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Key Findings

The KPIs for October report on achievement in math and English/Language Arts (ELA) and gaps in achievement by student subgroups, such as race/ethnicity and economically disadvantaged (ED). Additional indicators address student growth and overall school improvement, measured by TVAAS growth scores, and the four-year cohort graduation rate. While achievement results measure success, regardless of a student's growth score, and vice versa, the two together provide a more comprehensive account of a student's performance. This month's KPIs are aligned to both Priority 1 and Priority 2 of Destination 2025: Strengthen Early Literacy and Improve Post-Secondary Readiness.

- In 2018, SCS earned a TVAAS composite score of 2. This improvement from 2017 indicates that more students are closer to growing at or above the expected amount each year.
- Overall, 58% of schools earned a Level 3 or above TVAAS composite score in 2018, an increase from 36% in 2017.
- Since 2017, 47% of district-managed schools have improved their TVAAS composite scores, and 17% (20 schools) showed the largest amount of growth possible, improving from Level 1 to Level 5.
- Forty-seven percent of schools demonstrated improvements in success rate since 2017, and 14% of schools, majority elementary, made proficiency gains of five points or more.
- TNReady proficiency rates improved in ELA from 20% to 22% and in math from 21% to 23%. Below rates also improved from 2017 to 2018, decreasing in ELA from 34% to 31% and modestly in math from 42.9% to 42.7%.
- TNReady end of course (EOC) proficiency rates in math increased by two percentage points in 2018; however, ELA proficiency rates decreased by four percentage points. This change over time is mirrored by the State.
- Gaps in achievement exist across race/ethnicity and ED for all ELA and math subjects and grades. Success rates of non-Black/Hispanic/Native American (non-BHNA) students and non-ED students exceeded those of their BHNA and ED peers both within and between schools.
- At both the District and State levels, achievement gaps across race/ethnicity and ED decreased from 2017 to 2018 in EOC ELA subjects.
- The cohort graduation rate dropped slightly from 79.6% in 2017 to 79.1% in 2018; however, SCS continues to meet the target rates set by Destination 2025. Graduation rate improvements across race/ethnicity subgroups varied. Black students showed an increase in graduation rate from 2017 to 2018 while rates for white and Hispanic students decreased.

TVAAS Growth Rates

The TVAAS assessment system measures year-to-year student growth and is calculated by comparing a student's performance to that of his peers who performed similarly on past assessments. Because TVAAS compares the performance of students to the performance of their peers who are receiving the same standards of instruction at the same time, an improvement or decline in TVAAS scores is not influenced by any overall change in proficiency.

In 2018, SCS earned a composite TVAAS score of 2. This improvement from 2017 indicates that more students are closer to growing at or above the expected amount each year (designated by a Level 3 score)

ELEMENTARY MIDDLE HIGH Level 1 Level 5 21% Level 1 Level 5 26% Level 5 31% 34% 35% Level 2 Level 1 Level 4; 2% 8% 55% Level 4 Level 2 Level 4 10% Level 3 18%

Figure 1: 2018 School TVAAS Composites by Grade Band

Figure 1 shows that 70% of elementary schools, 51% of middle schools, and 38% of high schools earned a Level 3 or above composite score in 2018. This translates to an increase from 2017 of 29 percentage points for elementary schools, 25 for middle schools, and TWO for high schools. Overall, the percentage of schools that earned a Level 3 and above increased 22 percentage points from 36% in 2017 to 58% in 2018. In individual subjects, SCS earned a Level 3 and above across nine subjects and grade bands, which are shown in Table 1.

Subject	Grade	TVAAS Level
Social Studies	6	Level 3
Biology I	9-12	Level 3
English I	9-12	Level 3
Integrated Math I	9-12	Level 3
Math	3, 5, 7	Level 4
Social Studies	7	Level 5
ELA	3-8	Level 5
Science	5-8	Level 5

9-12

Level 5

Integrated Math II-III

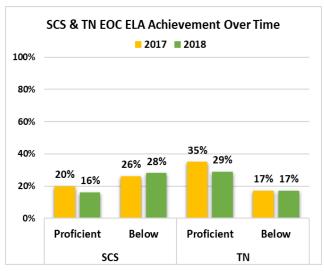
Table 1: 2018 TVAAS Level 3 and Above by Subject and Grade

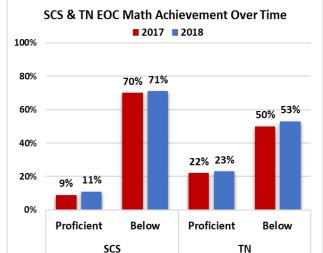
Trends in TNReady Proficiency Rates

Proficiency rates are determined by the percentage of students achieving on-track or mastered scores on the TNReady assessments. Although the District saw improvement in high school math proficiency in 2018, high school ELA proficiency decreased by four percentage points from 20% in 2017 to 16% in 2018. As illustrated in Figure 2, the District's improvement in math and decline in ELA proficiencies are mirrored by the State. Additionally, the percentage of students who did not achieve on-track or mastered scores is represented by the below rate. Both SCS and Tennessee saw an increase in the below rates for math and ELA, excluding the State's below rate for ELA which remained stagnant at 17%.



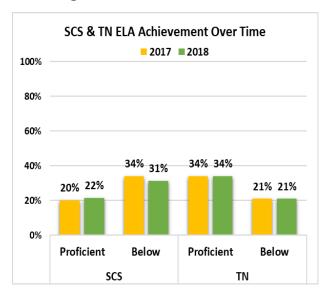
Figure 2: District and State Achievement Over Time in EOC Math and ELA

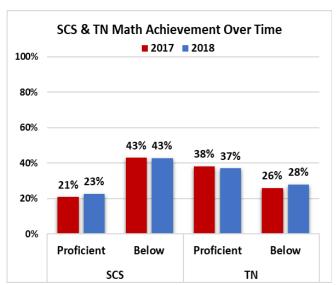




As Figure 3 shows, SCS elementary and middle schools demonstrated improvements in both proficiency rates and below rates from 2017 to 2018. Although the state's proficiency rates for students in grades 3-8 decreased in math and remained the same in ELA, SCS proficiency increased 2 percentage points in both ELA (20% to 22%) and math (21% to 23%). Additionally, SCS below rates decreased from 34% to 31% in ELA and decreased modestly from 42.9% to 42.7% in math, contrasting the increase in the State's below rate for math.

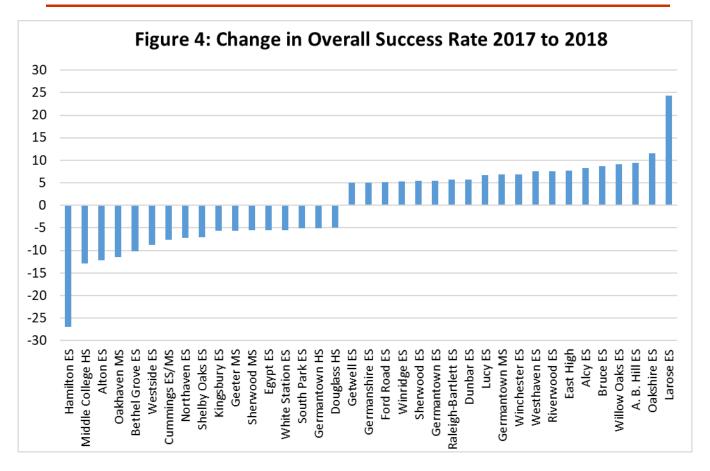
Figure 3: District and State Achievement Over Time in Grades 3-8 Math and ELA





Sixty-seven schools (47%) improved their success rates from 2017 to 2018, and 14% of schools, majority elementary, made proficiency gains of five points or more. The change in overall success rate for those schools is shown in figure 4 below.



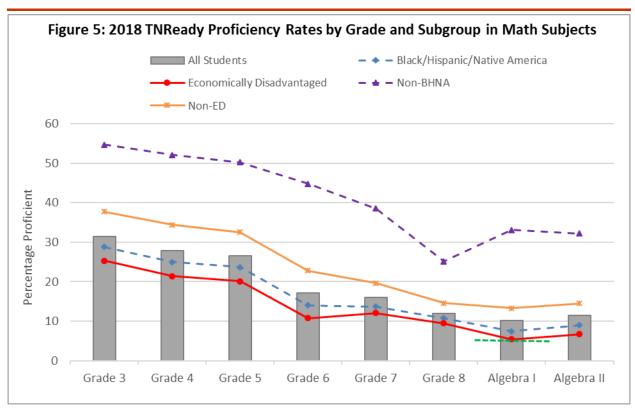


TNReady Proficiency Rates by Subgroup

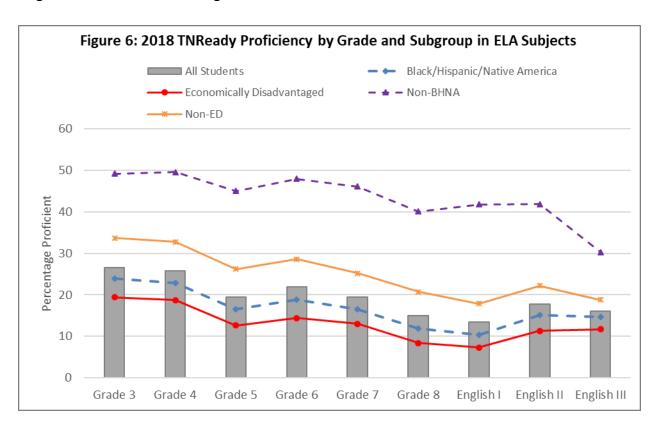
Achievement gaps across race/ethnicity and ED persisted in all math and ELA subjects and grade levels in 2018. As Figures 5 and 6 illustrate, proficiency rates for Black/Hispanic/Native American (BHNA) students and ED students were lower than those for all students in each subject and grade; however, proficiency rates for non-BHNA and non-ED student exceeded those of all students in each subject and grade. The widest gaps in achievement in math were found between ED and non-BHNA students in grade 4, gap of -31 percentage points; grade 5, gap of -30; and grade 6, gap of -34. The widest achievement gaps in ELA were found between ED and non-BHNA students in grade 6, gap of -35; grade 7, gap of -33; and English II, gap of -35. These results mirror the achievement gaps seen in 2017.

*Note that 7th and 8th graders who took Algebra I (759 students) are included in the calculations for overall proficiency rate. When these students are removed to examine the rate for only high school students, the Algebra I proficiency rate drops from 10% to 5%. Because the majority of students in Algebra I were in 8th or 9th grade, and 47% of 8th graders were proficient compared to only 6% of 9th graders, emphasis should be placed on increasing interventions and improving the outcomes of our 9th grade Algebra I students.





^{*}Algebra I rate without 7th and 8th graders _____





To examine the achievement gaps across race/ethnicity further, RPM isolated proficiency rates for a subset of high schools with the highest concentration of non-BHNA students. These seven schools¹ account for 36% of total high school enrollment, yet account for 88% of white student enrollment and 55% of Hispanic student enrollment. Figure 7 reports subgroup proficiency rates for the subset, and Figure 8 reports proficiency rates for schools not in that subset. Notably, in the subset of schools, proficiency rates for black and Hispanic students increase to meet or exceed the overall proficiency rates in Algebra II and English I-III. This is not a trend seen in the schools outside of this subset, in which proficiency rates remain lower than overall rates for black students across all subjects and in Algebra I and English I for Hispanic students.

Examining this subset by students who are economically disadvantaged yields similar results, as this subset represents 32% of the District's ED high school students. ED status is determined by factoring in both family income and family size. The following figures show that achievement gaps for ED and race/ethnicity are more pronounced in the subset than in schools not in the subset for all subjects, excluding the race/ethnicity gap in English I and English III. This suggests that some progress has been made in closing the race/ethnicity gap in those two subjects since 2017. Further, in schools outside of the subset, proficiency rates for both ED and non-ED students were lower than the overall proficiency rates in each subject. In the subset of schools, however, proficiency rates for non-ED students surpassed the overall proficiency rates in every subject, except Algebra I. This exploration of race/ethnicity and ED at the school level reveals that achievement gaps in TNReady subjects are reflected both within and between schools in SCS.

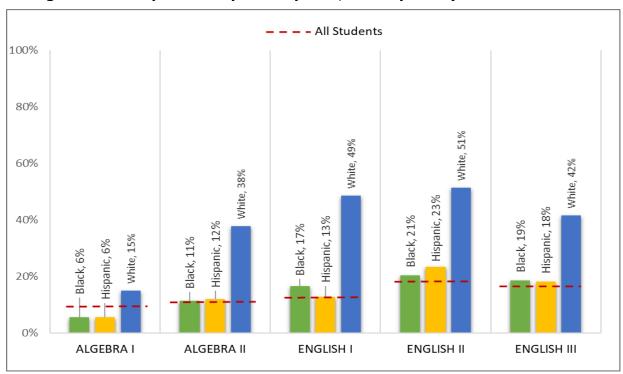
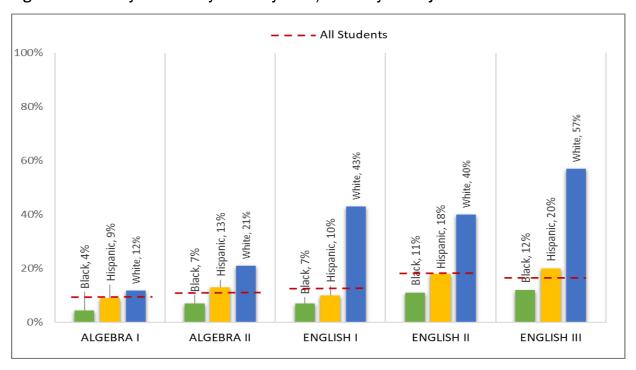


Figure 7: TNReady Proficiency Rates by Race/Ethnicity & Subject for School Subset

¹This subset includes Bolton, Central, Cordova, Germantown, Kingsbury, Overton, and White Station High Schools.

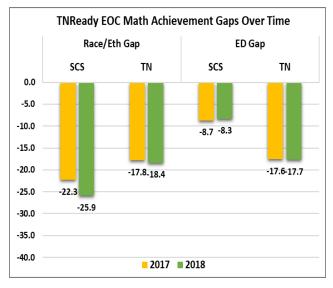
Figure 8: TNReady Proficiency Rates by Race/Ethnicity & Subject for Schools NOT in Subset

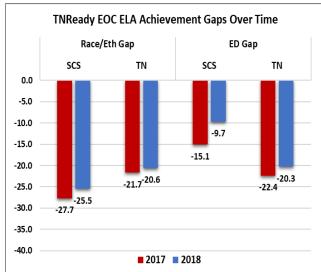


State and District Achievement Gaps

Gaps in achievement across race/ethnicity and ED exists at both the district and state level. From 2017 to 2018, SCS and the State worked to decrease the achievement gaps in ELA subjects, with SCS showing the most substantial change by decreasing the achievement gap for ED by 5.4 percentage points from -15.1 to -9.7. In EOC math subjects, both Tennessee and SCS saw an increase in the achievement gap across race/ethnicity. SCS showed a modest decrease (-0.4 percentage points) in the ED gap in math from 2017 to 2018.

Figure 9: State and District Achievement Gaps Over Time in EOC Subjects





Trends in Cohort Graduation Rate

The cohort graduation rate measures the proportion of students who attain a regular high school diploma within four years (plus the last summer if needed) of starting ninth grade. SCS's cohort graduation rate increased steadily from 74.6% in 2014 to 79.6% in 2017. Although the rate modestly decreased to 79.1% in 2018, SCS continues to meet the target goals set by Destination 2025.



Figure 10: Trends in Graduation Rate - D2025 Target vs. Actual

Examining the cohort graduation rate by race/ethnicity subgroups reveals that black students had the highest graduation rate (80.5%) in 2018, and Hispanic students had the lowest graduation rate (70.9%). The graduation rate for white students was 73.8%, but this subgroup had the greatest decline in graduation rate, dropping -3.4 percentage points from 2017 to 2018. As Figure 11 shows, the graduation rate for the Hispanic subgroup also decreased from 2017 to 2018, while the rate for the black subgroup showed a slight increase of 0.1 percentage points.

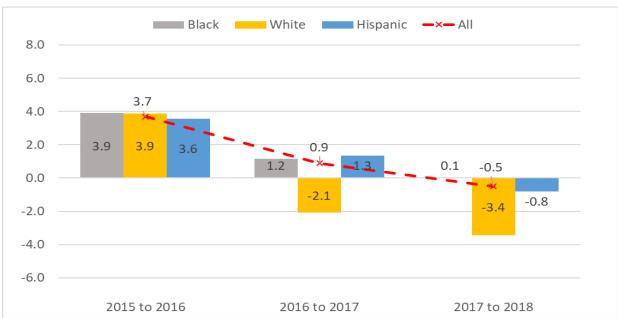


Figure 11: Annual Change in Graduation Rate by Race/Eth Subgroup



Recommendations

Based on the KPI data presented in 2017, the district made recommendations to advance progress towards reaching the goals of Destination 2025.

2017 Recommendations	Progress Made Since Then
Support all schools in implementing a rigorous curriculum	 The District continues to focus on the four cornerstones of high quality instruction (Instructional Core, Instructional Practice Guides, Instructional Leadership Teams, and Cycles of Professional Learning) to ensure teachers are equipped to enact rigorous instruction through the use of curriculum implementation. SCS was one of four districts to receive national recognition from the Center for American Progress for adopting highly rated instructional materials across the board.
Continue to identify and intervene with students who are falling behind on credits and coursework early	 Programs such as Project Graduation and Grade Results provide classroom and online opportunities for students to earn the credits they need to graduate on time and recover failing grades by demonstrating mastery on skills and standards they may have struggled with in previous coursework. All schools now have access to student early warning data for grades 1-12 to identify and intervene with those at risk for not graduating on time.
Continue to support student-based budgeting that will allocate school resources according to student need	 All schools now receive funding allocations weighted for student need including weightings specifically for high-and low-performing schools. Six schools are currently implementing new instructional designs based on strategic budgeting and the District is identifying 12-15 schools for cohort 2 based on performance.
Identify and share best practices from schools that showed high TVAAS growth and/or increases in success rate	The Office of School Leadership Development utilizes high-performing principals to provide ongoing PD on best practices and instructional strategies during Leadership Development Week and ILD zone meetings.