraw-Hill (CTB). More information about this process can be found at https://portal.smarterbalanced.org/library/en/achievement-level-setting-final-report-with-appendix.pdf. The adopted Achievement Levels first appeared on score reports for assessments administered in the 2015-2016 school year.

Information about the testing conditions under which Smarter assessments were administered is available in the test administration manuals available on the DeSSA Portal (http://de.portal.airast.org/).

## Smarter State Level Summary Results

## Smarter Participation

The overall state participation rate for Smarter ELA/Literacy and Mathematics for each grade assessed can be found in Figure 1. The combined participation rate for ELA/Literacy is 98.9\% and for Mathematics is $98.7 \%$. Federal reporting requires participation rates of at least $95 \%$. All grades and content areas in Smarter assessments meet this threshold.

It is important to note that multiple factors lead to a student counting as a non-participant such as absences, truancy, not completing enough items on the assessment, and parent or student refusals to participate in the assessment.

Figure 1- Statewide Smarter Assessment Participation Rates, 2017

|  | ELA/Literacy | Mathematics |
| :--- | :---: | :---: |
| Statewide | $>95 \%$ | $>95 \%$ |
| Grade 3 | $>95 \%$ | $>95 \%$ |
| Grade 4 | $>95 \%$ | $>95 \%$ |
| Grade 5 | $>95 \%$ | $>95 \%$ |
| Grade 6 | $>95 \%$ | $>95 \%$ |
| Grade 7 | $>95 \%$ | $>95 \%$ |
| Grade 8 | $>95 \%$ | $>95 \%$ |

## Smarter Proficiency

Statewide Smarter proficiency summary data may be found in Figures 2 and 3 below. These figures provide overall proficiency information for Smarter ELA/Literacy and Mathematics. Proficiency is defined as Achievement Levels 3 and 4 combined.

Figure 2- Statewide ELA/Literacy Percent Proficient and Achievement Levels, 2017

|  | ELA <br> Prof \% | AL 1 | AL 2 | AL 3 | AL 4 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Statewide | $\mathbf{5 4}$ | $\mathbf{2 2}$ | $\mathbf{2 4}$ | $\mathbf{3 2}$ | $\mathbf{2 2}$ |
| Grade 3 | 52 | 23 | 25 | 25 | 27 |
| Grade 4 | 54 | 26 | 20 | 26 | 28 |
| Grade 5 | 60 | 21 | 19 | 34 | 26 |
| Grade 6 | 52 | 22 | 26 | 34 | 18 |
| Grade 7 | 54 | 21 | 25 | 37 | 17 |
| Grade 8 | 52 | 21 | 26 | 37 | 15 |

Figure 3- Statewide Mathematics Percent Proficient and Achievement Levels, 2017

|  | Math <br> Prof \% | AL 1 | AL 2 | AL 3 | AL 4 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Statewide | $\mathbf{4 5}$ | $\mathbf{2 7}$ | $\mathbf{2 9}$ | $\mathbf{2 4}$ | $\mathbf{2 1}$ |
| Grade 3 | 54 | 22 | 25 | 31 | 23 |
| Grade 4 | 50 | 18 | 31 | 28 | 22 |
| Grade 5 | 44 | 27 | 29 | 20 | 24 |
| Grade 6 | 41 | 28 | 30 | 22 | 19 |
| Grade 7 | 42 | 30 | 29 | 23 | 19 |
| Grade 8 | 38 | 35 | 26 | 18 | 20 |

## District \& Charter Participation Rates for Smarter, 2017

The participation rate is a combination of all grades for district and charter schools. Any percentage above 95 is reported as $>95 \%$.

| District | ELA/Literacy | Mathematics |
| :--- | :---: | :---: |
| Appoquinimink | $>95 \%$ | $>95 \%$ |
| Brandywine | $>95 \%$ | $>95 \%$ |
| Caesar Rodney | $>95 \%$ | $>95 \%$ |
| Cape Henlopen | $>95 \%$ | $>95 \%$ |
| Capital | $>95 \%$ | $>95 \%$ |
| Christina | $>95 \%$ | $>95 \%$ |
| Colonial | $>95 \%$ | $>95 \%$ |
| Delmar | $>95 \%$ | $>95 \%$ |
| Indian River | $>95 \%$ | $>95 \%$ |
| Lake Forest | $>95 \%$ | $>95 \%$ |
| Laurel | $>95 \%$ | $>95 \%$ |
| Milford | $>95 \%$ | $>95 \%$ |
| Red Clay | $>95 \%$ | $>95 \%$ |
| Seaford | $>95 \%$ | $>95 \%$ |
| Smyrna |  |  |
| Woodbridge |  | $>95 \%$ |

## District \& Charter Participation Rates for Smarter, 2017 (cont'd)

The participation rate is a combination of all grades for district and charter schools. Any percentage above 95 is reported as $>95 \%$.

| Charter School | ELA/Literacy | Mathematics |
| :---: | :---: | :---: |
| Academia Antonia Alonso | >95\% | >95\% |
| Academy of Dover | >95\% | >95\% |
| Campus Community | >95\% | >95\% |
| East Side Charter | >95\% | >95\% |
| Family Foundations | >95\% | >95\% |
| First State Montessori | >95\% | >95\% |
| Freire Charter School | >95\% | >95\% |
| Gateway Lab | >95\% | >95\% |
| Great Oaks Charter School | >95\% | >95\% |
| Kuumba Academy | >95\% | >95\% |
| Las Aspira Academy | >95\% | >95\% |
| MOT Charter | >95\% | >95\% |
| Newark Charter | >95\% | >95\% |
| Odyssey Charter | >95\% | >95\% |
| Positive Outcomes | >95\% | >95\% |
| Prestige Academy | >95\% | >95\% |
| Providence Creek | >95\% | >95\% |
| Sussex Academy | >95\% | >95\% |
| Thomas Edison Charter | >95\% | >95\% |
| Other | ELA/Literacy | Mathematics |
| DSCYF | >95\% | >95\% |

In the following section, the 2017 Smarter results are summarized at the state level with the percent proficient by content, grade, and average score. Please note that, due to rounding for percentage, the total may be above or below $100 \%$.

## Smarter ELA/Literacy Performance

Figure 4 shows the percentage of students in each Achievement Level for the spring 2017 Smarter ELA/Literacy test given in grades 3-8. Descriptions for each Achievement Level (AL) can be found beginning on page two of this document. The percentages may not equal $100 \%$ at each grade level due to rounding.

Figure 4 - Smarter ELA/Literacy Achievement Levels, 2017


Grades 3, 4, and 5 show the highest percent of students who are performing at AL 4, the highest Achievement Level possible for Smarter ELA/Literacy. For AL 3, grades 5-8 were all at or above $34 \%$, while both grades 3 and 4 were at or above $25 \%$. The three grades with the lowest percent of students performing at AL 4 were in grades 6,7 and 8 , which were at $18 \%$, $17 \%$ and $15 \%$ respectively. The number of students at AL1 ranged from a low of $21 \%$ (grades 5,7 , and 8 ) to $26 \%$ (grade 4 ), and AL 2 ranged from $19 \%$ (grade 5) to $26 \%$ (grades 6 and 8 ). The results above do not have a discernable pattern; however, this is expected as the Achievement Levels were not meant to show a pattern for Smarter ELA/Literacy.

Attachment 1 of this document shows the distribution of these Achievement Levels across the subgroups at the State Level. Attachments 2, 3, and 4 show the distribution of Achievement Levels across subgroups at the District/Charter and School Level, with a comparison to the State Level.

Figure 5 - Smarter ELA/Literacy Percent Proficient, 2015-2017


Over a three-year period, grades 5-8 show increases in the percentage of students achieving proficiency in ELA, ranging from $3 \%$ (grade 8 ) to $6 \%$ (grade 6 ). Over the same period, grade 3 has decreased by $2 \%$, while grade 4 percentages have remained stable.

Figure 6 - Smarter ELA/Literacy Average Scale Scores, 2015-2017


Figure 6 shows the average scale score for all students in Delaware over a three-year period. The scale score is a measure that helps a child's teacher and parent understand where the student's score is within an Achievement Level. The Cut Scores for the Achievement Levels can be found on page 3 of this document. The scale scores are on a development scale (growth scale) and so it would be expected to see the scores increase with each grade. The overall range of the scale is 2000-3100.

Over a three-year period, grades 5-8 have increased their average scale score on the Smarter ELA/Literacy assessment. Grade 3 has decreased, while grade 4 has remained stable.

Smarter Mathematics Performance
Figure 7 - Smarter Mathematics Achievement Levels, 2017


Figure 7 shows the percentage of students in each Achievement Level on the spring 2017 Smarter Mathematics assessment in grades 3-8. The percentages may not equal $100 \%$ at each grade level due to rounding.

The percent in AL1 ranges from 18\% in grade 4 to $35 \%$ in grade 8 . The percent in AL2 ranges from $25 \%$ in grade 3 to $31 \%$ in grade 4 . The percent in AL 3 ranges from $18 \%$ in grade 8 to $31 \%$ in grade 3. The percent in AL 4 ranges from $19 \%$ in grades 6 and 7 to $24 \%$ in grade 5 .

Figure 8 - Smarter Mathematics Percent Proficient, 2015-2017


Over a three-year period, grades 4-8 show increases in the percentage of students achieving proficiency in ELA, ranging from $3 \%$ (grade 8 ) to $7 \%$ (grade 6). Over the same period, grade 3 has remained stable.

Figure 9 - Smarter Mathematics Average Scale Scores, 2015-2017


Figure 9 shows the 2017 average scale score per grade for all students in Delaware. The scale score is a measure that helps a child's teacher and parent understand where the student's score is within an Achievement Level. The Cut Scores for the Achievement Levels can be found on page $\underline{3}$ of this document. The scale scores are on a development scale (growth scale) and so it would be expected to see the scores increase with each grade. The overall range of the scale is 2000 to 3100.

Over a three-year period, all grades from 3-8 have increased their average scale score on the Smarter Mathematics assessment. The greatest increases are in grades 5-8.

## Smarter Disaggregated Summary Results

## Smarter ELA/Literacy Disaggregated Performance

Figure 10 - Smarter ELA/Literacy Achievement Levels, Grade Band 3-5,
Disaggregated 2017


In ELA/Literacy for Grade Band 3-5, the SWD group had the highest proportion of students in AL1 and AL2 combined at $81 \%$. The Asian group had the highest proportion of students in AL3 and AL4 combined at $82 \%$ followed by White ( $68 \%$ ). The percent in AL1 ranges from $6 \%$ (Asian) to $59 \%$ (SWD). The percent in AL2 ranges from $11 \%$ (Asian) to $28 \%$ (ELL). The percent in AL3 ranges from 14\% (SWD) to 30\% (White and Multi-Racial). The percent in AL4 ranges from $6 \%$ (SWD) to $56 \%$ (Asian).

[^1]Figure 11 - Smarter ELA/Literacy Achievement Levels, Grade Band 6-8,
Disaggregated, 2017


In English Language Arts/Literacy for Grade Band 6-8, the ELL group had the highest proportion of students in AL1 and AL2 combined at $94 \%$. The Asian group had the highest proportion of students in AL3 and AL4 combined at $82 \%$. The percent in AL1 ranges from $6 \%$ (Asian) to 70\% (ELL). The percent in AL2 ranges from 12\% (Asian) to 31\% (African American and Low Income). The percent in AL3 ranges from 5\% (ELL) to 42\% (White). The percent in AL4 ranges from 1\% (ELL and SWD) to 46\% (Asian).

[^2]
## Smarter Mathematics Disaggregated Performance

Figure 12 - Smarter Mathematics Achievement Levels, Grade Band 3-5,
Disaggregated, 2017


In Mathematics for Grade Band 3-5, the ELL, SWD, and African American groups had higher proportions of students in AL1 and AL2. The White and Asian groups had highest proportions of students in AL3 and AL4 with a range of $63 \%$ to $80 \%$ for these two combined levels. The percent in AL1 ranges from 5\% (Asian) to 56\% (SWD). The percent in AL2 ranges from 14\% (Asian) to 35\% (Hispanic/Latino). The percent in AL3 ranges from 13\% (SWD) to 30\% (White and Multi-Racial). The percent in AL4 ranges from 6\% (SWD) to 56\% (Asian).

[^3]Figure 13 - Smarter Mathematics Achievement Levels, Grade Band 6-8, Disaggregated, 2017


In Mathematics for Grade Band 6-8, the SWD, ELL, Low-Income, and African American group had the highest proportion of students in AL1 and AL2 combined. The Asian group had the highest proportion of students in AL3 and AL4 combined (76\%). The percent in AL1 ranges from 9\% (Asian) to $75 \%$ (ELL and SWD). The percent in AL2 ranges from 15\% (Asian) to 34\% (Multi-Racial). The percent in AL3 ranges from 4\% (ELL) to 26\% (White). The percent in AL4 ranges from $2 \%$ (SWD) to $54 \%$ (Asian).
*The Hawaiian and American Indian groups are excluded from the narrative due to small numbers of students tested in these groups.

# SAT State Summary 

## 2016-2017

## Administration

## II. SAT Assessment Summary

## SAT Overview

Spring 2017 marked the second year of the administration of the Redesigned SAT assessment in high school.
On January 6, 2016, the Department of Education announced the SAT assessment would replace the Smarter Balanced Assessment in grade 11 as Delaware's state assessment. The change originated at the request of legislators as the state continued to look for ways to reduce testing time, particularly for 11th grade students who were taking both the Delaware state-funded SAT School Day assessment, as well as the $11^{\text {th }}$ grade Smarter Balanced assessment.

College Board developed the SAT to assess the critical reading, mathematical reasoning, and writing skills of students and to provide a benchmark for college and career success through a standardized assessment. In March 2016, College Board launched a redesigned SAT, aligned to the Common Core State Standards. The redesigned SAT is scheduled to be completed in 3 hours and 30 minutes with breaks included. In Delaware, the optional essay portion of the SAT is required for all students participating in the SAT. With the essay included, the scheduled time is 4 hours and 22 minutes.

The SAT measures the knowledge and skills needed for students to be ready for college, career, and beyond. The Evidence-Based Reading and Writing (ERW) section of the SAT is text-based, requiring students to provide support for their responses. The Mathematics section focuses on the math that research has shown to be most useful in college and career. The Essay requires students to analyze a text and explain how the author builds an argument to persuade an audience.

Information about the typical conditions under which the SAT is administered is available in the test administration manuals located on the DOE website at https://www.doe.k12.de.us/Page/2717.

## SAT Administration Dates

| Dates of Window | Tests Administered |
| :---: | :---: |
| Oct 2016 - January 2017 | SAT Saturday |
| April 5, 2017 |  |
| April 25,2017 | School Day SAT |
| School Day SAT Make-Up |  |

## SAT School Day Achievement Level Descriptions

The SAT assessment scores reported in this summary are based on the scale scores and the Achievement Levels for the state, the districts, and the schools. The scores are reported on a combined ERW and Mathematics scale for High School ranging from 400 to 1600. The overall achievement was delineated into the following four levels (with defining phrases bolded):

| Level 4 | - SAT ERW - 630-800: The level 4 student has exceeded the achievement level and demonstrates a thorough understanding of the knowledge and skills needed for college and career readiness and achievement relative to the ELA/Literacy Content Standards. <br> - SAT Math - 650-800: The level 4 student has exceeded the achievement level and demonstrates a thorough understanding of, and ability to apply the mathematics knowledge and skills needed for college and career readiness and achievement relative to the Math Content Standards. |
| :---: | :---: |
| Level 3 | - SAT ERW - 480-620: The level 3 student has met the achievement level and demonstrates adequate understanding of the knowledge and skills needed for college and career readiness and achievement relative to the ELA/Literacy Content Standards. <br> - SAT Math - 530-640: The level 3 student has met the achievement level and demonstrates an adequate understanding of, and ability to apply the mathematics knowledge and skills needed for college and career readiness and achievement relative to the Math Content Standards. |
| Level 2 | - SAT ERW - 420-470: The level 2 student partially meets the achievement level and demonstrates an incomplete understanding of the knowledge and skills needed for college and career readiness and achievement relative to the ELA/Literacy Content Standards. |


|  | - SAT Math 420-520: The level 2 student has partially met the achievement level and demonstrates an incomplete understanding of, and ability to apply the mathematics knowledge and skills needed for college and career readiness and achievement relative to the Math Content Standards. |
| :---: | :---: |
| Level 1 | - SAT ERW 200-410: The level 1 student has not met the achievement level and demonstrates a minimal understanding of the knowledge and skills needed for college and career readiness and achievement relative to the ELA/Literacy Content Standards. <br> - SAT Math 200-410: The level 1 student has not met the achievement level and demonstrates a minimal understanding of, and ability to apply the mathematics knowledge and skills needed for college and career readiness and achievement relative to the Math Content Standards. |

The SAT Essay has only two performance levels, Proficient and Non-Proficient, due to the structure and number of points for the Essay portion. The two levels are described below:

- SAT Essay: The proficient student on the Essay portion of the SAT has met the achievement level and demonstrates an adequate understanding of and ability to apply ELA/Literacy knowledge and skills in reading, analysis, and writing needed for college and career readiness and achievement on the Delaware ELA/Literacy Content Standards. The student demonstrates effective comprehension and analysis of the passage and writes mostly cohesively demonstrating an effective use and control of language.
- SAT Essay: The non-proficient student on the Essay portion of the SAT has not met the achievement performance level and demonstrates a minimal understanding of the knowledge and skills in reading, analysis, and writing needed for college and career readiness and performance on the Delaware ELA/Literacy Content Standards. The student demonstrates little understanding with an ineffective analysis of the passage and demonstrates little or no cohesion and inadequate skill in the use and control of language.


## SAT Cut Scores

SAT ERW Achievement Levels

| Achievement <br> Level 1 | Achievement <br> Level 2 | Achievement <br> Level 3 | Achievement <br> Level 4 |
| :---: | :---: | :---: | :---: |
| $200-410$ | $420-470$ | $480-620$ | $630-800$ |

(Approved by State Board on August 18, 2016)

SAT Mathematics Achievement Levels

| Achievement <br> Level 1 | Achievement <br> Level 2 | Achievement <br> Level 3 | Achievement <br> Level 4 |
| :---: | :---: | :---: | :---: |
| $200-410$ | $420-520$ | $530-640$ | $650-800$ |

(Approved by State Board on August 18, 2016)

SAT Essay Achievement Level

## Proficient Level*

To be Proficient on the Essay portion of the SAT,
(a) The sum of the three dimension scores (Reading, Analysis, and Writing) must be 13 points or greater and;
(b) Each dimension must be 3 points or greater.

## About Achievement Level Setting

Four achievement levels, labeled Level 1 to Level 4, are used to report student performance on SAT ERW and mathematics in conjunction with the assessment scores. The cut scores for achievement levels were recommended at the multi-state standard setting workshops on June 15-16, 2016. During this process, educators from Connecticut, Delaware, Maine, and New Hampshire reviewed item by item on the operational test form; discussed the expectations of student performance specified in the Achievement Level Descriptors (ALDs) for each achievement level and the impact data; and determined the cut points on the reporting scale based on the Modified Angoff approach.

The recommended cut scores were reviewed by policy makers from the four participating states and agreed upon with minor adjustments. On July 14, 2016, a large group of Delaware classroom teachers, administrators, as well as representatives from higher education participated in the SAT Standard Setting Review meeting to experience the process and review the adjusted recommended cut scores. The recommended cut scores were presented to the State Board of Education for consideration on July 21, 2016, with an understanding that these cut scores would be preliminary and revisited, if approved after additional student data are available.

On February 23-24, 2017, 31 educators and administrators from Delaware public schools, school districts, and higher education revisited the standard setting for the redesigned SAT Essay to determine the performance standards for student achievement on writing. The results of the 2017 SAT Essay are included based on the established performance standards.

## SAT State Level Summary Results

The state participation rates for ERW and Mathematics may be found in Figure 1 below. The participation rate for ERW is $90 \%$ and for Mathematics is $90 \%$. It is important to note that the participation rate is the same for ERW and Mathematics, as high school students are required to take all portions of the SAT (ERW, Math, and Essay) once in their high school education to receive a valid score. Federal reporting requires the participation rate to be higher than $95 \%$. In 2016, there was a shift in business and accountability rules to include students in twelfth grade who had not been previously assessed in high school. Therefore, last year (2016) is considered a transition year in reporting combined grade 11 and 12 participation; participation this year includes both grade levels.

It is important to note that multiple factors lead to a student counting as a non-participant such as absences, truancy, not completing enough items on the assessment, and parent or student refusals to participate in the assessment.

Figure 1- Statewide SAT Assessment Participation Rates, 2017

|  | ERW | Math | Essay |
| :---: | :---: | :---: | :---: |
| Statewide | $90 \%$ | $90 \%$ | $88 \%$ |

## SAT Proficiency and Achievement Levels

Statewide SAT proficiency summary data may be found in Figure 2 below. This figure provides overall proficiency information for SAT for ERW and Mathematics. Proficiency is a combination of achievement levels 3 and 4 combined.

Figure 2- Statewide ERW and Mathematics Proficient and Achievement Levels, 2017

|  | Proficiency <br> Rate | AL 1 | AL 2 | AL 3 | AL 4 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Statewide <br> ERW | $53 \%$ | $24 \%$ | $23 \%$ | $43 \%$ | $10 \%$ |
| Statewide <br> Mathematics | $29 \%$ | $26 \%$ | $45 \%$ | $23 \%$ | $6 \%$ |
| Statewide <br> Essay | $26 \%$ | $74 \%$ | $26 \%$ |  |  |

As with other DeSSA assessments, the 2017 SAT results are summarized at the state level with the percent proficient by content and average score. Please note that, due to rounding for percentage, the total may be above or below $100 \%$.

## SAT ERW Performance

Figure 3 - SAT High School ERW Achievement Levels, 2017


Figure 3 shows the performance levels distribution for High School students in spring 2017 compared to spring 2016. The percentages may not equal $100 \%$ due to rounding. The highest percent of students (43\%) are performing at AL3. The next largest percentage of students are in AL1, followed by AL2. 10\% of students performed at AL4.

Descriptions for each Achievement Level (AL) can be found in on pages 29-30 of this document. More than half of the students (53\%) were proficient in ERW in 2017.

## SAT ERW Average Scale Score, 2017

The scale score is a measure that helps a student's teacher and parent understand where a student's score is within the range of an Achievement Level. The overall range of the scale score in each section (ERW and Mathematics) of the SAT is 200 to 800 .

The SAT ERW average scale score for 2017 was 491. In 2016, the ERW average scale score was 490. The SAT Essay average scale score for 2017 was 11 . There was no cut score for the Essay in 2016.

The cut scores for each Achievement Level can be found on page 31.

Figure 4 - SAT High School Essay Performance, 2017


SAT Mathematics Performance
Figure 5 - SAT High School Mathematics Achievement Levels, 2017


Figure 5 shows the percentage of students in each Achievement Level on the spring 2017 School Day SAT Mathematics assessment in High School. The highest percent of students (45\%) are performing at AL 2. The next largest percentage of students were in AL 1, followed by AL 3. Only $6 \%$ of students performed at AL 4 . The percentages may not equal $100 \%$ due to rounding.

The scale score is a measure that helps a student's teacher and parent understand where a student's score is within the range of an Achievement Level. The overall range of the scale score in each section (ERW and Mathematics) of the School Day SAT is 200 to 800.

The SAT Mathematics average scale score for 2017 was 478. In 2016, the average mathematics scale score was 482.

## District \& Charter School Day SAT Participation Rates for 2017

(Any percentage above 95 is reported as $>95 \%$.)

| Districts | Evidence-Based Reading and Writing (ERW) | Mathematic s |
| :---: | :---: | :---: |
| Appoquinimink | 93\% | 93\% |
| Brandywine | 91\% | 91\% |
| Caesar Rodney | 92\% | 92\% |
| Cape Henlopen | 93\% | 93\% |
| Capital | 83\% | 83\% |
| Christina | 77\% | 77\% |
| Colonial | 82\% | 82\% |
| Delmar | >95\% | >95\% |
| Indian River | 91\% | 91\% |
| Lake Forest | 92\% | 92\% |
| Laurel | 88\% | 88\% |
| Milford | 93\% | 93\% |
| NCCVT | >95\% | >95\% |
| Polytech | >95\% | >95\% |
| Red Clay | 89\% | 89\% |
| Seaford | 95\% | 95\% |
| Smyrna | 91\% | 91\% |
| Sussex Tech | >95\% | >95\% |
| Woodbridge | 88\% | 88\% |
| Charters | Evidence-Based Reading and Writing (ERW) | Mathematic <br> s |
| Delaware Academy of Public Safety and Security | 71\% | 71\% |
| Delaware Design Lab | 87\% | 87\% |
| Early College High School | >95\% | >95\% |
| Newark Charter School | >95\% | >95\% |
| Positive Outcomes | >95\% | >95\% |
| Sussex Academy | >95\% | >95\% |
| Other | Evidence-Based Reading and Writing (ERW) | Mathematic $\mathbf{s}$ |
| DSCYF | 90\% | 90\% |

## SAT Disaggregated Summary Results

SAT Evidence-Based Reading and Writing (ERW) Disaggregated Performance

Figure 6 - SAT Evidence-Based Reading and Writing (ERW) Achievement Levels, 2017, Disaggregated


Figure 6 shows that in Evidence-Based Reading and Writing, the ELL, SWD, African American and Low Income groups had higher proportions of students in AL1 and AL2 combined. The Asian, White, and Multi-Racial groups had higher proportions of students in AL3 and AL4 combined. Excluding the high performance of Asian group, the percent in AL1 ranges from 15\% (White) to $79 \%$ (ELL). The percent in AL2 ranges from 15\% (ELL) to 30\% (Hispanic/Latino). The percent in AL3 ranges from 5\% (ELL) to 52\% (White and Multi-Racial). The percent in AL4 ranges from 0\% (ELL and SWD) to $38 \%$ (Asian).

[^4]
## SAT Mathematics Disaggregated Performance

Figure 7 - SAT Mathematics Achievement Levels, 2017, Disaggregated


In Mathematics, the ELL, SWD, African American, and Low Income groups had higher proportions of students in AL1 and AL2 combined. The Asian and White groups had higher proportions of students in AL3 and AL4 combined. Excluding the high performance of Asian group, the percent in AL1 ranges from $15 \%$ (White) to $68 \%$ (SWD and ELL). The percent in AL2 ranges from 26\% (Asian) to $51 \%$ (Multi-Racial). The percent in AL3 ranges from 2\% (SWD) to $32 \%$ (White). The percent in AL4 ranges from 0-1\% (SWD, ELL, Low Income, Hispanic/Latino, and African American) to 35\% (Asian).

[^5]
## SAT Essay Disaggregated Performance

Figure 8 - SAT Essay Proficiency Levels, 2017, Disaggregated


The percent not proficient ranges from $47 \%$ (Asian) to $98 \%$ (ELL). More than $83 \%$ of students in the African American, Hispanic, Low Income, SWD, and ELL groups are not proficient for the SAT Essay. The percent proficient ranges from 2-3\% (SWD and ELL) to 53\% (Asian). Between 15-17\% of students are proficient on the SAT Essay in the Low-Income, African American, and Hispanic groups.

[^6]
# State Summaries of Delaware Comprehensive Assessment System (DCAS) Science 

## 2016-2017

## Administration

## III. DCAS State Assessment Summary

## DCAS Overview

The administration of the DCAS for science in grades 5,8 , and 10 occurred during the spring 2017. See below for the assessment windows available for administration:

There was no administration of the Social Studies assessments for grade 4, 7, and high school in Spring 2017 due to the development of a new assessment and there is no Federal requirement to report any Social Studies scores.

## DCAS Assessment Window Dates:

| Dates of Window | Tests Administered |
| :---: | :--- |
| March 8- June 1, 2017 | DCAS Science <br> Grades 5, 8, and 10 |

The DCAS Science scores reported in this summary are based on the scale scores and the achievement levels for the state, the districts, and the schools. The scores for DCAS Science are reported on this within grade scale ranging from approximately 15 to 650 . Student achievement is reported in four performance levels:

- Advanced
- Meets Standard
- Below Standard
- Well-Below Standard

The proficiency level is reported as the percentage of students who are proficient; that is, the percentage of students in Meets Standard and Advanced performance levels combined.

Located below are the DCAS Science cut scores and performance levels for grades 5, 8 and 10.

## DCAS Cut Scores:

## DCAS Science Performance Standards

| Grade | Well-Below <br> Standard | Below Standard | Meets Standard | Advanced |
| :---: | :---: | :---: | :---: | :---: |
| 5 | 351 or less | $352-399$ | $400-434$ | 435 or more |
| 8 | 359 or less | $360-399$ | $400-434$ | 435 or more |
| 10 | 380 or less | $381-399$ | $400-434$ | 435 or more |

The preliminary standard setting for the DCAS Science took place in August 2010 using the Bookmark Method. Panelists were representative of Delaware educators in terms of gender, ethnicity, and geographic location. Community members and parents were also represented among the panelists. More information about the standard setting can be found in the Standard Setting Technical Report: Setting Performance Standards for the Computer-Adaptive Delaware Comprehensive Assessment System (DCAS). ${ }^{1}$

A confirmatory standard setting for the DCAS was performed in June 2011. The purpose of the confirmatory standard setting was to review the performance standards set in August 2010 in light of the first year of operational data. Following the panel review of the 2010-2011 DCAS operational results, panelists recommended that the interim performance standards be confirmed. The Delaware State Board of Education approved this recommendation at its July 2011 public meeting.

Information about the testing conditions under which DCAS was administered is available in the test administration manuals available on the DCAS Portal (http://de.portal.airast.org/).

All Students with Disabilities (SWDs), which only includes students who have an Individualized Education Program (IEP), and English Language Learners (ELLs), are required to be included in the statewide assessment program. The Accessibility Guidelines for Delaware System of Student Assessments (DeSSA) describe the conditions under which such students are included, including descriptions of permissible test accommodations.

The Students with Disabilities subgroup may show increases in performance in the 2017 school year partly as a result of a change in policy. Prior to 2015, Students with Disabilities who had the disability code label "Speech Only" were not included in the SWDs reporting group. For 2016, speech only students were included in this reporting group. This could change the overall performance of the Students with Disabilities subgroup and comparisons to previous years should be made with caution.

Rules for suppression and subgroup reporting may be found on page 5 of the initial introduction of the DeSSA Overview.

## DCAS 2017 Participation Rate

## Participation Rate - Definitions and Calculations

DCAS participation definitions and calculations follow the same rules as described in the DeSSA Overview section, page 6.

## DCAS Science Participation Rate

Participation rates were calculated for 36 grade level/content area/subgroups in science. Of these, eight subgroups do not meet the $95 \%$ target, all of which are in grade 10 . The subgroups that had 16 or more students in the cell in grade 10 with participation rates below $95 \%$ are SWDs at $87 \%$, ELLs at $85 \%$, Low-Income at $88 \%$, Hispanic at $90 \%$, African American at $89 \%$, American Indian at $89 \%$, and Multi-racial at $93 \%$.

Figure 1- Statewide DCAS Science Participation Rates, 2017

|  | Science <br> Participation |
| :--- | :---: |
| Statewide | $\mathbf{9 8 \%}$ |
| Grade 5 | $\mathbf{9 9 \%}$ |
| Grade 7 | $\mathbf{9 8 \%}$ |
| Grade 10 | $\mathbf{9 6 \%}$ |

## DCAS Science State Level Performance Results

The statewide DCAS Science summary data, with subgroups, is presented in 2017 DCAS State Summary Attachment 1.

In the following section, the 2017 DCAS Science results are summarized at the state level with the percent proficient by grade, and average score. A comparison from spring 2012 through spring 2017 is also provided with the average scale score and the percentage of proficient by grade level. Please note that, due to rounding for percentage, the total may be above or below $100 \%$.

Similarly to the Smarterstate-level results, Science results are also summarized by subgroups. The DCAS Science subgroup results for all grade levels were calculated using the same criteria, see page 18 for more information.

## DCAS Science Performance

Figure 2 - DCAS Science Performance Levels, 2017


Figure 2 shows the percentage of students in each performance level on the spring 2017 DCAS Science assessment in grades 5,8 , and 10 . Fewer than half of students in each tested grade ( $45 \%$ in grade $5,47 \%$ in grade 8 , and $43 \%$ in grade 10) performed at the Meets Standard and Advanced levels.

Figure 3 - DCAS Science Percentage of Students Proficient, 2014-2017


The results of the four-year comparison (Figure 3) show a slight decrease in the percentage of students proficient over time in grades 5 and 8 . Although the percent proficient in grade 10 dropped 3\% from 2014 to 2017, results from 2017 are unchanged from 2016.

Figure 4 - DCAS Science Average Scale Scores, 2012-2017


As seen in Figure 4 above, the average scale scores for 2017 DCAS Science are 394, 394, and 389 respectively, in grades 5, 8 and 10. Compared with student performance in 2012, the 2017 average scale scores have decreased between seven (7) to nine (9) score points across grades.

Figure 5 - DCAS Science Levels, Disaggregated, 2017


In Science for all grade levels combined, the ELL group had the highest proportion of students in AL1 and AL2 combined at 93\%. The Asian group had the highest proportion of students in AL3 and AL4 combined at $72 \%$ followed by White ( $60 \%$ ). The percent in AL1 ranges from $10 \%$ (Asian) to 67\% (ELL). The percent in AL2 ranges from 18\% (Asian) to 37\% (Hispanic/Latino and Low-Income). The percent in AL3 ranges from 6\% (ELL) to 34\% (White). The percent in AL4 ranges from $1 \%$ (ELL) to $42 \%$ (Asian).

# State Summaries of Delaware Comprehensive Assessment System Alt1 (DCAS-Alt1) Reading, Mathematics, and Science 

2016-2017 Administration

## IV. DCAS-Alt 1 State Assessment Summary

## DCAS-Alt1 Overview

There was one opportunity for the DCAS- Alt1 during the spring 2017 administration for reading and mathematics in grade 3-11 and for science in grades 5, 8, and 10. The DCAS-Alt1 Reading and Mathematics assessments parallel the Smarter ELA/Literacy and Mathematics assessments administered to students taking the general assessment (grades 3-8) and the PSAT and SAT (grades 9-11). See below for the assessment windows that were available for the administration of the DCAS-Alt1. Three tasks were previously released in each grade band to provide teachers with resources to use with students who may not be familiar with the assessment.

There was no administration of the DCAS-Alt1Social Studies assessments for grade 4, 7, and High School in spring 2017 due to the development of a new assessment. Also, there is no Federal requirement to report Social Studies scores.

| Dates of Window | Tests Administered |
| :---: | :--- |
| March 8-June 1, 2017 | $\underline{\text { DCAS-Alt1 Reading and Mathematics }}$ |
|  | Grades 3-8 and 11 <br> GCAS-Alt1 Science |
|  |  |

DCAS-Altl scores are not summarized at the school level due to the small numbers of students. The scale scores for DCAS-Alt1 Reading and Mathematics are reported on a developmental scale for grade 3 through grade 11, ranging from approximately 100 to 1000 .

Student achievement for DCAS-Alt1 is also reported in performance levels.
There are four performance levels:

- Advanced
- Meets Standard
- Below Standard
- Well-Below Standard


## DCAS-Alt1 Standard Setting

The preliminary standard setting for the DCAS-Alt1 Reading and Mathematics took place in July 2011. There were 47 panelists working with data from the reading and mathematics DCAS-Alt1 field test of spring 2011. The panelists were selected by Department of Education (DOE) and represented a broad cross- section of special education and general education teachers, parents, and higher education leaders. Gender and ethnicity/race were also considered to ensure a representative selection within the panel.

A confirmatory standard setting took place July 9-10, 2012. More information about the standard setting can be found in the Standard Setting Technical Report: Setting Performance Standards for the Delaware Comprehensive Assessment System - Alternate Assessment (DCASAlt1). ${ }^{2}$

The standard setting for the DCAS-Alt1 Science took place July 9-10, 2012. There were 44 panelists consisting of teachers, parents, and higher education leaders to recommend performance standards for science (grade 5, 8 , and 10 ).

The reading, mathematics, and science cut scores developed from the DCAS-Alt1 Standard Setting are located below:

## DCAS-Alt1 Cut Scores:

DCAS-Alt1 Reading Performance Standards

| Grade | Well-Below <br> Standard | Below Standard | Meets Standard | Advanced |
| :---: | :---: | :---: | :---: | :---: |
| $3-5$ | 629 or less | 630 | 673 | 725 |
| $6-8$ | 639 or less | 640 | 700 | 779 |
| $9-11$ | 649 or less | 650 | 740 | 817 |

DCAS-Alt1 Mathematics Performance Standards

| Grade | Well-Below <br> Standard | Below Standard | Meets Standard | Advanced |
| :---: | :---: | :---: | :---: | :---: |
| $3-5$ | 624 or less | 625 | 676 | 724 |
| $6-8$ | 641 or less | 642 | 700 | 773 |
| $9-11$ | 656 or less | 657 | 724 | 802 |

## DCAS-Alt1 Science Performance Standards

| Grade | Well-Below <br> Standard | Below Standard | Meets Standard | Advanced |
| :---: | :---: | :---: | :---: | :---: |
| 5 | 346 or less | 347 | 400 | 435 |
| 8 | 365 or less | 366 | 400 | 435 |
| 10 | 368 or less | 369 | 400 | 435 |

Information about the typical conditions under which the DCAS-Alt1 is administered is available in the test administration manuals located on the DCAS Portal (http://de.portal.airast.org/).

All SWDs and ELLs are required to be included in the statewide assessment program, to the extent possible. The Accessibility Guidelines for Delaware System of Student Assessments (DeSSA), available on the DeSSA Portal, describe the participation criteria for students who are included in the DCAS-Alt1. The IEP team approves the participation criteria and identifies each student in the Test Information Distribution Engine (vendor database).

To preserve student confidentiality, all reports adhere to the data suppression rules described in the Smarter State Summary Achievement Level Setting found on page 5.

[^7]
## DCAS-Alt1 2017 Participation Rate

## Participation Rate - Definitions and Calculations

DCAS participation definitions and calculations follow the same rules as described in the DeSSA Overview section, page 6.

## DCAS-Alt1 Reading Participation Rate

All grades met the goal of at least 95\% participation for DCAS-Alt1 Reading, except Grade 4 (92\%).

## DCAS-Alt1 Mathematics Participation Rate

All grades met the goal of at least $95 \%$ participation for DCAS-Alt1 Math, except Grade 4 (91\%).

## DCAS-Alt1 Science Participation Rate

Grades 5 and 8 both met the participation rate threshold. However, grade $10(93 \%)$ did not.

## DCAS-Alt1 State Level Summary Results

The statewide DCAS-Alt1 summary data, with subgroups, is presented in 2017 DCAS-Alt1 State Summary Attachment 1.

In this section, student achievement on DCAS-Alt 1 is summarized by each performance level, content area, and grade level for reading, mathematics, and science. Please note that, due to rounding for percentages, the total may be above or below $100 \%$. The results of the 2017 DCAS-Alt1 are also compared with results from other years in terms of average scores and percent proficient for each content area.

## DCAS-Alt1 Reading Performance

Figure 7 - DCAS-Alt1 Reading Performance Levels, 2017


Figure 7 shows the percentage of students in each performance level for reading by grade for the spring 2017 DCAS-Alt1 administration.

Grade 5 has the highest percentage of students who are in the Advanced performance level in reading at $46 \%$, while grade 6 has the lowest at $20 \%$. Grades 7,5 and 8 show the highest proficiency rates (Meets and Advanced levels combined) at $69 \%, 68 \%$, and $65 \%$ respectively. Grade 6 has a proficiency rate of $62 \%$. The proficiency rate for grade 4 follows with $57 \%$.

Grade 11 and grade 3 have similar proficiencies, with a proficiency of $54 \%$ and $53 \%$ respectively, having the highest percentages of students in Below and Well-Below categories.

Figure 8 - DCAS-Alt1 Reading Average Scale Scores, 2014-2017


Figure 8 shows the statewide average scale score for DCAS-Alt1 reading by grade from spring 2014 through spring 2017.

Changes from year to year within each grade vary. Grades 5, 6 , and 11 show increases from the baseline year ( 2014 or 2015 for grade 11) to 2017 , with grade 4 being essentially the same. A discernable pattern in these increases and decreases is not evident at each grade level. This is likely due to the small number of students and heterogeneous population tested in this assessment.

Figure 9 - DCAS-Alt1 Reading Percent Proficient, 2014-2017


As shown in Figure 9, the percent proficient in grades 3, 5, 6, 7, and 8 in spring 2017 is above the grade-level baseline established in spring 2014. In 2017, grades 4,5 and 7 increased, with ranges between $1 \%$ (grade 5 ) and $9 \%$ (grade 7). It is important to be cautious in the interpretation of cross-year comparison due to the small number of students and heterogeneous population tested in this assessment.

## DCAS-Alt1 Mathematics Performance Results

Figure 10 - DCAS-Alt1 Mathematics Performance Levels, 2017


Figure 10 displays the percentage of students in each performance level by grade for the 2017 DCAS-Alt 1 Mathematics.

The proportion of students performing at Meets or Advanced ranges from 46\% at grade 3 to $69 \%$ at grade 7. The proportion of students performing at Advanced level has a range of $15 \%$ in grade 11 to $43 \%$ in grade 5 .

The percentage of students performing at Well-Below Standard has a range of $12 \%$ in grade 6 to $34 \%$ in grade 3 .

Figure 11 - DCAS-Alt1 Mathematics Average Scale Scores, 2014-2017


In figure 11 , grades 5,6 , and 11 show an overall increase from the baseline years. Grades $3,4,7$, and 8 show an overall decrease in spring 2017 DCAS-Alt1 Mathematics scale scores compared to baseline 2014. Grade 11 was not implemented until spring 2015.

Figure 12 - DCAS-Alt1 Mathematics Percent Proficient, 2014-2017


DCAS-Alt1 Mathematics percentages for proficiency show mixed results from 2016 to 2017 with grades $3,6,7$, and 8 showing an increase in proficiency ranging from 4 to 12 points. Grades 4 and 5 show a decrease ranging from 1 point to 3 points. For the last four years, grade 4 has been relatively consistent in percent proficiency.

DCAS-Alt1 Science Performance Results
Figure 13 - DCAS-Alt1 Science Performance Levels, 2017


Figure 13 displays the percentage of students in each performance level by grade for the spring DCAS-Alt1 2017 Science. The proportion of students at Meets Standard has a range of $30 \%$ in grade 5 to 37 in grade 10. The proportion of students performing at Advanced level has a range of $15 \%$ in grade 10 to $28 \%$ in grade 8 . The proficiency ranges from $52 \%$ in grade 10 to $62 \%$ in in grade 8 .

The percentage of students performing at Well-Below Standard has a range of $8 \%$ in grade 5 to $24 \%$ in grade 10. At Below Standard, the smallest percentage is seen at grade 10 with $24 \%$.

Figure 14 - DCAS-Alt1 Science Average Scale Scores, 2014-2017


The spring 2017 DCAS-Alt 1 Science scale scores vary with an 18 point increase for grade 5, a decrease of 5 points for grade 8 , and a 4 point increase in grade 10 from 2015 to 2016. Overall, scores from this year compared with the baseline of 2014 have shown a decrease.

Figure 15 - DCAS-Alt1 Science Percent Proficient, 2014-2017


The DCAS-Alt1 Science percent proficient has remained generally the same in grade 5 from 2016 to 2017. Grade 8 showed a spiked increase in 2014-2015 and then dropped 6 points to a two year flat line, above the baseline of $57 \%$. Grade 10 showed a $10 \%$ increase from spring 2016 to spring 2017. Over the four-year period, grade 5 remains flat for proficiency, with grades 8 and 10 showing less trending results. It is important to be cautious in the interpretation of cross-year comparison due to the small number of students and heterogeneous population tested in this assessment.


[^0]:    The Department of Education is an equal opportunity employer. It does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, marital status, disability, age, genetic information, or veteran's status in employment or its programs and activities. Inquiries should be directed to the Department's Human Resource Officer, 401 Federal Street, Suite 2, Dover, Delaware 19901. Telephone Number: (302) 735-4030.

[^1]:    *The Hawaiian and American Indian groups are excluded from the narrative due to small numbers of students tested in these groups.

[^2]:    *The Hawaiian and American Indian groups are excluded from the narrative due to small numbers of students tested in these groups.

[^3]:    *The Hawaiian and American Indian groups are excluded from the narrative due to small numbers of students tested in these groups.

[^4]:    *The Hawaiian and American Indian groups are excluded from the narrative due to small numbers of students tested in these groups.

[^5]:    *The Hawaiian and American Indian groups are excluded from the narrative due to small numbers of students tested in these groups.

[^6]:    *The Hawaiian and American Indian groups are excluded from the narrative due to small numbers of students tested in these groups.

[^7]:    ${ }^{2}$ American Institutes for Research. (2011) "Standard Setting Technical Report: Setting Performance Standards for the Computer-Adaptive Delaware Comprehensive Assessment System-Alternate Assessment(DCAS-ALT1)." Washington, D.C.

