

**DELAWARE STUDENT TESTING PROGRAM
PERFORMANCE LEVEL 1 STUDY
DISTRICT LEVEL FINDINGS**

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EXECUTIVE SUMMARY

- ☞ It appears that the longer students remain at Performance Level I, the less likely they will reach the state’s expected level of achievement by high school. The majority of students who score PL1 in reading or math will remain at PL1 or PL2. This re-emphasizes the importance of early intervention to address the needs of the stat’s most at-risk students.
- ☞ Most of the “successful” districts are moving 25 to 30 percent of students from Performance Level 1 to Performance Level 3 during the elementary and middle school years. By high school, districts are only moving 7 to 10 percent of low-performing (PL1) students to the standards in reading and mathematics.
- ☞ Clear disparities exist in regards to the distribution of students at the PL1 level as compared to most districts’ overall student populations according to race and income status. A small number of Delaware districts are reaching parity in this regard.
- ☞ Some of the state’s smaller school districts appear to be more successful at reaching parity than many of its larger districts.

Description

The study was designed to examine the progress of Delaware’s lowest performing students beginning with DSTP data gathered in its first administration in 1998 through 2005. Students’ progress has been tracked by cohorts statewide and within district. By analyzing five cohorts, there will be at least three scenarios to explore within district and statewide change in the academic performance of PL1 students at the elementary, middle, and high school levels in both reading and mathematics.

The power of the findings is increased by combining cohorts so as to avoid characteristics that may be idiosyncratic to any single cohort of students. Three cohorts have been combined to examine both the elementary (3rd to 5th grade) and the high school (8th to 10th grade) changes. Five cohorts have been combined for the middle school (5th to 8th grade) analyses. We paid specific attention to students who scored Performance Level 1 at the first time point within each grouping.

The total number of students included in the analyses is 24,404. Only those students who had DSTP scores at each data point have been included. For example, in cohort 1, 3819 students had DSTP scores beginning in 3rd grade in 1998 through 10th grade in 2005.

Cohorts

Cohort	name	3rd	5th	8th	10th	N
1	1998G3	‘98	‘00	‘03	‘05	3819
2	1998G5		‘98	‘01	‘03	4840
3	1999G3	‘99	‘01	‘04		5587
4	1999G5		‘99	‘02	‘04	4536
5	2000G3	‘00	‘02	‘05		5622

Total N= 24,404

This report supplements the July 2006 report, *Delaware Student Testing Program Performance Level 1 Study-Preliminary Findings*. The July 2006 report portrayed students’ progress statewide by tracking multiple cohorts described above. This report examines the following questions:

- ☞ To what degree have Delaware districts¹ been able to improve the distributions of students in reading and mathematics at the elementary, middle, and high school levels?
- ☞ How do these distributions vary by students’ race and socio-economic status?
- ☞ How does the distribution of minority and low-income students who score at PL1 initially and remain below the standard reflect the general demographics of the district population?

¹ Delaware charter schools are NOT included in these analyses because of the lack of data within the cohorts examined (dating back to 1998) and/or the lack of data between two data points.

This report illustrates the degree to which districts have been able to move students from Performance Level 1 to “meeting or exceeding” the standard (PL3, 4, or 5) on the Delaware State Testing Program (DSTP) in reading and mathematics. The district-level data are disaggregated by students’ income status and race. For purposes of illustration, distribution changes are defined by the percentage of students moved from PL1 to PL3, 4, and 5 combined. Our interest is in what percentage of PL1 students reached the standard by the next assessment period. Tables that illustrate the distribution of performance levels for *all groups within all districts* by reading and math content area can be found in the appendix.

IMPORTANT NOTE: These analyses are not purely longitudinal. As one examines Table A below, it can be seen, for example, that Colonial had 1340 students within the three 3rd grade cohorts who had DSTP reading scores. Of these students, 104 or 8% scored at PL1. The numbers in columns labeled “By 5th Grade” represent those Colonial students within the 3 cohorts who took the 5th grade DSTP and who had scored PL1 in grade 3. While this 5th grade group includes many of the same students as the 3rd grade group, there may be some other students included/excluded due to mobility (i.e., some students leaving and some entering the district between 3rd and 5th grade). Consequently, in an effort to recognize that districts are responsible for all students tested, regardless of whether they were there for the full time period between assessments, we chose this method of analysis and presentation. Also, in many cases the actual number of students (n) that represent the percentage is very small. In this case, one should be very careful in making judgments or comparisons. Notice that “n’s” that follow the school district name represent the number of students in the district in the first testing point.

READING

Table A. District-Level Distribution of 3rd Grade DSTP Reading Performance Level by 5th Grade

District	Percentage of Students at PL1 in 3 rd Grade	By 5 th Grade	
		PL1	Meets or Exceeds PL3,4, or 5
<i>Highest Percentages</i>			
Appoquinimink (n=720)	7% (52)	36% (20)	33% (18)
Colonial (n=1340)	8% (104)	30% (31)	30% (31)
Indian River (n=1041)	3% (32)	24% (7)	28% (8)
<i>Lowest Percentages</i>			
Capital (n=898)	8% (65)	52% (32)	16% (10)
Cape Henlopen (n=646)	6% (39)	60% (24)	15% (6)
Woodbridge (n=268)	8% (21)	55% (11)	15% (3)
RANGE	2% to 12%	19% to 60%	15% to 33%

Table A illustrates findings from the three (3) cohorts where we were able to track the progress of students who scored PL1 in 3rd grade reading. For example, it shows that in the Appoquinimink School District, 7% of its 3rd graders from the 3 combined cohorts scored at PL1 in reading. When

looking at Appoquinimink’s 5th grade students, of those who had scored PL1 in grade 3, some 33% of them had met or exceeded the reading standard. However, 36% of 5th graders who had PL1 in grade 3 remained at PL1 in grade 5. While Appoquinimink, Colonial, and Indian River are on the higher end of this spectrum, Capital, Cape Henlopen, and Woodbridge are on the lower end. It is important to recognize that we used percentages for comparison purposes but the actual number that this percentage represents (n) is also important to consider.

RANGE: Following each table is a range that illustrates the combined range of all districts’ data. As can be seen in Table B below, for the combined 5th grade cohorts, across the districts assessing 5th grade students, 5% to 13% of students scored at PL1. Across districts, by 8th grade, of those 8th grade students who scored PL1 in 5th grade reading, 14% to 54% of them again scored PL1; while, 0% to 52% of them scored at levels 3, 4, or 5.

Table B. District-Level Distribution of 5th Grade DSTP Reading Performance Level by 8th Grade

District	Percentage of Students at PL1 in 5 th Grade	By 8 th Grade	
		PL1	Meets or Exceeds PL3,4, or 5
<i>Highest Percentages</i>			
Laurel (n=509)	13% (65)	19% (11)	52% (30)
Smyrna (n=858)	7% (45)	26% (7)	30% (13)
Caesar Rodney (n=1372)	7% (90)	25% (20)	29% (23)
<i>Lowest Percentages</i>			
Seaford (n=733)	13% (94)	50% (38)	16% (12)
Woodbridge (n=420)	9% (38)	38% (17)	11% (5)
RANGE	5% to 13%	14% to 54%	0% to 52%

In the 5th to 8th grade analyses, Laurel had 13% of its 5th grade students scoring at performance level 1. Of their 8th grade students who had scored PL1 in reading in 5th grade, 52% of them reached levels 3, 4, or 5 on the 8th grade DSTP reading.

Table C. District-Level Distribution of 8th Grade DSTP Reading Performance Level by 10th Grade

District	Percentage of Students at PL1 in 8 th Grade	By 10 th Grade	
		PL1	Meets or Exceeds PL3,4, or 5
<i>Highest Percentages</i>			
Smyrna (n=471)	4% (18)	73% (11)	7% (1)
Lake Forest (n=470)	8% (39)	89% (31)	6% (2)
Capital (n=795)	8% (63)	83% (44)	6% (3)
RANGE	3% to 10%	73% to 100%	0% to 7%

Progress of students between 8th and 10th grade was very minimal and the number of students was quite small. Three to ten percent of the districts' students were scoring at performance level 1 in grade 8 reading. Of the 10th grade students who scored PL1 in grade 8, 73 to 100 percent of them again scored at PL1. It is important to recognize that what is not accounted for in these middle to high school analyses is the number of students who dropped out of school between these two testing periods.

MATHEMATICS

Table D. District-Level Distribution of 3rd Grade DSTP Math Performance Level by 5th Grade

District	Percentage of Students at PL1 in 3 rd Grade	By 5 th Grade	
		PL1	Meets or Exceeds PL3,4, or 5
<i>Highest Percentages</i>			
Colonial (n=1369)	11% (148)	37% (60)	30% (47)
Appoquinimink (n=753)	11% (86)	48% (39)	23% (19)
Indian River (n=1135)	7% (76)	57% (44)	21% (16)
<i>Lowest Percentages</i>			
Capital (n=927)	9% (81)	67%(58)	8% (7)
Laurel (n=330)	18% (61)	77% (41)	4% (2)
Seaford (n=490)	9% (44)	70% (35)	4% (2)
RANGE	4% to 18%	36% to 77%	4% to 30%

Table D shows that Colonial School District had 11% of its students from the three cohorts scoring PL1 in 3rd grade mathematics. Of those 5th grade Colonial students who scored PL1 in 3rd grade, 30% had reached or exceeded the math standard. In Seaford and Laurel, only 4% reached those levels.

Table E. District-Level Distribution of 5th Grade DSTP Math Performance Level by 8th Grade

District	Percentage of Students at PL1 in 5 th Grade	By 8 th Grade	
		PL1	Meets or Exceeds PL3,4, or 5
<i>Highest Percentages</i>			
Laurel (n=522)	19% (97)	54% (54)	25% (26)
Brandywine (n=2442)	11% (264)	60% (158)	12% (32)
Cape Henlopen (n=1116)	12% (132)	65% (80)	11% (14)
<i>Lowest Percentages</i>			
Woodbridge (n=430)	10% (43)	7% (40)	2% (1)
Capital (n=1489)	16% (235)	82% (174)	2% (5)
RANGE	8% to 19%	54% to 82%	0% to 25%

Table E above shows that the Laurel School District had 19% of its students from the five combined cohorts scoring PL1 in 5th grade mathematics. Of those 8th grade Laurel students who scored PL1 in 5th grade, 25% had reached or exceeded the math standard. In Woodbridge and Capital, only 2% reached those levels.

Table F. District-Level Distribution of 8th Grade DSTP Math Performance Level by 10th Grade

District	Percentage of Students at PL1 in 8 th Grade	By 10 th Grade	
		PL1	Meets or Exceeds PL3,4, or 5
<i>Highest Percentages</i>			
NCCVT (no 8 th grade)		70% (130)	11% (20)
POLYTECH (no 8 th grade)		69% (47)	10% (7)
<i>Lowest Percentages</i>			
Colonial (n=1189)	15% (183)	83% (131)	1% (1)
Lake Forest (n=470)	14% (66)	91% (49)	0% (0)
RANGE	11% to 23%	33% to 91%	0% to 11%

**LOW INCOME
READING**

The following tables illustrate the DSTP reading performance level distribution changes among students from low income families in Delaware districts.

Table G. District-Level Distribution of 3rd Grade Low Income Students' DSTP Reading Performance Level by 5th Grade

District	Percentage of Students at PL1 in 3 rd Grade	By 5 th Grade	
		PL1	Meets or Exceeds PL3,4, or 5
<i>Highest Percentages</i>			
Appoquinimink (n=94)	15% (14)	38% (6)	38% (6)
Smyrna (n=137)	4% (5)	14% (1)	29% (2)
Colonial (n=577)	10% (59)	40% (24)	25% (15)
<i>Lowest Percentages</i>			
Laurel (n=133)	13% (17)	38% (5)	8% (1)
Caesar Rodney (n=288)	13% (37)	46% (17)	8% (3)
Cape Henlopen (n=262)	10% (27)	63% (17)	7% (2)
RANGE	5% to 21%	14% to 63%	7% to 38%

Table G illustrates that of the three cohorts examined across all districts, 5 to 21 percent of students from low-income families scored PL1 in 3rd grade reading. Small “n’s” are particularly important to watch when examining the percentages in these analyses.

Table H. District-Level Distribution of 5th Grade Low Income Students' DSTP Reading Performance Level by 8th Grade

District	Percentage of Students at PL1 in 5 th Grade	By 8 th Grade	
		PL1	Meets or Exceeds PL3,4, or 5
<i>Highest Percentages</i>			
Laurel (n=217)	18% (40)	24% (8)	47% (16)
Smyrna (n=242)	7% (18)	20% (4)	35% (7)
Cape Henlopen (n=442)	20% (89)	30% (24)	22% (17)
<i>Lowest Percentages</i>			
Capital (n=615)	20% (122)	40% (45)	12% (13)
Seaford (n=374)	21% (80)	58% (37)	8% (5)
Woodbridge (n=200)	14% (27)	44% (15)	3% (1)
RANGE	7% to 23%	20% to 58%	3% to 47%

Table H above illustrates the number of low-income students considered in the 5th to 8th grade distributions is somewhat larger than the previous table since five cohorts were examined for this analysis. Laurel had 18% of its low-income students score PL1 in 5th grade reading. Of those 8th grade Laurel students who had PL1 in 5th grade, 47% of them met or exceeded the 8th grade reading standard.

Table I. District-Level Distribution of 8th Grade Low Income Students' DSTP Reading Performance Level by 10th Grade

District	Percentage of Students at PL1 in 8 th Grade	By 10 th Grade	
		PL1	Meets or Exceeds PL3,4, or 5
<i>Highest Percentages</i>			
Smyrna (n=136)	7% (10)	73% (8)	9% (1)
Capital (n=125)	16% (20)	89% (17)	5% (1)
RANGE	7% to 18%	73% to 100%	0% to 9%

Again small “n’s” are very problematic in this analysis. However, it does appear that of those low-income 10th grade students who scored at PL1 in 8th grade reading, most (73% -100%) stayed at that level in 10th grade.

MATHEMATICS

Table J. District-Level Distribution of 3rd Grade Low Income Students' DSTP Math Performance Level by 5th Grade

District	Percentage of Students at PL1 in 3 rd Grade	By 5 th Grade	
		PL1	Meets or Exceeds PL3,4, or 5
<i>Highest Percentages</i>			
Colonial (n=600)	14% (85)	42% (41)	23% (23)
Appoquinimink (n=111)	26% (29)	64% (18)	21% (6)
Lake Forest (n=230)	15% (35)	63% (22)	17% (6)
<i>Lowest Percentages</i>			
Capital (n=418)	14% (57)	69% (43)	5% (3)
Seaford (n=253)	16% (40)	72% (33)	4% (2)
Laurel (n=148)	28% (41)	76% (26)	3% (1)
RANGE	6% to 29%	39% to 76%	3% to 23%

Table J shows that Colonial School District had 14% of its low-income students from the three cohorts scoring PL1 in 3rd grade mathematics. Of those low-income 5th grade Colonial students who scored PL1 in 3rd grade, 23% had reached or exceeded the math standard. Again, small “n’s” are problematic when examining other districts with the distribution changes.

Table K. District-Level Distribution of 5th Grade Low Income Students' DSTP Math Performance Level by 8th Grade

District	Percentage of Students at PL1 in 5 th Grade	By 8 th Grade	
		PL1	Meets or Exceeds PL3,4, or 5
<i>Highest Percentages</i>			
Laurel (n=226)	27% (62)	58% (38)	24% (16)
Brandywine (n=736)	25% (187)	63% (121)	10% (20)
<i>Lowest Percentages</i>			
Capital (n=663)	24% (155)	83% (118)	1% (1)
Seaford (n=390)	27% (106)	87% (81)	1% (1)
Smyrna(n=255)	13% (34)	83% (38)	2% (1)
Christina (n=1608)	27% (438)	78% (315)	2% (10)
RANGE	13% to 27%	58% to 87%	1% to 24%

Table K shows that the Laurel School District had 27% of its low-income students scoring PL1 in 5th grade mathematics. Of those low-income 8th grade Laurel students who had PL1 in 5th grade, 24% met or exceeded the 8th grade math standard. Across the districts, 13 to 27 percent of 5th grade low-income students scored PL1 in mathematics. By 8th grade, of those who scored PL1 in 5th grade, 58 to 87 percent of low-income students continued to score at the lowest DSTP level in mathematics.

Table L. District-Level Distribution of 8th Grade Low Income Students' DSTP Math Performance Level by 10th Grade

District	Percentage of Students at PL1 in 8 th Grade	By 10 th Grade	
		PL1	Meets or Exceeds PL3,4, or 5
<i>Highest Percentages</i>			
POLYTECH (no 8 th grade)		71% (20)	14% (4)
NCCVT (no 8 th grade)		73% (79)	9% (10)
Appoquinimink (n=128)	20% (25)	74% (29)	9% (4)
Smyrna (n=148)	30% (44)	62% (17)	9% (2)
RANGE	15% to 43%	62% to 93%	0% to 14%

Changes in distributions between 8th and 10th grade in mathematics of low performing students from low-income families again is minimal. Districts are having very limited success in moving student achievement to expected levels of those students scoring at the lowest performance level.

MINORITY²
READING

The following tables illustrate the DSTP reading performance level distribution changes among minority students in Delaware districts.

Table M. District-Level Distribution of 3rd Grade Minority Students' DSTP Reading Performance Level by 5th Grade

District	Percentage of Students at PL1 in 3 rd Grade	By 5 th Grade	
		PL1	Meets or Exceeds PL3,4, or 5
<i>Highest Percentages</i>			
Woodbridge (n=83)	14% (12)	55% (6)	27% (3)
Colonial (n=534)	11% (60)	41% (24)	21% (12)
Milford (n=147)	15% (22)	46% (11)	17% (4)
Brandywine (n=468)	12% (56)	63% (33)	17% (9)
<i>Lowest Percentages</i>			
Caesar Rodney	11% (22)	57% (13)	9% (2)
Laurel (n=52)	25% (13)	36% (4)	9% (1)
Lake Forest (n=88)	17% (15)	47% (7)	7% (1)
Smyrna (n=56)	2% (1)	50% (1)	0% (0)
RANGE	7% to 25%	36% to 60%	0% to 27%

Table M shows that Colonial had 11% of its minority students from the three cohorts scoring PL1 in 3rd grade reading. Of those 5th grade Colonial minority students who scored PL1 in 3rd grade, 21% had reached or exceeded the reading standard. Again, small “n’s” are problematic when examining the districts with the distribution changes in this table.

² “Minority” includes African American, Hispanic, and American Indian students; “Non-minority” includes White and Asian students.

Table N. District-Level Distribution of 5th Grade Minority Students' DSTP Reading Performance Level by 8th Grade

District	Percentage of Students at PL1 in 5 th Grade	By 8 th Grade	
		PL1	Meets or Exceeds PL3,4, or 5
<i>Highest Percentages</i>			
Smyrna (n=102)	12% (12)	17% (2)	50% (6)
Laurel (n=98)	23% (23)	20% (4)	45% (9)
Colonial (n=848)	14% (122)	30% (39)	28% (36)
<i>Lowest Percentages</i>			
Seaford (n=258)	23% (60)	54% (28)	12% (6)
Caesar Rodney (n=330)	11% (37)	43% (12)	11% (3)
Woodbridge (n=116)	18% (21)	46% (12)	8% (2)
RANGE	11% to 25%	17% to 68%	8% to 50%

Table N shows that the Smyrna School District had 12% of its minority students scoring PL1 in 5th grade reading. Of those low-income 8th grade Smyrna students who had PL1 in 5th grade, 50% met or exceeded the 8th grade math standard. Laurel also demonstrated similar progress. Colonial with a higher number of minority students scoring at the PL1 level, had 28% of them meeting or exceeding the reading standard by 8th grade.

Table O. District-Level Distribution of 8th Grade Minority Students' DSTP Reading Performance Level by 10th Grade

District	Percentage of Students at PL1 in 8 th Grade	By 10 th Grade	
		PL1	Meets or Exceeds PL3,4, or 5
<i>Highest Percentages</i>			
Smyrna (n=54)	6% (3)	75% (3)	25% (1)
Appoquinimink (n=84)	17% (14)	86% (12)	7% (1)
Capital (n=344)	12% (42)	89% (31)	6% (2)
RANGE	4% to 23%	75% to 100%	0% to 25%

Table O illustrates the very limited number of low-performing minority students who move from PL1 to PL3 or better between 8th and 10th grade in reading.

MATHEMATICS

Table P. District-Level Distribution of 3rd Grade Minority Students' DSTP Math Performance Level by 5th Grade

District	Percentage of Students at PL1 in 3 rd Grade	By 5 th Grade	
		PL1	Meets or Exceeds PL3,4, or 5
<i>Highest Percentages</i>			
Colonial (n=547)	17% (92)	43% (43)	20% (20)
Caesar Rodney (n=208)	19% (36)	48% (16)	15% (5)
Appoquinimink (n=68)	34% (23)	57% (12)	14% (3)
<i>Lowest Percentages</i>			
Laurel (n=55)	36% (20)	88% (14)	0% (0)
Smyrna (n=60)	7% (4)	75% (6)	0% (0)
Seaford (n=175)	19% (34)	74% (29)	0% (0)
RANGE	7% to 36%	33% to 88%	0% to 20%

Table P shows that Colonial School District had 17% of its minority students from the three cohorts scoring PL1 in 3rd grade mathematics. Of those 5th grade Colonial minority students who scored PL1 on the 3rd grade DSTP, twenty percent (20%) had reached or exceeded the math standard. Again, small “n’s” are problematic when examining the other distribution changes.

Table Q. District-Level Distribution of 5th Grade Minority Students' DSTP Math Performance Level by 8th Grade

District	Percentage of Students at PL1 in 5 th Grade	By 8 th Grade	
		PL1	Meets or Exceeds PL3,4, or 5
<i>Highest Percentages</i>			
Laurel (n=102)	38% (39)	61% (25)	20% (8)
Brandywine (n=735)	26% (193)	64% (126)	11% (22)
Colonial (n=686)	17% (150)	69% (119)	7% (12)
Caesar Rodney (n=338)	17% (56)	76% (42)	7% (4)
<i>Lowest Percentages</i>			
Seaford (n=274)	32% (87)	87% (69)	0% (0)
Smyrna (n=107)	22% (24)	82% (23)	0% (0)
Woodbridge (n=430)	20% (24)	73% (24)	0% (0)
RANGE	17% to 38%	61% to 100%	0% to 20%

Table Q above shows that the Laurel School District had 38% of its minority students scoring PL1 in 5th grade math. Of those 8th grade Laurel minority students who had PL1 in 5th grade, 20% met or exceeded the 8th grade math standard. Across districts, of the 5 cohorts examined, 17 to 38 percent of 5th grade minority students scored PL1 in mathematics. Of those 8th grade minority students who scored PL1 in 5th grade, 61 to 100 percent of them scored PL1 again in 8th grade.

Table R. District-Level Distribution of 8th Grade DSTP Math Performance Level by 10th Grade

District	Percentage of Students at PL1 in 8 th Grade	By 10 th Grade	
		PL1	Meets or Exceeds PL3,4, or 5
<i>Highest Percentages</i>			
POLYTECH		65% (13)	20% (4)
Smyrna (n=60)	45% (27)	61% (19)	6% (2)
Appoquinimink (n=85)	24% (20)	83% (15)	6% (1)
<i>Lowest Percentages</i>			
Lake Forest (n=83)	29% (24)	95% (21)	0% (0)
Colonial (n=454)	22% (102)	83% (85)	0% (0)
Brandywine (n=370)	29% (108)	92% (82)	1% (1)
RANGE	16% to 47%	61% to 95%	0% to 20%

The above table illustrates again the limited progress, besides POLYTECH, being made in improving the achievement levels of 8th grade minority students from PL1 to meeting or exceeding the math standard by 10th grade.

ISSUES OF PARITY

After having examined the cohort and district data as portrayed thus far, the authors chose to examine the data from the perspective of parity. We believe that it was important to look at whether the distribution of students at the PL1 level reflect the district as a whole. In other words, parity exists when a district enrollment is 45% minority and 45% of the PL1 students are minority students. We also recognized that some information was being lost about the progress of PL1 students when we only looked at how many of them reached or exceeded the standard. Consequently, we decided to examine this question:

- ☞ How does the distribution of minority and low-income students who score at PL1 initially and remain below the standard reflect the general demographics of the district population?

Tables U and V portray the data of all 19 Delaware school districts. Here, as in the prior analyses, we chose not to include the charter schools because of the lack of data within the cohorts examined and/or the lack of data between two data points.

To interpret these tables, one should consider the following Caesar Rodney example.

RACE

- ☞ **District-wide:** From the most current DOE District Profile data, it was found that the racial population of the Caesar Rodney School District included 68% non-minority (Asian and white) and 32% minority (African American, Hispanic, and American Indian) students.
- ☞ **3rd to 5th:** From all the cohorts examined, of the Caesar Rodney 5th grade students who scored PL1 in 3rd grade reading, of those who remained below the standard (PL1 +PL2) on the 5th grade DSTP, 55% were non-minority and 45% were minority students.
- ☞ **5th to 8th:** From all the cohorts examined, of the Caesar Rodney 8th grade students who scored PL1 in 5th grade reading, of those who remained below the standard (PL1 +PL2) on the 8th grade DSTP, 55% were non-minority and 45% were minority students.
- ☞ **8th to 10th:** From all the cohorts examined, of the Caesar Rodney 10th grade students who scored PL1 in 8th grade reading, of those who remained below the standard (PL1 +PL2) on the 5th grade DSTP, 54% were non-minority and 46% were minority students.

One can see that the ratio of non-minority to minority students across all three analyses remains constant (i.e., 55:45, 55:45, and 54:46). However, these ratios are somewhat different from the district-wide demographic ratio of 68:32.

SES

☞ **District-wide:** From the most current DOE District Profile data, it was found that the population of the Caesar Rodney School District in regards to income status included 70% non-low income students and 30% low-income students.

☞ **3rd to 5th:** From all the cohorts examined, of the Caesar Rodney 5th grade students who scored PL1 in 3rd grade reading, of those who remained below the standard (PL1 +PL2) on the 5th grade DSTP, 28% were non-low income and 72% were from low-income families.

☞ **5th to 8th:** From all the cohorts examined, of the Caesar Rodney 8th grade students who scored PL1 in 5th grade reading, of those who remained below the standard (PL1 +PL2) on the 8th grade DSTP, 39% were non-low income and 61% were from low-income families

☞ **8th to 10th:** From all the cohorts examined, of the Caesar Rodney 10th grade students who scored PL1 in 8th grade reading, of those who remained below the standard (PL1 +PL2) on the 5th grade DSTP, 31% were non-low income and 69% were from low-income families

In these analyses of income status data, lack of parity is clearly evident. While the district-wide demographic ratio is 70:30 (non-low-income to low-income), the achievement measures are almost the inverse.

Some districts appear to be reaching or achieving parity in regards to the performance of their minority and/or low-income students.

Table S. Examples of Districts Approaching Parity

District Name	Group	Population Ratio	3 rd to 5 th	5 th to 8 th	8 th to 10 th
Reading					
Smyrna	Non-minority: Minority	80:20	83:17	80:20	79:21
Appoquinimink	Non-minority: Minority	78:22	78:22	67:33	68:33
Woodbridge	Non-minority: Minority	55:45	53:47	40:60	47:53
Appoquinimink	Non-low income: Low Income	87:13	73:27	71:29	73:28
Laurel	Non-low income: Low Income	49:51	37:63	36:64	33:67
Mathematics					
Smyrna	Non-minority: Minority	80:20	89:11	69:31	73:27
Appoquinimink	Non-minority: Minority	78:22	85:15	70:30	68:33
Laurel	Non-low income: Low Income	49:51	39:91	37:63	33:67

Table T. Examples of Districts Demonstrating Lack of Parity

District Name	Group	Population Ratio	3 rd to 5 th	5 th to 8 th	8 th to 10 th
Reading					
Milford	Non-minority: Minority	63:37	35:65	42:58	41:59
Cape Henlopen	Non-minority: Minority	73:27	50:50	48:52	49:51
Brandywine	Non-minority: Minority	59:41	26:74	26:74	30:70
Seaford	Non-low income: Low Income	46:54	18:82	8:92	8:92
Red Clay	Non-low income: Low Income	62:38	31:69	29:71	22:78
Mathematics					
Red Clay	Non-minority: Minority	53:47	29:71	35:65	28:72
Christina	Non-low income: Low Income	57:43	27:73	35:65	31:69
Seaford	Non-low income: Low Income	46:54	15:85	15:85	12:88

Table U. Reading—All Cohorts disaggregated by Student Race and Socio-economic Status as Compared to District Demographics

		District	Caesar Rodney	Capital	Lake Forest	Laurel	Cape Henlopen	Milford	Seaford	Smyrna	Appoquinimink	Brandywine	Red Clay	Christina	Colonial	Woodbridge	Indian River	Delmar	NCCVT	POLYTECH	Sussex Tech	
Race	District-wide	non-minority	68%	46%	75%	68%	73%	63%	54%	80%	78%	59%	53%	49%	44%	55%	66%	82%	61%	76%	79%	
		minority	32%	54%	25%	32%	27%	37%	46%	20%	22%	41%	47%	51%	56%	45%	34%	18%	39%	24%	21%	
	3rd to 5 th	non-minority	55%	31%	60%	47%	50%	35%	33%	83%	78%	26%	35%	31%	37%	53%	43%	67%				
		minority	45%	69%	40%	53%	50%	65%	67%	17%	22%	74%	65%	69%	63%	47%	57%	33%				
	5th to 8 th	non-minority	55%	27%	66%	61%	48%	42%	28%	80%	67%	26%	37%	37%	40%	40%	53%	86%				
		minority	45%	73%	34%	39%	52%	58%	72%	20%	33%	74%	63%	63%	60%	60%	47%	14%				
	8th to 10 th	non-minority	54%	34%	52%	59%	49%	41%	25%	79%	68%	30%	27%	37%	27%	47%	53%		50%	60%	71%	
		minority	46%	66%	48%	41%	51%	59%	75%	21%	33%	70%	73%	63%	73%	53%	47%		50%	40%	29%	

SES	District-wide	not low inc	70%	52%	57%	49%	64%	59%	46%	76%	87%	67%	62%	57%	56%	44%	57%	65%	72%	81%	77%
		low income	30%	48%	43%	51%	36%	41%	54%	24%	13%	33%	38%	43%	44%	56%	43%	35%	28%	19%	23%
	3rd to 5 th	not low inc	28%	21%	31%	37%	26%	35%	18%	58%	73%	28%	31%	26%	38%	24%	24%				
		low income	72%	79%	69%	63%	74%	65%	82%	42%	27%	72%	69%	74%	62%	76%	76%				
	5th to 8 th	not low inc	39%	23%	40%	36%	27%	33%	8%	57%	71%	25%	29%	35%	33%	18%	19%	29%			
		low income	61%	77%	60%	64%	73%	67%	92%	43%	29%	75%	71%	65%	67%	83%	81%	71%			
	8th to 10 th	not low inc	31%	32%	33%	33%	28%	24%	8%	29%	73%	27%	22%	30%	21%	35%	22%		40%	40%	43%
		low income	69%	68%	67%	67%	72%	76%	92%	71%	28%	73%	78%	70%	79%	65%	78%		60%	60%	57%

Table V. Math—All Cohorts disaggregated by Students’ Race and Socio-economic Status as Compared to District Demographics

		District	Caesar Rodney	Capital	Lake Forest	Laurel	Cape Henlopen	Milford	Seaford	Smyrna	Appoquimink	Brandywine	Red Clay	Christina	Colonial	Woodbridge	Indian River	Delmar	NCCVT	POLYTECH	Sussex Tech	
Race	District-wide	non-minority	68%	46%	75%	68%	73%	63%	54%	80%	78%	59%	53%	49%	44%	55%	66%	82%	61%	76%	79%	
		minority	32%	54%	25%	32%	27%	37%	46%	20%	22%	41%	47%	51%	56%	45%	34%	18%	39%	24%	21%	
	3rd to 5th	non-minority	53%	34%	57%	44%	54%	27%	33%	89%	85%	25%	29%	31%	30%	42%	43%					
		minority	47%	66%	43%	56%	46%	73%	67%	11%	15%	75%	71%	69%	70%	58%	57%					
	5th to 8th	non-minority	57%	28%	62%	61%	46%	41%	34%	69%	70%	23%	35%	37%	37%	37%	53%	80%	100	50%	0%	
		minority	43%	72%	38%	39%	54%	59%	66%	31%	30%	77%	65%	63%	63%	63%	47%	20%	0%	50%	100	
	8th to 10th	non-minority	50%	31%	53%	63%	49%	43%	24%	73%	68%	30%	28%	38%	26%	41%	53%	51%	60%	71%	100	
		minority	50%	69%	47%	37%	51%	57%	76%	27%	33%	70%	72%	62%	74%	59%	47%	49%	40%	29%	0%	

SES	District-wide	not low inc	70%	52%	57%	49%	64%	59%	46%	76%	87%	67%	62%	57%	56%	44%	57%	65%	72%	81%	77%
		low income	30%	48%	43%	51%	36%	41%	54%	24%	13%	33%	38%	43%	44%	56%	43%	35%	28%	19%	23%
	3rd to 5th	not low inc	26%	26%	29%	39%	31%	23%	15%	44%	73%	27%	28%	27%	33%	8%	14%	100	10%	50%	14%
		low income	74%	74%	71%	61%	69%	77%	85%	56%	28%	73%	72%	73%	67%	92%	86%	0%	90%	50%	86%
	5th to 8th	not low inc	41%	25%	38%	37%	25%	30%	15%	46%	67%	24%	30%	35%	36%	19%	21%	20%	60%	50%	0%
		low income	59%	75%	62%	63%	75%	70%	85%	54%	33%	76%	70%	65%	64%	81%	79%	80%	40%	50%	100
	8th to 10th	not low inc	25%	35%	35%	33%	28%	30%	12%	40%	73%	27%	22%	31%	22%	29%	22%	41%	40%	43%	50%
		low income	75%	65%	65%	67%	72%	70%	88%	60%	28%	73%	78%	69%	78%	71%	78%	59%	60%	57%	50%