Review of Smarter and DCAS Assessment Results
(SY 2014-15)

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Smarter Assessment Results - Spring 2015
Smarter Assessment Results: Test Participation
Smarter Assessment Participation Rates for CSD:

- ELA: 91.8%
- Math: 91.3%

...but there have been issues with DE DOE’s methodology...

Preliminary corrections by DE DOE increased our participation rates to:

- ELA: 93.3%
- Math: 91.6%

...but there continue to be serious problems with their calculations.
Problems with DE DOE participation rate calculations:

1. Alt 1 testers were inappropriately included as eligible non-participants (roughly 200 students).

2. Students who withdrew from the district in the middle of the test window, as well as those who enrolled very near the end of the school year, were included as eligible non-participants.

*Importantly, just under 3% of eligible Smarter Assessment testers were opted out by their parents/guardians, so our maximum potential participation rate would be roughly 97%.

If these errors are corrected by DE DOE and traditional accountability rules are applied (e.g., only students enrolled for the entire three-month test window included in the calculation), it is expected that the district’s participation rate will increase to above 95% in ELA and close to, if not at/above, the 95% target in Math.
Smarter Assessment Results:
CSD vs. Statewide Performance, by Grade
CSD’s Smarter Assessment proficiency rates (AL’s 3 & 4) in ELA exceeded proficiency rates in Math in every tested grade except grade 3. In both subjects, performance was highest in the early grades and declined in the middle grades. However, in ELA, after decreasing in grades 5-7, performance increased in grades 8 and 11. In Math, performance declines were linear.
Statewide Smarter Assessment proficiency rates in both ELA and Math exceeded CSD’s proficiency rates in every grade. Like CSD’s patterns, statewide performance in ELA surpassed that of Math across the grades. However, while CSD’s ELA performance dipped in the middle grades, statewide performance was relatively static across grades. In Math, similar to CSD’s pattern, statewide performance declined in a more linear fashion, with the lowest proficiency rate found in 11th grade.
Smarter Assessment ELA Performance: CSD vs. Statewide

- CSD’s ELA proficiency rates were consistently lower than statewide performance.
- CSD’s performance slumped in the middle grades, while statewide performance was relatively flat across grades.
Smarter Assessment MATH Performance: CSD vs. Statewide

- CSD’s Math proficiency rates were consistently lower than statewide performance.
- CSD’s performance showed a steeper decline in the middle grades than was seen statewide.
CSD’s Smarter Assessment Performance vs.
CSD’s Prior Year DCAS Performance, by Grade and Subject

- CSD’s ELA proficiency rates on the Smarter Assessment were substantially lower than on DCAS the prior year.
- CSD’s Smarter Assessment performance slumped in the middle grades, compared to the flatter pattern on DCAS.
CSD’s MATH Performance on the Smarter Assessment (2015) vs. DCAS (2014)

- CSD’s MATH proficiency rates on the Smarter Assessment were substantially lower than on DCAS the prior year.
- Performance declines across the elementary grades into middle school were steeper on the Smarter Assessment.
CSD’s Smarter Assessment Performance, by Claim (subscale), by Grade
CSD’s ELA performance on Smarter by Claim (Subscale): Overall, a slumping pattern in the middle grades was observed across all four Claims. Performance in Reading and Research/Inquiry was superior to Listening/Speaking and Writing in most grades.
CSD’s **MATH** performance on Smarter by Claim (Subscale): Overall, performance decreased all three Claims as grade increased. One exception – *Problem Solving* appeared to increase slightly in the upper middle grades before declining again in 11th grade.
Student Subgroup
Gap Analyses
Historically-present subgroup proficiency rate gaps are still evident.

A simple examination of comparative proficiency rates would suggest that elementary gaps between subgroups have increased and secondary gaps have decreased, but this is largely a reflection of overall declines in proficiency among all students and the 0% proficiency “floor,” which is artificially truncating performance gaps between lower-performing student subgroups.

Regression analyses indicate that even after adjusting for previous performance on DCAS and grade level, performance gaps on the Smarter assessment—which measured in proficiency probabilities or mean scale scores—remain relatively large and statistically significant in both ELA and Math for—

- African American and Latino students (lower performance compared to White students)
- Lower Income students
- ELL students
- Special Ed. students
- Males (under-performing females)
Shifts in the Performance/Achievement Level (AL) Distribution from DCAS to Smarter
How does Smarter relate to DCAS?

- In a matched student score analysis (CSD data only), Smarter and DCAS scores correlate at $r \approx 0.75$ in both ELA and Math. 

  In other words, performance patterns on the two assessments are very similar. Students scoring higher on DCAS scored higher on Smarter, and vice versa.

So what’s different? Why are proficiency rates so much lower?

- The Performance/Achievement Level (AL) cut-points on the Smarter scale essentially have been set higher than was the case on DCAS. As such, higher scores are necessary to achieve an AL of 3 or 4. This has resulted in a downshift in the AL distribution.
How does Smarter relate to DCAS?

- In ELA, among CSD students who were proficient on the DCAS in Spring 2014, only 55% were still proficient on the Smarter Assessment in Spring 2015. *Of those who were not proficient on DCAS, 94% were still not proficient on Smarter.*

- In Math, among CSD students who were proficient on the DCAS in Spring 2014, only 45% were still proficient on the Smarter Assessment in Spring 2015. *Of those who were not proficient on DCAS, 98% were still not proficient on Smarter.*
## How does Smarter relate to DCAS?

### The PL / AL Distribution Shift in ELA Performance Levels among CSD students

*(based on those testing on both DCAS in Spring 2014 and Smarter in Spring 2015):*

<table>
<thead>
<tr>
<th>Smarter Performance (Spring 2015)</th>
<th>DCAS Performance (Spring 2014)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PL 1</td>
</tr>
<tr>
<td>AL 1 % within DCAS PL</td>
<td>80.1%</td>
</tr>
<tr>
<td>AL 2 % within DCAS PL</td>
<td>16.7%</td>
</tr>
<tr>
<td>AL 3 % within DCAS PL</td>
<td>2.9%</td>
</tr>
<tr>
<td>AL 4 % within DCAS PL</td>
<td>0.3%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

**Color Key:**
- Blue = Increased 1 or more PL/AL
- Green = Maintained PL/AL
- Yellow = Decreased 1 PL/AL
- Red = Decreased more than 1 PLs/ALs
How does Smarter relate to DCAS?

The PL / AL Distribution Shift in Math Performance Levels among CSD students (based on those testing on both DCAS in Spring 2014 and Smarter in Spring 2015):

<table>
<thead>
<tr>
<th>Smarter Performance (Spring 2015)</th>
<th>DCAS Performance (Spring 2014)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PL 1</td>
</tr>
<tr>
<td>AL 1 % within DCAS PL</td>
<td>93.4%</td>
</tr>
<tr>
<td>AL 2 % within DCAS PL</td>
<td>6.0%</td>
</tr>
<tr>
<td>AL 3 % within DCAS PL</td>
<td>0.6%</td>
</tr>
<tr>
<td>AL 4 % within DCAS PL</td>
<td>0.0%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Blue = Increased 1 or more PL/AL
Green = Maintained PL/AL
Yellow = Decreased 1 PL/AL
Red = Decreased more than 1 PLs/ALs
Implications of PL/AL Downshift:

- Schools with larger proportions of “DCAS-proficient” students in the lower scale regions of DCAS Performance Level 3 were much more likely to see marked decreases in their proficiency rates this past year, as most of these students slipped down to an AL 2 or lower on the Smarter Assessment.

- The much lower Smarter Assessment Achievement Level (AL) and proficiency rate baselines are the result of a more difficult assessment with higher AL cut-scores than was the case on the DCAS. Performance has not necessarily declined from the previous year; the definition of what is and isn’t “good enough” has changed.
NOTE: The State Department of Education’s (DE DOE) test vendor (AIR) did not include apartment numbers in its mailing list. As such, many Smarter Assessment parent reports have been returned by the US Postal Service. To date, the Christina School District has received well over 1,200 returned reports. The DE DOE retrieved returned parent reports on Friday, Oct. 9, and the test vendor has committed to re-mail these reports with corrected addresses.
The **Scale Score** is the student's score on the test. Scores can be between 2000 and 3000; the range varies by grade.

Here is information on student strengths and areas of growth within the subject.

The **Achievement Level** shows if the student met the standards for the grade (Level 3 and above). This also shows how the student score compares to school, district, and state.

**How did Jolyne do on the English Language Arts/Literacy Assessment?**

**Jolyne's ELA/Literacy Score**

![Scale Score](image)

**2527**

How does this compare?

Jolyne's ELA/Literacy score is 2527. This score is **lower** than the average score of eighth graders in her school, **lower** than eighth graders in her district, and **lower** than eighth graders statewide.

**FAQs**

The Smarter ELA/Literacy Assessment has four claims: Reading, Speaking and Listening, Writing, and Research/Inquiry. Each claim is a summary statement about the knowledge and skills students are expected to demonstrate on the assessment related to a particular aspect of the Delaware Content Standards - Common Core State Standards for ELA/Literacy.

**Take the Test:**

Gain familiarity with the test software platform and sample test questions for grades 3-8 and 11 by taking a practice test: [http://www.smarterbalanced.org/practice-test/](http://www.smarterbalanced.org/practice-test/)

**How Did Jolyne Do in the Different Areas of the Assessment?**

<table>
<thead>
<tr>
<th>Claim</th>
<th>Reading</th>
<th>Speaking and Listening</th>
<th>Writing</th>
<th>Research/Inquiry</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Below Standard</td>
<td>At/Near Standard</td>
<td>Below Standard</td>
<td>At/Near Standard</td>
</tr>
<tr>
<td></td>
<td>for this Area</td>
<td>for this Area</td>
<td>for this Area</td>
<td>for this Area</td>
</tr>
</tbody>
</table>
How did Jolyne do on the Mathematics Assessment?

Jolyne’s Mathematics Score

2545

How does this compare?

Jolyne’s Mathematics score is 2545. This score is lower than the average score of eighth graders in her school, lower than eighth graders in her district, and lower than eighth graders statewide.

Level 4 The student has exceeded the achievement standard and demonstrates advanced progress toward mastery of the knowledge and skills of state standards in mathematics.

Level 3 The student has met the achievement standard and demonstrates progress toward mastery of the knowledge and skills of state standards in mathematics.

Level 2 The student has nearly met the achievement standard and may require further development to demonstrate the knowledge and skills of state standards in mathematics.

Level 1 The student has not met the achievement standard and needs substantial improvement to demonstrate the knowledge and skills of state standards in mathematics.
Specific Claims for Mathematics

Three specific claims for Mathematics

<table>
<thead>
<tr>
<th>Concepts &amp; Procedures</th>
<th>Problem Solving; Modeling and Data Analysis</th>
<th>Communicating Reasoning</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Below Standard for this Area</strong></td>
<td><strong>At/Near Standard for this Area</strong></td>
<td><strong>At/Near Standard for this Area</strong></td>
</tr>
<tr>
<td>Student has difficulty explaining and applying mathematical concepts and interpreting and carrying out mathematical procedures with precision and fluency.</td>
<td>Student may be able to solve a range of complex well-posed problems in pure and applied mathematics, making productive use of knowledge and problem solving strategies. Students can analyze complex, real-world scenarios and can construct and use mathematical models to interpret and solve problems.</td>
<td>Student may be able to clearly and precisely construct viable arguments to support their own reasoning and to critique the reasoning of others.</td>
</tr>
</tbody>
</table>

These statements describe the student’s strengths and areas of growth.

These statements describe the skills being assessed.
DCAS Social Studies and Science Performance Trends, by Grade
Social Studies: CSD’s DCAS Social Studies proficiency rates have declined across the past three years in both 4th and 7th grades. In Spring 2015, Social Studies proficiency in both grades was below 50%.
Science: CSD’s DCAS Science proficiency rates were fairly stable from 2013 to 2014, but declined in all three tested grades (grades 5, 8 & 10) from 2014 to 2015. In 2015, Science proficiency rates in all three grades were below 35%.
Questions?