



WCPSS High School Graduation Rates 2012-13

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Introduction

In today's economy, graduating from high school is more important than ever. The economic consequences of dropping out of high school are more severe than in the past, with diminished job prospects and life-time earnings (Rouse, 2007). There are also substantial social costs associated with high school dropouts such as lower productivity and tax revenues. At the same time, the path to on-time graduation has arguably become more difficult, with higher academic expectations and stricter requirements. While WCPSS has been fairly successful compared to other large school districts in graduating four-fifths of its high school students, there is still a lot of room for improvement, particularly for its more vulnerable students. In addition to presenting detailed statistics on high school graduation rates in 2012-13, this report also seeks to highlight the demographic and academic characteristics of students who did not graduate. Suggestions for improving high school graduation rates are also discussed.

Abstract

The WCPSS four-year cohort graduation rate increased slightly from 80.6% in 2011-12 to 81.0% in 2012-13. Over the past five years, the overall rate has increased 2.6 percentage points and is now at its highest point since 2005-06. In contrast to the 2011-12 cohort, graduation rates declined slightly for economically disadvantaged students (64.9%), and students with disabilities (59.6%). Four-year cohort graduation rates at the 25 WCPSS high schools with graduating classes ranged from 68.3% to more than 95% in 2012-13. Rates increased at nine schools and declined at 15 schools. Follow-up analysis of the 2012-13 cohort also shed light on the characteristics of non-graduates and the relationship between early literacy and graduation rates.

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Four-Year Cohort Graduation Rate: Definition and Calculation

The federal No Child Left Behind Act of 2001 (NCLB) requires public school districts and high schools to report a four-year graduation rate. In addition, the North Carolina Ready Accountability Model, effective with the 2012-13 school year, includes both 4-year and 5-year cohort graduation rates (CGR) as indicators of college- and career-readiness.

In order to graduate on-time (in four years), high school students must meet local and state graduation requirements which include demonstrating proficiency on state tests and accumulating sufficient credits (see [WCPSS Promotion and Intervention Policy 5530](#)). While credit requirements vary, students generally must have 21 to 26 total credits for graduation, and successfully complete “core” courses to be promoted each year. Students entering high school in 2009-10 or later fall under the future-ready core graduation requirements that require students to complete four English credits, four mathematics credits, and three credits in science and social studies. ([WCPSS High School Program Planning Guide, 2013-14](#)).

The 2012-13 four-year cohort graduation rate is defined by the NC Department of Public Instruction as the percentage of students who entered the 9th grade *for the first time* during the 2009-10 school year and who earned a diploma by June of 2013. Students who transfer into a school on grade level are added to that school’s cohort, and those who transfer out are removed. Students who are initially in a school cohort and transfer off grade level from one high school to another are in the district cohort graduation rate calculation but are not included in any school rate. These students are removed from both the sending school’s and the receiving school’s cohort, but they stay in the district cohort. Students who earn a certificate of completion or a GED are in the cohort but are counted as non-graduates.

The cohort graduation rate is computed at the school, LEA, and state level. Disaggregated rates based on demographics are also computed. The demographic cohorts are based on gender, ethnicity, economically disadvantaged, limited English proficient, and students with disabilities.

Disaggregated Four-Year Cohort Graduation Rates

The WCPSS high school cohort that entered 9th grade for the first time in 2009-10 consisted of 10,915 students. Of this total, 81.0% (8,846 students) earned a diploma and graduated by the end of June 2013. Another 6.3 % of the cohort (685 students) was still in school but did not have sufficient credits to graduate at the end of the 2012-13 school year. Sixty-two students (0.6%) left high school and indicated that they had transferred to a community college. 8.7% of the students in the cohort (955) dropped out of high school sometime during the four-year period. Of the remaining 3.4%, 254 left school for unknown reasons, 108 transferred to another school in the district but did not graduate, and 5 were withdrawn due to suspension or because of illness (Figure 1).

Figure 1

WCPSS High School Four-Year Graduation Cohort Outcomes 2012-13

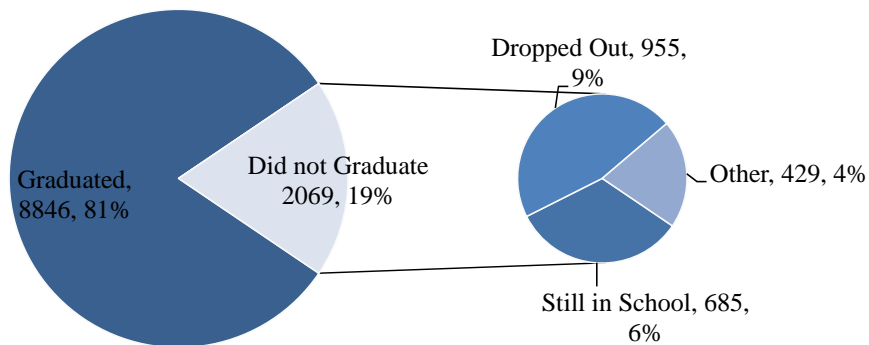


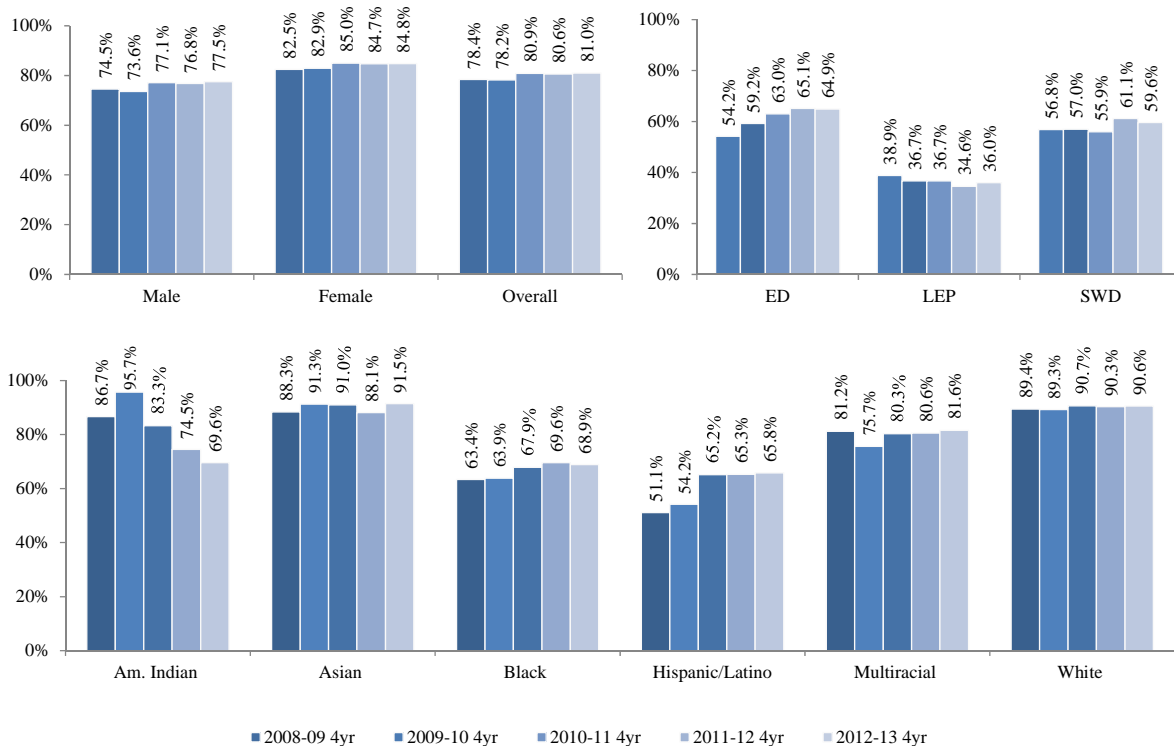
Figure 2 shows WCPSS four-year cohort graduation rates over five years by gender, race/ethnicity, and risk factors. Over the past five years, the overall rate has increased 2.6 percentage points. The rate for male students has risen by 3.0 percentage points since 2008-09, while the rate for female students has risen by 2.3 percentage points over that same span. Overall, female students continue to graduate at a higher rate than male students.

The graduation rate for students with disabilities (SWD) declined from 61.1% to 59.6% in 2012-13, but the rate is still up 2.8 percentage points since 2008-09. The rate for economically disadvantaged (ED) students decreased by 0.2% to 64.9%; however, over the past five years, the rate has increased by 10.7 percentage points. In contrast, the rate for students with limited English proficiency (LEP) rose from 34.6% to 36.0%, although the rate is still down by 2.9 percentage points since 2008-09. It should be noted that the LEP rate includes only those students currently receiving LEP services, and excludes students who exited LEP status.

By race and ethnicity, the graduation rate for American Indian students showed the largest decline over the past five years, but because of the relatively small size of the group, the rate varies greatly from year to year. Over the past five years, the graduation rate has risen the most for Hispanic/Latino students (up 14.7 percentage points since 2008-09), followed by Black/African American students (up 5.5 points). The rates for Asian students, Multi-racial students, and White students have been fairly stable over the same time period.

Figure 2

WCPS High School Four-Year Cohort Graduation Rates by Demographics Subgroups Over Five Years



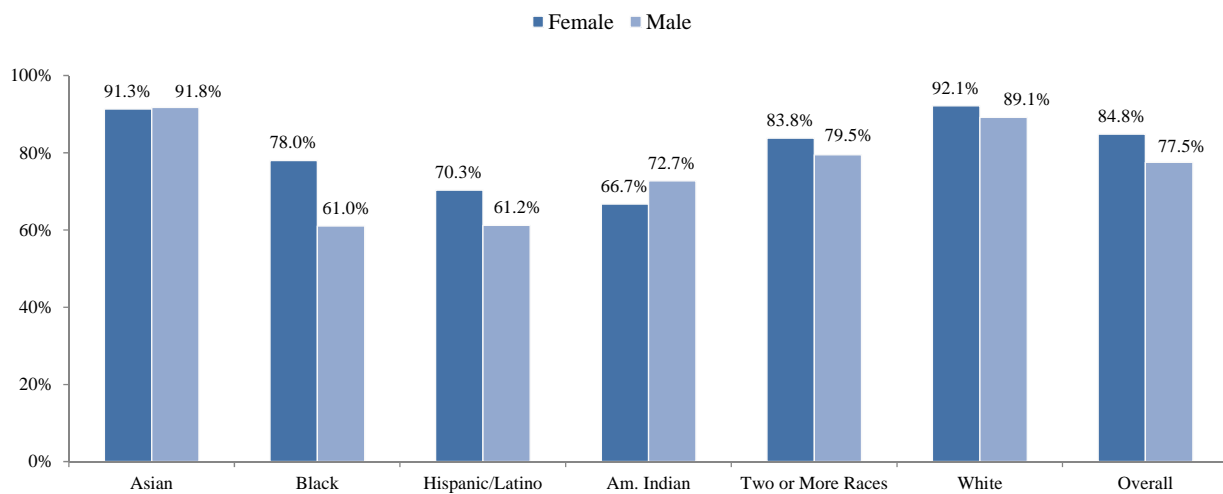
Note: Changes in the collection and reporting of student ethnicity per U.S. Department of Education directive means that graduation rates by ethnicity prior to 2010-11 may not be directly comparable to those from 2010-11 forward.

Graduation Rates by Gender and Race/Ethnicity

Figure 3 shows 2012-13 graduation rates by gender and race/ethnicity. With the exception of Asian students and American Indian students, females graduated at a higher rate than males. The overall gap between male and female students of all races was 7.3 percentage points in 2012-13. The group with the highest graduation rate was White females (92.1%), while the group with the lowest rate was Black/African American males (61.0%). The largest gender gap in graduation rates was between Black/African American female and male students (17 percentage points).

Figure 3

**WCPSS Four-Year Cohort Graduation Rates
By Gender and Race/Ethnicity 2012-13**



Comparison with North Carolina and Other Large NC School Districts

Figure 4 shows trends in four-year cohort graduation rates for the state of North Carolina, WCPSS, and six selected NC public school districts over the past five years. Since 2008-09, the state rate has risen 10.7 percentage points. Over the same period, the rate for WCPSS has increased by 2.6 percentage points, compared to 4.3 points in Chapel Hill-Carrboro, 6.3 points in Guilford, 8.5 points in Cumberland, 9.4 points in Forsyth, 14.9 points in Charlotte-Mecklenburg, and 15.6 points in Durham.

Figure 4

Four-Year Cohort Graduation Rates for WCPSS, North Carolina, and Selected NC School Districts Over Five Years

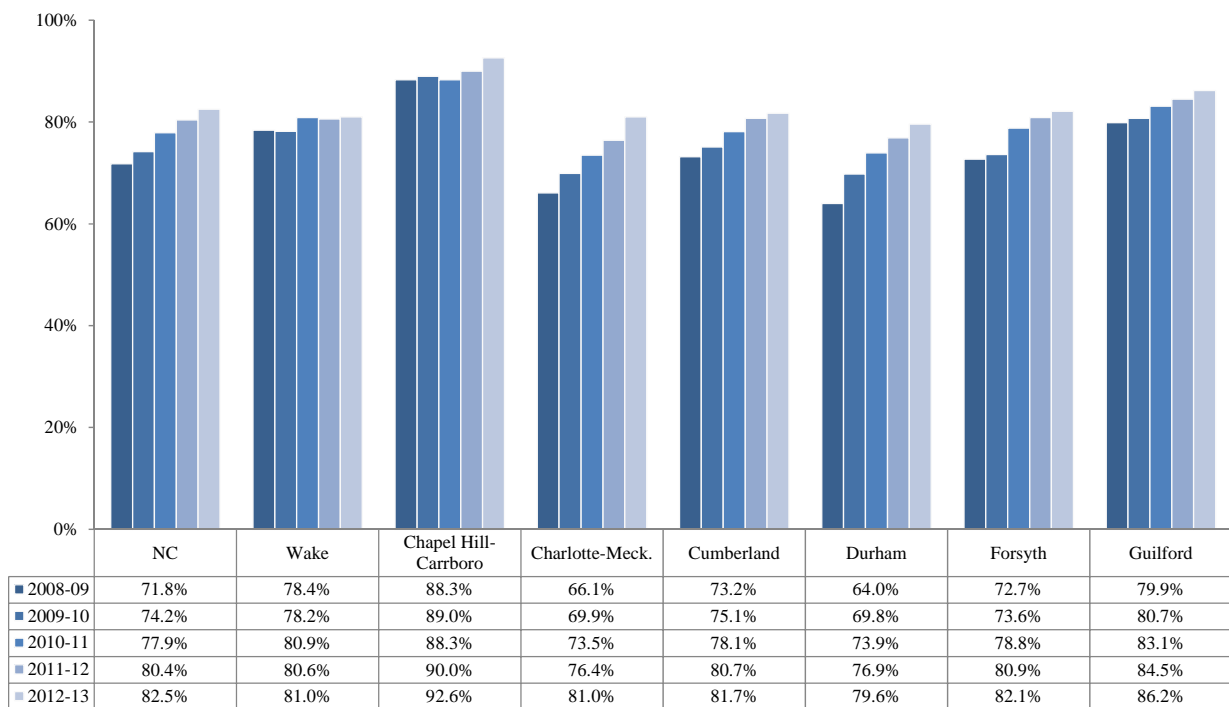


Figure 5 shows graduation rates for the state of North Carolina, WCPSS, and six selected NC public school districts by race/ethnicity for 2012-13. WCPSS’s graduation rates for Black/African American students (68.9%) and Hispanic/Latino students (65.7%) were substantially below than the state and the lowest of all the comparison districts. WCPSS’s rates for Asian students and White students were above the state and about half of the comparison districts.

Figure 5

Four-Year Cohort Graduation Rates by Race/Ethnicity for WCPSS, North Carolina, and Selected NC School Districts 2012-13

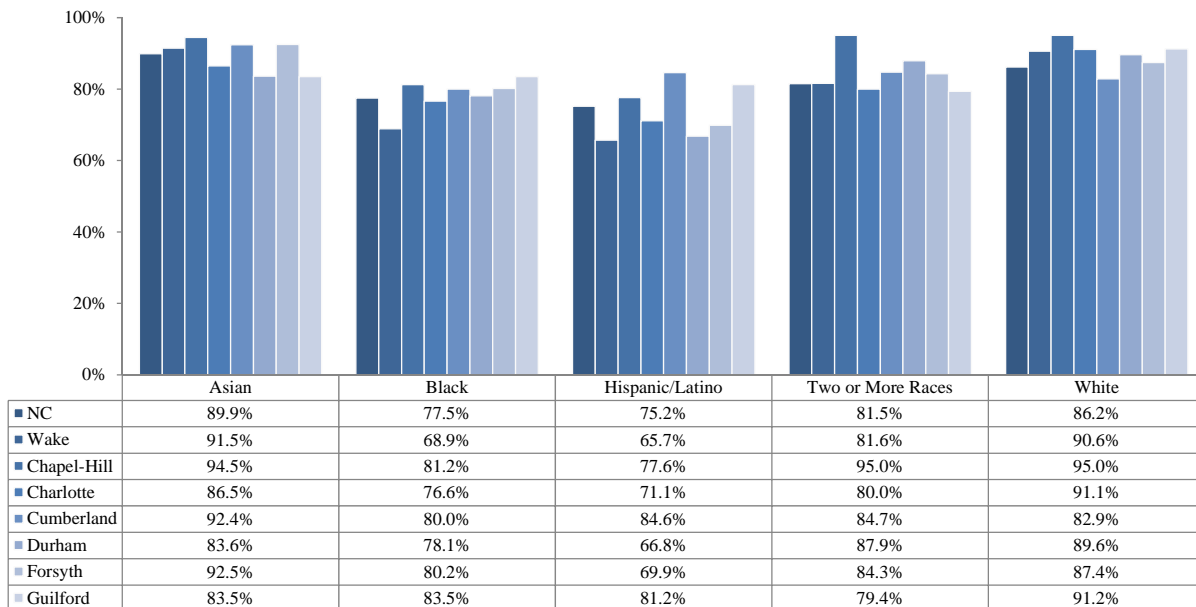
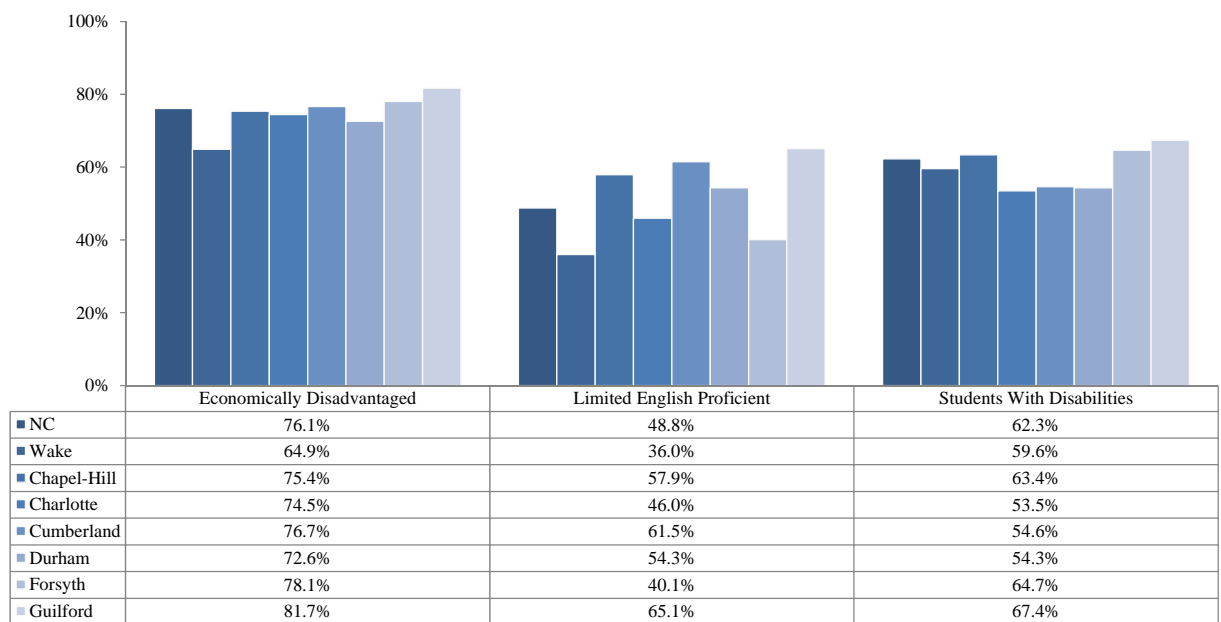


Figure 6 shows graduation rates in these same districts for ED students, LEP students, and SWD students. WCPSS’s rates for ED students (64.9%) and LEP students (36.0%) were substantially below state rates and the lowest of all the comparison districts. WCPSS’s graduation rate for SWD students (59.5%) was lower than the state rate, but higher than three of the six comparison districts.

Figure 6

Four-Year Cohort Graduation Rates by Demographic Subgroups for WCPSS, North Carolina, and Selected NC School Districts 2012-13



Four-Year Cohort Graduation Rates by High School

Table 1 shows four-year cohort graduation rates for all comprehensive WCPSS high schools over the past five years. In 2012-13, rates ranged from 72.7% at East Wake School of Integrated Technology to above 95% at Wake Early College of Health. The rates for 9 of 24 high schools increased in 2012-13 and declined for the other 15 schools. Heritage High School had its first graduating class in 2012-13, posting a 4-year cohort rate of 89.4%. Fourteen high schools, or 56%, had rates over 80%, while six high schools had rates over 90%. The largest gains over 5 years were made by Garner High School (up 7.7 points), Millbrook High School (up 7.0 points), and East Wake School of Health and Science (up 6.2 points).

Table 1

WCPSS High School Four-Year Cohort Graduation Rates Over Five Years

	2008-09	2009-10	2010-11	2011-12	2012-13
NC	71.7	74.2	77.9	80.4	82.5
WCPSS	78.4	78.2	80.9	80.6	81.0
Apex	90.2	91.2	90.8	91.2	91.8
Athens Drive	75.8	78.1	85.1	81.2	75.8
Broughton	80.2	83.7	85.8	82.5	81.4
Cary	78.5	80.9	83.0	86.7	84.5
East Wake Health	84.0	85.3	80.5	81.7	90.2
East Wake Technology	80.7	77.8	69.2	68.9	72.7
East Wake Arts	85.2	75.6	69.2	66.4	76.8
East Wake Engineering	84.8	88.4	80.2	79.6	78.0
Enloe	85.5	84.2	85.0	81.8	78.6
Fuquay-Varina	83.0	80.7	83.3	84.7	84.4
Garner	71.8	72.6	75.0	70.0	79.5
Green Hope	94.0	92.6	95.0 or above	94.7	93.8
Heritage					89.4
Holly Springs	90.6	82.1	85.8	88.5	91.5
Knightdale	73.8	73.7	76.4	79.6	78.3
Leesville	87.5	86.4	85.2	82.0	86.0
Middle Creek	80.4	83.3	85.7	86.0	85.6
Millbrook	72.6	76.8	81.8	81.3	79.6
Panther Creek	95.0 or above	92.8	93.4	94.7	95.0 or above
Phillips	74.4	79.3	81.3	75.0	68.3
Sanderson	76.7	75.0	77.5	78.6	78.1
Southeast Raleigh	80.9	82.6	76.4	81.5	75.2
Wake Early College			95.0 or above	93.8	95.0 or above
Wake Forest	86.7	89.1	85.7	87.8	86.2
Wakefield	85.0	83.4	87.4	85.5	85.3

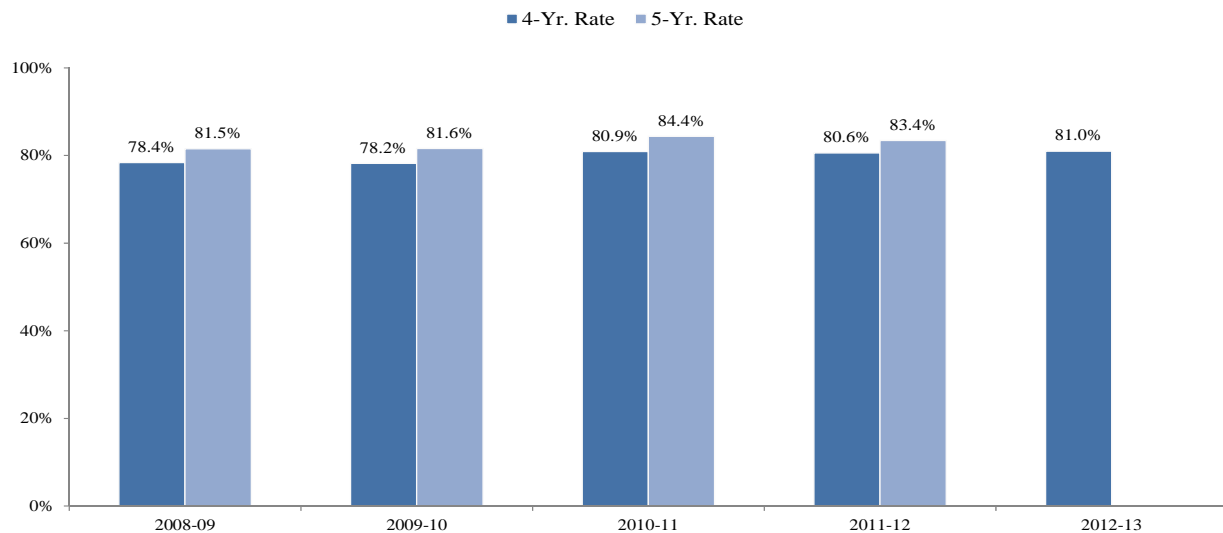
Note: Schools with blank values had no four-year graduation cohort in that school year.

Five-Year Cohort Graduation Rates

The 2012-13 five-year cohort graduation rate has the same denominator as the 2011-12 four-year rate (the number of students who entered the 9th grade during the 2008-09 school year), but the numerator is larger because it includes students from the cohort who took an additional year to graduate. As Figure 7 shows, graduation rates in WCPSS increase by about three percentage points when students who graduate in five years are included in the rate. The cohort that started 9th grade in 2008-09 had a four-year graduation rate of 80.6% in 2011-12; this same cohort had a five-year rate of 83.4% in 2012-13, a gain of 2.8 percentage points. The five-year rate for the cohort that started 9th grade in 2009-10 will depend on how many more students earn a diploma by June of 2014. This group includes SWD students for whom a five-year graduation plan is part of their Individualized Education Plan (IEP).

Figure 7

WCPSS Four- and Five-Year Cohort Graduation Rates Over Five Years

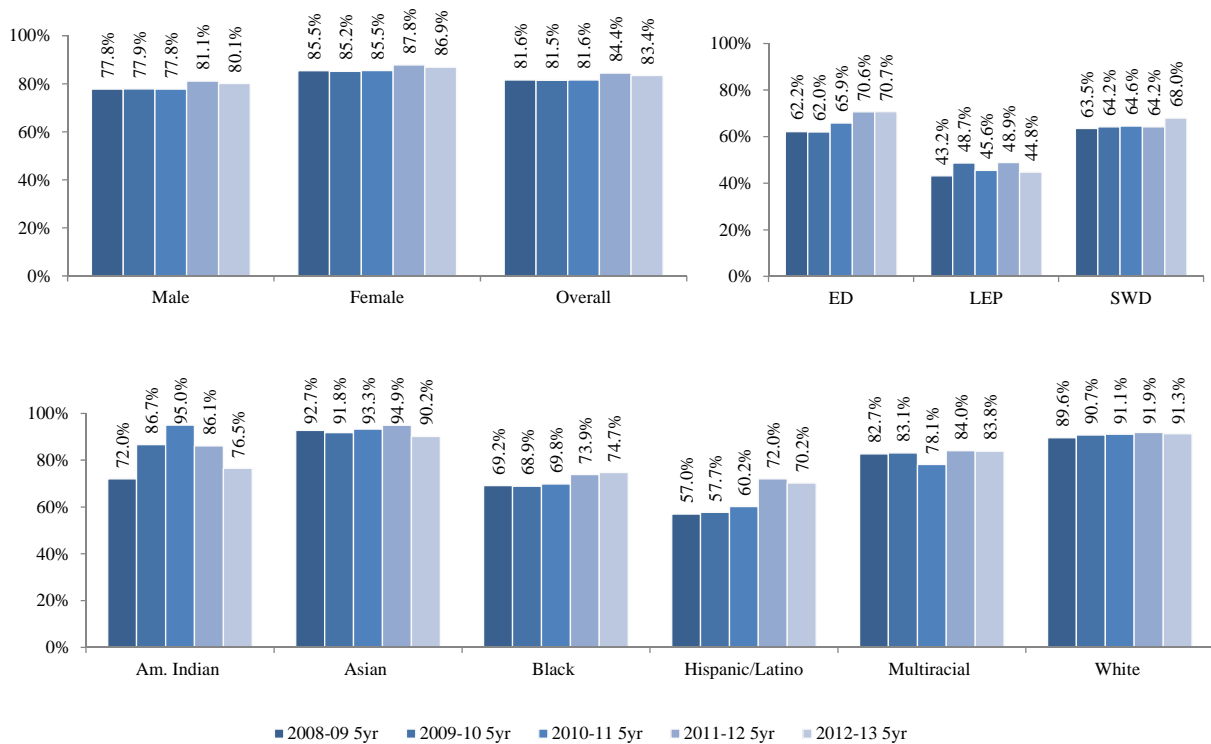


Note: Years represent the four-year graduation year for the student cohort. For example, the 2008-09 cohort started 9th grade in 2005-06, so their four-year graduation year was 2008-09 (78.4%) while their five year graduation year was 2009-10 (81.5%). The four-year cohort that graduated in 2012-13 (81.0%) will post its five-year rate in 2013-14.

Figure 8 shows trends in WCPSS’s five-year cohort graduation rates over the past five years. After remaining flat for three years, the overall rate rose by almost three percentage points in 2011-12, then dropped by a percentage point in 2012-13. The rates for male and female students have followed the same trend, although the gap between them has narrowed somewhat (from 7.7 percentage points in 2008-09 to 6.8 points in 2012-13). The rate for ED students has steadily increased over the past five years, rising by 8.5 percentage points since 2008-09. The rate for SWD students hovered around 64% for four years before increasing to 68% in 2012-13. The rate for LEP students has fluctuated between 43% and 49%. By race and ethnicity, the five-year rate has been fairly stable for White students, Multi-racial students, and Asian students. The rates for Black students and Hispanic/Latino students increased significantly in 2011-12, while the rate for American Indian students has fluctuated from year to year.¹

Figure 8

**WCPSS High School Five-Year Cohort Graduation Rates
By Demographic Subgroups Over Five Years 2012-13**

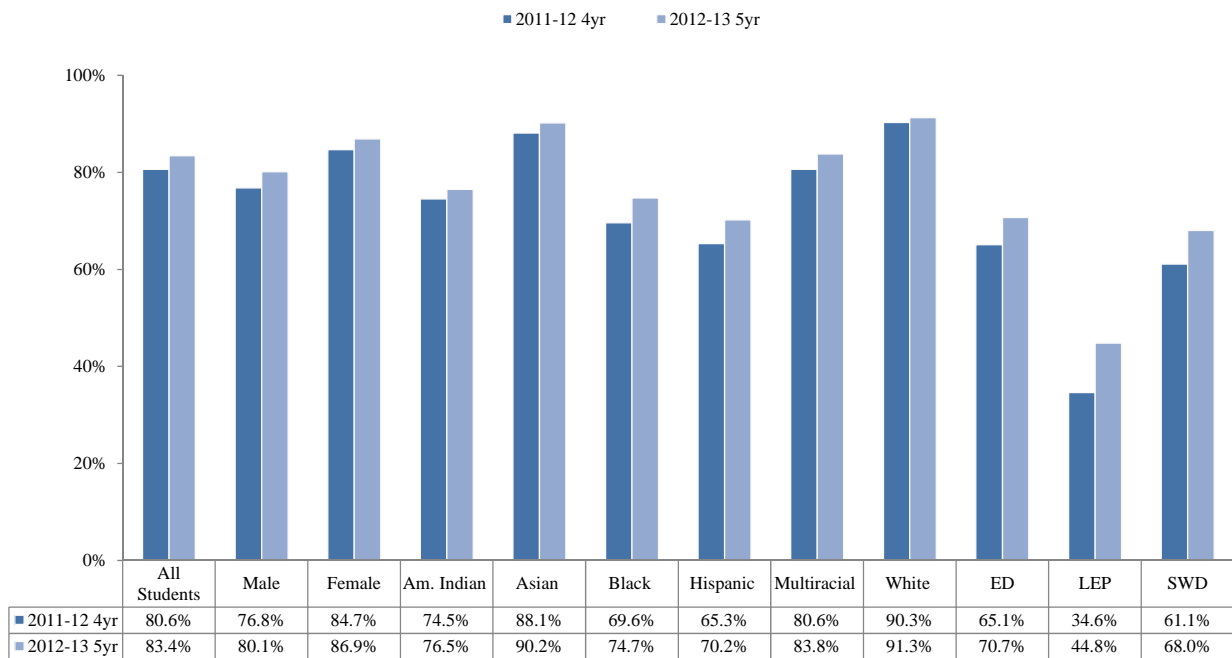


¹ Note: Changes in the collection and reporting of student ethnicity per U.S. Department of Education directive means that five-year graduation rates by ethnicity prior to 2011-12 may not be directly comparable to those from 2011-12 forward.

Five-year graduation rates for various subgroups exhibit the same overall pattern as the 4-year rates; however, graduation rates increase more for some subgroups than others. Figure 9 shows that for the 2012-13 five-year cohort (students who entered 9th grade in 2008-09), the graduation rate for LEP students rose 10.2 percentage points over their four-year rate, the rate for SWD students rose 6.9 points, and the rate for ED students rose 5.6 points. Among racial/ethnic subgroups, Black/African American students improved their graduation rate by 5.1 points, while the rate for Hispanic/Latino students rose 4.9 points.

Figure 9

WCPSS Four- and Five Year Cohort Graduation Rates by Demographic Subgroups for the Cohort of Students that entered 9th grade in 2008-09



Five-Year Cohort Graduation Rates By High School

Table 2 shows five-year cohort graduation rates for all comprehensive WCPSS high schools over the past five years. In 2012-13, rates ranged from 70.8% at East Wake School of Arts, Education, and Global Studies to 95.5% at Green Hope High School. The rates for 9 of 24 high schools increased in 2012-13 and declined for 14 schools, while one school had no change. Eighteen high schools, or 75%, had rates over 80%.

Table 2

WCPSS High School Five-Year Cohort Graduation Rates Over Five Years

	2008-09	2009-10	2010-11	2011-12	2012-13
NC	72.9%	74.7%	77.7%	81.1%	83.1%
WCPSS	81.6%	81.5%	81.6%	84.4%	83.4%
Apex	91.6%	92.2%	92.8%	91.0%	92.1%
Athens Drive	81.9%	80.3%	80.6%	88.4%	82.6%
Broughton	81.6%	82.2%	86.5%	87.3%	84.7%
Cary	86.5%	81.4%	85.1%	85.7%	88.9%
East Wake Health	96.3%	85.0%	87.3%	87.4%	83.9%
East Wake Technology	85.7%	87.7%	84.0%	75.8%	75.6%
East Wake Arts	90.0%	88.6%	80.5%	72.6%	70.8%
East Wake Engineering	93.8%	87.9%	92.8%	83.5%	79.6%
Enloe	89.4%	88.4%	85.1%	86.7%	83.2%
Fuquay-Varina	80.0%	84.9%	84.0%	86.0%	86.3%
Garner	77.8%	77.4%	74.7%	77.4%	76.4%
Green Hope	94.0%	94.3%	93.4%	95.4%	95.5%
Heritage					
Holly Springs		92.2%	84.1%	88.6%	89.4%
Knightdale	81.6%	76.5%	77.5%	80.7%	81.6%
Leesville	88.6%	90.2%	89.2%	89.0%	86.2%
Middle Creek	85.9%	82.6%	85.2%	88.1%	88.2%
Millbrook	79.4%	75.7%	79.3%	83.5%	83.5%
Panther Creek		97.7%	93.6%	95.0%	95.3%
Phillips	65.6%	79.1%	79.3%	83.3%	78.1%
Sanderson	79.5%	79.6%	79.5%	82.6%	79.7%
Southeast Raleigh	87.0%	84.8%	86.7%	80.7%	85.7%
Wake Early College				98.2%	93.8%
Wake Forest	85.2%	87.3%	89.8%	88.9%	88.5%
Wakefield	86.4%	88.5%	86.3%	91.0%	87.0%

Note: Schools with blank values had no five-year graduation cohort in that school year.

Profile of Non-Graduates

District and high school graduation rates are based on data compiled over time at each high school, including students' initial year and grade of enrollment, and withdrawal data (transfer and dropout information). NCDPI compiles these data and provides each school district in the state with a cohort graduation file containing records for every student believed to be in the district's four-year graduation cohort each year.

Exit reasons for students in the four-year cohort who did not graduate on-time are shown in Table 3. Almost one-half of non-graduates dropped out of high school sometime during the four years. About one-third of non-graduates were still in school at the end of June 2013 (about one-half of these students typically graduate in their fifth year). About 18% of non-graduates either had no identified reason or transferred to another district high school off-grade level and then left school without providing a reason. The remaining 3% of non-graduates indicated that they had transferred to a community college.

Table 3
Non-Graduates by Exit Reason

Status	Number of Students (and Percent of Cohort)	Percent of Non-Graduates
Dropout	955 (8.7%)	46.2%
Still in school as of June 2013	685 (6.3%)	33.1%
Unknown/Other	367 (3.3%)	17.7%
Enrolled in Community College	62 (0.6%)	3.0%
Total Non-Graduates	2,069 (19.0%)	100.0%

In addition to exit reasons, NCDPI also provides data on the year non-graduates were last seen in WCPSS high schools. Excluding students who were still in school in June 2013, Table 4 shows that non-graduates in the 2009-10 to 2012-13 graduation cohort left high school during all four years, with the largest number leaving in their third year in high school.

Table 4
Exit Year of Non-Graduates

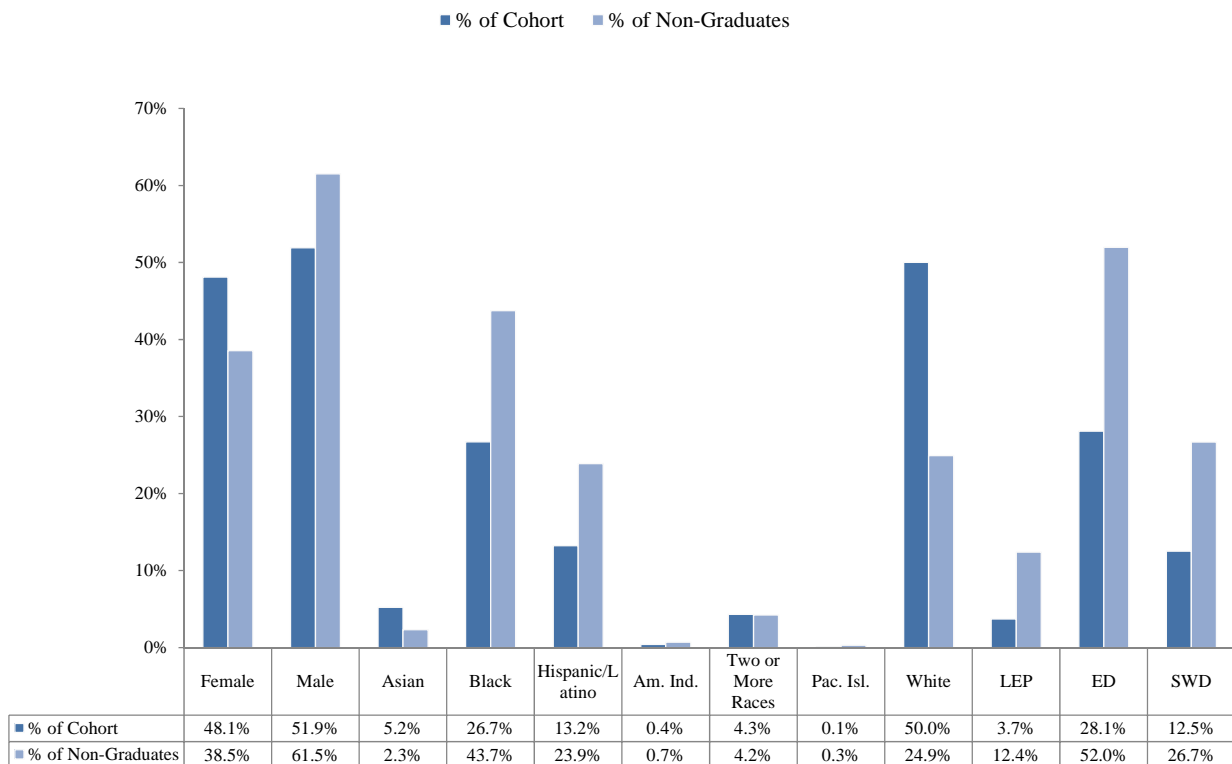
	Year 1 (2010)	Year 2 (2011)	Year 3 (2012)	Year 4 (2013)
Dropout	163	301	343	148
Unknown/Other	117	49	62	134
Enrolled in CC	8	6	6	42
	288 (20.9%)	356 (25.8%)	411 (29.8%)	324 (23.5%)

Note: The exit year for some students with unknown exit reasons were not reported.

Demographics and Academic Achievement of Students Who Failed to Graduate On-Time

The WCPSS high school cohort that entered 9th grade for the first time in 2009-10 consisted of 10,915 students. Of this total, 2,069 did not graduate by the end of June 2013. As can be seen in Figure 10, the demographic make-up of non-graduates is not comparable to the composition of the cohort as a whole. By race/ethnicity, the proportion of Black/African-American students and Hispanic/Latino students among non-graduates is almost twice their proportion of the cohort. Similarly, ED students were over-represented, accounting for one-half of non-graduates even though they represented about one-quarter of the cohort. The proportion of SWD students among non-graduates was also double their proportion of the cohort. LEP students, who made up only 4% of the cohort accounted for 12% of non-graduates.

Figure 10
WCPSS Four-Year Cohort and Non-Graduates
by Demographic Subgroup 2012-13



This pattern of disproportionate outcomes by demographic groups is also reflected in the reading proficiency rates of this class all the way back to grade 3. Figure 11 shows district-wide achievement data on grade 3 and 8 reading EOGs plotted by student subgroups during the years when most of the graduating class of 2012-13 students would have been in those grades. The resulting proficiency pattern resembles the 2012-13 graduation rate pattern: the subgroups that had the lowest passing rates on reading EOGs in grades 3 and 8 also had the lowest graduation rates.

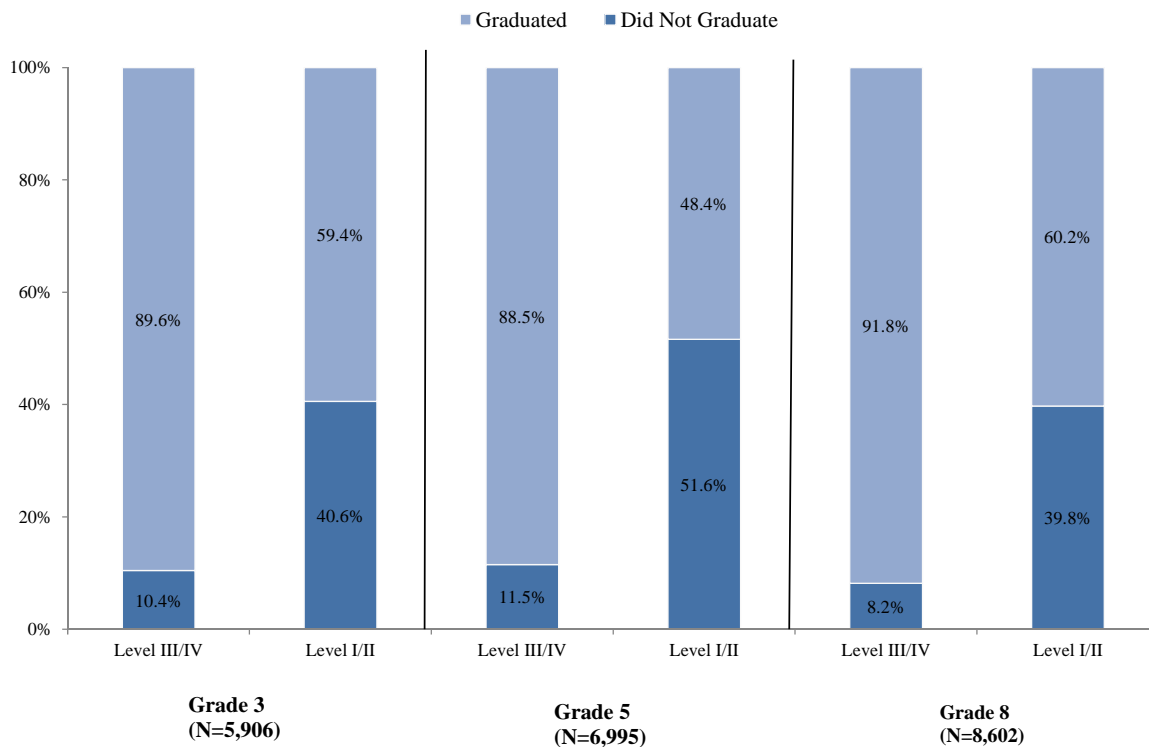
Figure 11

WCPSS Four-Year Cohort Graduation Rates, Achievement Levels on Grade 3 and Grade 8 Reading EOG Exams by Demographic Subgroups



Prior academic achievement is a powerful predictor of on-time graduation. Students who demonstrate proficiency on EOG exams in elementary and middle school are more likely to graduate on-time than those who do not. Figure 12 shows graduation rates for WCPSS students based on their achievement level on EOG exams in reading in grade 3, grade 5, and grade 8.² For students who scored proficient (i.e. Level III or IV) on the exam in grade 3, their graduation rate was 89.6%, while the rate for those who did not score proficient was 59.4%. Similarly, the graduation rate for students who were proficient on the reading EOG in grade 5 was 88.5%, compared to 48.4% for those who were not proficient. In grade 8, students who were proficient on the reading exam had a graduation rate of 91.8%, compared to a rate of 60.2% for those who were not proficient.

Figure 12
WCPSS Four-Year Cohort Graduation Rates by Achievement Level on Grade 3, Grade 5, and Grade 8 Reading EOG Exams (Class of 2012-13)



² Student records from the four-year graduation cohort were matched with EOG exam records when students were in grade 3, grade 5, and grade 8. Students who entered WCPSS after grade 8 are not included.

High School Retention and Graduation

Unlike in elementary and middle school, students in high school may be retained in-grade for failing to pass as few as one core course such as English I or Common Core Math I. For these students, promotion to the next grade level can only occur once they have successfully completed the failed course. Not surprisingly, students who fail more than one course face an even more difficult path to on-time graduation.

In fact, recent research on high school retention in WCPSS (Paepflow, 2013) found that students who were retained one or more times during their high school years were far less likely to graduate on-time than students who were promoted each of the four years. Focusing on the grade 9 cohort from 2008-09 to 2011-12, the study found that students who were promoted each of the four years considered had a graduation rate of 98% in 2011-12. In contrast, students who were retained once during the four years had a four-year graduation rate of 78%, and those with three retentions had a rate of 33%. These findings are consistent with national research showing a strong causal link between retention and dropping out of school (Leckrone & Griffith, 2006).

Typically, students are retained for failing *core* courses. For the 2011-12 cohort examined by Paepflow, nearly half of grade 9 retainees failed mathematics, over 50% failed science and/or social studies courses, and two-third failed English I. While retentions become less common in the upper grades, this partially reflects lower enrollments at these grades because of students who give up and drop out. Paepflow also found:

- While at each grade level English is the subject failed most often, the percentage of retained students failing English ranges from nearly two thirds of students in grade 9 failing English I to less than one third of students in grade 12 failing English IV.
- Approximately, one third of retained students in grades 10 - 12 failed a mathematics credit and nearly half of retained students in grade 9 did so.
- In grade 9, more than half of retained students failed a social studies and science credit compared to approximately 40% of retained students in grade 10 and approximately one third to one quarter of retained students in grades 11 and 12.

Further research on the 2009-10 ninth-grade cohort confirms the pivotal role played by failure to meet credit and course requirements on on-time graduation (Hill & Lenard, 2014). Using an “on-track” indicator composed of total credits and course requirements in English and Mathematics, they found that 34% of the four-year cohort was off-track at least one year. The four-year graduation rate for this group of off-track students was 53%, compared to 99% for students who were never off-track during high school. Looking more closely at students who fell off-track, they found that the vast majority (70%) fell off track in grade 9, most often because they failed Math or English, or both.

Discussion

The four-year cohort graduation rate in WCPSS has seen a modest increase over the past five years, from 78.4% in 2008-09 to 81.0% in 2012-13 and is now at its highest point in WCPSS since 2005-06. This increase is largely attributable to significant improvements in the rates for three subgroups: economically disadvantaged students, Hispanic/Latino students, and to a lesser extent, Black/African-American students. Despite these increases, the WCPSS four-year graduation rate appears to have plateaued when compared to other North Carolina school districts and the state as a whole. For certain subgroups in particular (e.g., ED students), the WCPSS rate is substantially below that of other districts and the state. Understanding the reasons for these trends requires a better understanding of district and high school policies and practices, including graduation requirements, graduation promotion initiatives, and other factors that impact graduation rates.

For example, high school course and credit requirements vary by school district. For students entering ninth grade in 2009-10, the NC State Board of Education requires 21 credits plus any local requirements in order to earn a diploma for the “future-ready core” course of study.³ For the majority of WCPSS high schools, graduation requires completion of a minimum of 26 credits.⁴ In addition to state credit requirements, WCPSS requires 5 additional credits in elective courses. In contrast, Chapel Hill-Carrboro City Schools requires 22 credits to graduate, Mecklenburg County Schools requires 24 credits, and Durham County requires 28 credits.

Over the past 10 years, school districts across the county have developed a variety of strategies and interventions to reduce dropout rates and increase graduation rates. One of the more promising approaches has been the implementation of “early warning systems,” which seek to identify students at risk of dropping out as early as grade 6 by monitoring indicators such as final grades in mathematics and English, attendance rates, and behavior problems (Neild, Balfanz, and Herzog, 2007). Once students are identified, the next challenge is to devise strategies to help them based on their academic, social, and personal needs.

Within WCPSS, there is wide variation in graduation rates for various subgroups among the district’s high schools. Why are some schools more successful than others in optimizing on-time graduation for their students? Investigating differences in the following factors may aid our understanding:

- School climate and culture
- Instructional practices and grading standards

³ <http://www.ncpublicschools.org/docs/curriculum/home/graduationrequirements.pdf>

⁴ Note: Students at Enloe, Longview, Phillips, Wake Early College of Health and Sciences, and Wake NC State University STEM Early College entering 9th grade in 2012-13 must complete 22 credits to graduate.

- Retention and promotion practices
- Academic intervention strategies
- Discipline and suspension policies
- Dropout prevention strategies and graduation promotion initiatives

In addition to collecting available data on the above factors, surveys and focus groups could be conducted as well. Carefully controlled research designs need to be employed in order to pinpoint which interventions are truly working to improve graduation rates in schools, and those identified practices then need to be scaled up and out to other schools. Given the increasing importance of high school graduation, it is more important than ever to continue to improve graduation rates.

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