

# PROJECT LIFT: YEAR THREE STUDENT OUTCOMES MEMO

---

Prepared by **Research for Action** • January 2016

*Michael Norton Ph.D. • Dae Y. Kim, Ph.D. • Daniel Long, Ph.D.*



RESEARCH  
for ACTION



## About Research for Action

Research for Action (RFA) is a Philadelphia-based nonprofit organization. We seek to use research as the basis for the improvement of educational opportunities and outcomes for traditionally underserved students. Our work is designed to: strengthen public schools and postsecondary institutions; provide research-based recommendations to policymakers, practitioners, and the public at the local, state, and national levels; and enrich the civic and community dialogue about public education. For more information, please visit our website at [www.researchforaction.org](http://www.researchforaction.org).

---

## Acknowledgements

This evaluation was made possible with the generous support of the Project LIFT Governance Board and Project LIFT leadership. Research for Action is grateful for the guidance and support of Denise Watts and Douglas Jones, along with the rest of the Project LIFT staff, for their support of the external evaluation over the past three years. We would also like to thank the CMS Research, Evaluation, and Analytics Office staff for providing data and assistance. In addition, we greatly appreciate the input and continued participation of principals at the nine Project LIFT schools: West Charlotte High School, Ranson Middle School, Allenbrook Elementary, Ashley Park Elementary, Bruns Academy, Druid Hills Academy, Statesville Road Elementary, Thomasboro Academy, and Walter G. Byers Elementary. Finally, we value the support of the LIFT partners, teachers, and other CMS administrators who participated in the Year Three evaluation.

This report was greatly enhanced by the contributions of many RFA staff. We especially appreciate the oversight provided by Dr. Kate Shaw, Executive Director; Dr. Rebecca Reumann-Moore, Interim Director of Qualitative Research; Alison Murawski, Communications Director; and Rachel Greene, Communications Assistant. We also want to acknowledge the valuable research assistance we received from Marvin Barnes, Research Assistant and Katie Englander, Research Analyst.

## Table of Contents

Executive Summary.....	1
I. Introduction.....	7
II. LIFT Student Academic Performance: End of Grade and End of Course Assessments.....	9
Contextual Factors Affecting the Analysis.....	10
New Assessment in 2012-13.....	10
Changes in Performance Levels in 2013-14 .....	10
Exit and Entry of Students into LIFT Schools.....	11
LIFT Student Academic Performance Findings.....	13
A. Reading EOG and English II EOC.....	13
B. Math EOG and Math I EOC .....	17
C. Science EOG and Biology EOC .....	20
D. Summary of Academic Performance Over Three Years.....	23
III. Climate at LIFT Elementary/Middle Schools: Student Attendance and Behavior .....	24
Attendance .....	25
Out-of-School Suspensions .....	26
Changes Over Time in Elementary/Middle School Climate Risk Factors.....	28
School Climate in Each LIFT Elementary/Middle School.....	29
IV. Climate at WCHS: Graduation Rates, Early Warning Indicators, Attendance, and Credits Earned.....	30
High School Graduation Rates.....	30
Early Warning Indicators for First-Time 9th Graders.....	31
Credits Earned as Indicator of On-Track Graduation Status for 9th Grade Students.....	33
Summary: EWIs and On-Track Graduation Indicators .....	35
V. Continuous Learning Calendars: Student Academic Achievement in (CLC) Schools Compared to Non-CLC Schools.....	35
Findings .....	36
Summary: CLC Schools versus Non-CLC Schools .....	39
VI. Summary & Preview of Year Four Evaluation .....	40

# **Project LIFT: Student Outcomes Memo**

Prepared by *Research for Action*

January 2016

---

## **Authors**

Michael Norton, Ph.D.

Dae Y. Kim, Ph.D.

Daniel A. Long, Ph.D.





## **Project LIFT: Year Three Student Outcomes Memo Executive Summary**

Prepared by *Research for Action* • January 2016

Research for Action (RFA) was commissioned to evaluate changes in student outcomes during the first three years of Project LIFT. This report focuses on two questions: First, how do LIFT students' behavioral and academic performance compare to those of a matched set of non-LIFT comparison students? Second, how do the Continuous Learning Calendars at LIFT schools affect student performance?

During the first three years of the initiative, the most significant gains in student outcomes were in the social and behavioral outcomes of graduation rates, attendance rates, credit completion, and a decline in ninth grade early warning indicators such as out of school suspensions. Graduation rates in West Charlotte High School increased from 56.1% the year prior to the LIFT initiative to 76.9% during the third year of the LIFT initiative. In addition, during the three years of the LIFT initiative, there was a notable reversal of downward trends in out of school suspension rates, early warning indicators, and the percent of ninth grade students on track to graduate.

Academic outcomes during the first three years of the LIFT initiative are mixed. In terms of the percent of students achieving College and Career Readiness, LIFT students in grades 3-8 improved in Reading End of Grade (EOG) and Science EOG assessments; and high school students improved in Math 1 End of Course (EOC) assessments. However there were no statistically significant gains in English II EOC, Math EOG, and Biology EOC. When students in LIFT schools are compared to similar students in comparison schools, there are no statistically significant differences between LIFT and Comparison schools in the percentage of students achieving College and Career Readiness, with the exception of higher scores in Math 1 EOC and lower scores in Biology EOC.

The Continuous Learning Calendar Schools (CLC), historically the lowest performing schools within the LIFT initiative, performed better in reading compared to students in comparable K-8 comparison schools. However, CLC schools have lower academic achievement compared to non-CLC schools within the LIFT initiative and non K-8 comparison schools.

LIFT's theory of change aligns to research on school change indicating that improvements in social and behavioral outcomes should be the focus during the initial years of implementation, and lay the groundwork for improvements in student performance in later years. Year 3 research results align with this pattern. LIFT saw improvement in social and behavioral outcomes and mixed results on academic outcomes. Improvement on some student academic outcomes and not on others is to be expected in Year 3 of the initiative. Academic outcomes will be a strong focus of research in years 4 and 5.

## LIFT Student Academic Performance

### A. Changes Over Time

Since the first year of the initiative, changes in academic performance at LIFT schools are as follows:

1. Statistically significant gains in College and Career Readiness in:

- Reading EOG: an increase from 18% to 22%
- Math1 EOC: an increase from 11% to 22%
- Science EOG: an increase from 37% to 46%

2. No statistically significant gains in College and Career Readiness in:

- English II EOC
- Math EOG
- Biology EOC

In Reading, LIFT 3<sup>rd</sup>-8<sup>th</sup> graders maintained the significant gains they achieved in the percent 'College and Career Ready' on the Reading and Science EOGs during the 2013-14 school year in 2014-15; and on the Math I EOC, LIFT students continued to make substantive gains in 'College and Career Readiness' in 2014-15.

### B. Academic Achievement of LIFT versus Comparison Schools Over Time

Overall proficiency levels in LIFT schools remain below those of both the comparison schools and overall CMS proficiency levels, particularly in Math and Reading. However, when we compare the likelihood of achieving College and Career Readiness among similar students in similar schools, these differences are statistically insignificant except for Math 1 EOC and Biology EOC.

- Across all EOG assessments in Reading, Math and Science, LIFT and comparison students were just as likely to achieve College and Career Readiness in 2014-15, after taking into account their prior academic achievement, attendance, behavior and demographics.
- In high school level subjects, LIFT students were more than twice as likely to achieve College and Career Readiness as were the comparison students on the Math I EOC.
- LIFT students were significantly less like to achieve College and Career Readiness than were the comparison students in Biology in 2014-15.

## Climate at LIFT Elementary/Middle Schools

When we use an interrupted time series regression model to examine changes in attendance and out of school suspension among K-8 students compared to similar students in comparison schools we find that:

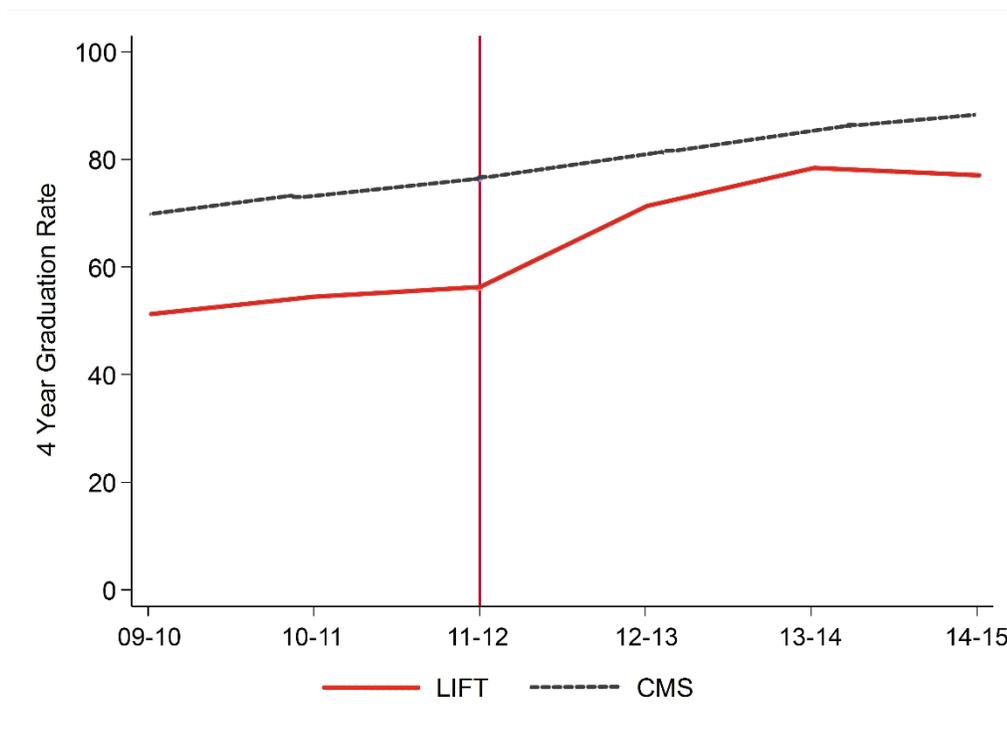
- Attendance in LIFT schools considerably improved in grades 2, 5, 6 and 8, among similar students in LIFT schools compared to comparison schools during the three years of the initiative.
- LIFT effects on the number of out of school suspensions per student were not consistent across K-8<sup>th</sup> grades during the three years of the initiative.
- Out of school suspensions dropped in grades 1 and 5, but increased in grades 3 and 4 among students in LIFT schools when compared to similar students in comparison schools during the three years of the initiative.

## Climate at West Charlotte High School

### A. Graduation Rates

Figure 1 presents the state-reported, four year graduation rates for West Charlotte High School and CMS for the three years prior to the start of Project LIFT and the first three years of the initiative.

**Figure 1. Four Year Graduation Rate at West Charlotte HS: 2009-10 - 2014-15**



- Over the first three years of the initiative, the four year graduation rate at West Charlotte High School has increased substantially compared to pre-initiative levels (see figure 1).

## B. Early Warning Indicators

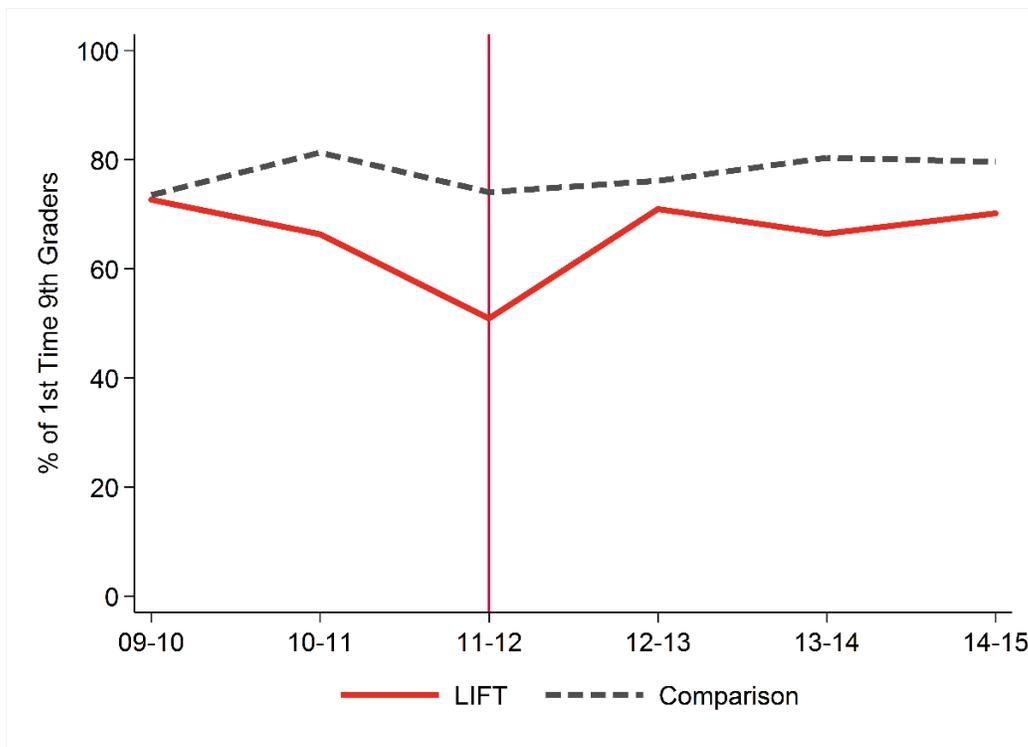
**Getting off to a positive start in 9th grade is one of the strongest predictors of on-time graduation.**

We examine progress on the reduction of four Early Warning Indicators (EWIs) of high school dropout among West Charlotte High School students over the first three years of Project LIFT:

1. Daily attendance below 80%
  2. Multiple out-of-school suspensions (OSS)
  3. Course failure
  4. Earning three or fewer credits
- Over the first three years of the initiative, the risk levels of incoming cohorts of 9<sup>th</sup> graders at West Charlotte HS have declined substantially.
  - An increasing percentage of 9<sup>th</sup> graders finished their freshman year on track to graduation (earned 6 or more credits per year).

Figure 2 illustrates changes in on-time graduation rates over time.

**Figure 2. Percent of 9th Grade Cohorts On-Track to Graduation after 9th Grade: WCHS and Comparison High Schools: 2009-10 – 2014-15**



	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
<b>LIFT - % of students on track to graduation</b>	73%+	66%+	51%	71%+	66%+	70%+
<b>Comparison - % of students on track to graduation</b>	74%	81%+	74%	77%+	81%+	80%+

+ Significantly different from 2011-12

At West Charlotte HS, 70% of first time 9<sup>th</sup> graders finished their freshman year on-track to graduation in 2014-15 – continuing a trend of significant improvements for incoming freshman cohorts since the LIFT initiative began.

- At both West Charlotte HS and the comparison high schools, an increasing percentage of incoming 9<sup>th</sup> grade cohorts have completed their freshman year on track to graduation during the first three years of the initiative.

Table 1 presents a summary of the year to year progress on Early Warning Indicators of incoming cohorts of 9<sup>th</sup> graders at West Charlotte HS over the first three years of the initiative.

**Table 1. WCHS EWI Measures in Year One through Three**

	2012-13	2013-14	2014-15	% CHANGE FROM 2011-12 TO 2014-15
Fewer Students with ADA below 80%	✓	X	✓	-35%
Reductions in OSS	✓	✓	✓	-71%
Reductions in Course Failure	✓	X	✓	-8%
Reductions in Students Earning 3 or Fewer Credits	✓	X	✓	-50%
% of 9 <sup>th</sup> Grade Cohort On-Track to Graduate	71%	66%	70%	37%

+ Significantly different from 2011-12; ✓ Performance remained stable or improved

## Continuous Learning Calendars

The CLC schools serve a student population that has historically under-performed in comparison to students at other LIFT schools – particularly the 180 day CLC schools.

- CLC schools made greater gains in average reading performance (measured by scale scores) between 2012-13 and 2014-15 than other K-8 schools from the comparison group.
- After the first two years of CLC implementation, the academic performance in mathematics of students in the 180 day CLC schools continues to be significantly below that of student in non-CLC LIFT schools.
- All LIFT students, including those in CLC schools, have made significant gains in their reading achievement over the first three years of the initiative.

## Overall Summary of the Outcomes Memo

LIFT saw some of its largest gains in school climate and graduation rates. LIFT schools continue to make considerable gains improving school climate, particularly at West Charlotte HS. At West Charlotte, the considerable reduction of the overall risk levels for incoming cohorts of 9<sup>th</sup> grade students represents a positive sign for the initiative overall. Across every Early Warning Indicator for high school drop-out, risk levels for incoming cohorts of 9<sup>th</sup> graders at West Charlotte have continued to drop over the first three years of the initiative. In addition, overall attendance rates remained very high at all LIFT schools. However, out of school suspensions did increase at a number of LIFT elementary/middle schools in 2014-15.

Student achievement during Year Three of the Project LIFT initiative was mixed. There have been gains in reading, mathematics, and science since the first year of the LIFT initiative in three out of the six assessments. Most notably, LIFT students continued to outperform students in the comparison schools on the Science EOG. In addition, the gains that LIFT elementary/middle school students achieved in Reading in 2013-14 were largely sustained in 2014-15. And at the high school level, LIFT students continued to make substantial gains in College and Career Readiness on the Math I EOC in 2014-15, although the overall levels of College and Career Readiness on this assessment remain quite low. Across all math, reading, and science assessments, except for biology, LIFT students in the 2014-2015 school year score as well or better than students in comparison schools when similar students are compared.

In addition, gains in Math and Reading at the CLC schools after the first two years of the CLC program are slightly above those of students in comparison K-8 schools. While students at CLC schools perform worse than students in non-CLC LIFT and other comparison schools, this is at least partially explained by lower initial performance levels before the start of the LIFT initiative. Yet all LIFT students, including those in CLC schools, have made significant gains in their reading achievement over the first three years of the initiative.



## Project LIFT: Year Three Student Outcomes Memo

Prepared by *Research for Action* • January 2016

### I. Introduction

Research for Action (RFA) is in the process of completing its third year of a five-year external evaluation of the Project Leadership and Investment for Transformation (LIFT) Initiative in the Charlotte-Mecklenburg School District (CMS).

Project LIFT is a five-year district turnaround effort created through a public-private partnership between CMS and local philanthropic and business communities. An initial investment of \$55 million in private support facilitated the development of a semi-autonomous “LIFT Learning Community” within CMS, solely dedicated to the rapid turnaround of the eight elementary and middle schools that feed into West Charlotte High School (WCHS) in the West Charlotte Corridor. While Project LIFT shares some similarities with other public-private partnerships in public education (e.g., the Harlem Children’s Zone), it is distinguished by its institutional position within CMS and its focus on developing partnerships to implement the turnaround initiative. Project LIFT’s long-term goals are to significantly improve student achievement by meeting the following targets: 1) 90% of students will achieve proficiency in math and English across the Learning Community; 2) 90% of students will meet annual growth goals in math and English; and, 3) 90% of WCHS students will graduate on time.

This memo, which focuses on student outcomes from the 2014-15 school year, is the second of three memos that RFA will produce for the Year Three external evaluation. RFA’s [Year Three Implementation Memo](#) described program and strategy implementation in the 2014-15 school year, and the third memo will present findings on LIFT partners.

The Year Three student outcomes analyses presented in this memo were guided by the following key research questions:

1. How do LIFT students’ behavioral and academic performance compare to those of a matched set of non-LIFT comparison students?
2. How do the Continuous Learning Calendars at LIFT schools affect student performance?

As seen in the Year Three Implementation Memo, Year Three was a “stabilization” year. In Years One and Two of the initiative, LIFT staff and principals rolled out multiple new programs to advance strategies across all four pillars (Talent, Time, Technology, and Parent & Community Engagement) of the initiative. However, in Year Three, LIFT’s efforts were more focused on refining key strategies implemented in Years One and Two. In particular, the LIFT staff prioritized ongoing professional development and training for

principals and teachers to focus on early literacy development, promote positive school culture, and use Data-Driven Instruction to inform teaching and learning in the LIFT schools.

As program practices have stabilized, some student outcomes measures also stabilized or improved. Key successes presented in this Student Outcomes Memo include:

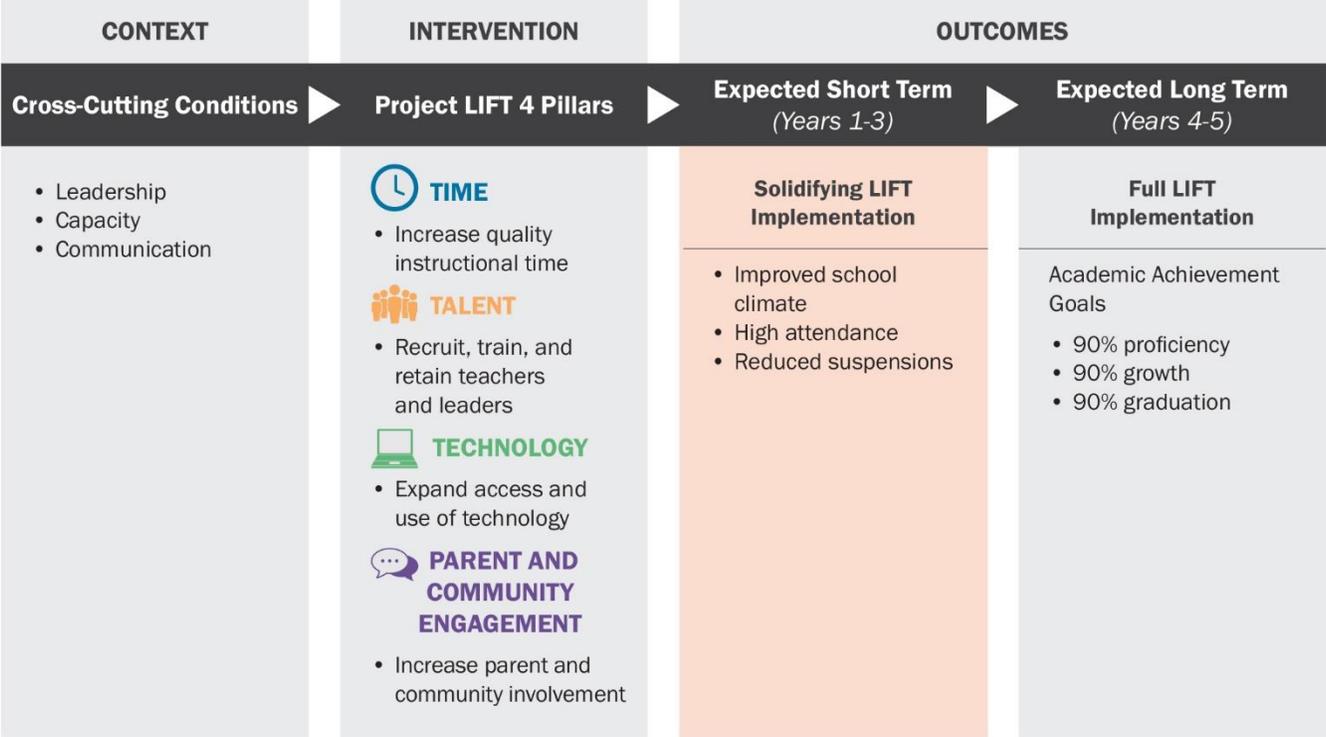
- Continued gains in the four year graduation rate at WCHS;
- Continued reductions in risk levels for incoming 9<sup>th</sup> graders at WCHS;
- Increasing percentage of 9<sup>th</sup> graders finished their freshman year on track to graduate;
- Maintained achievement gains on the Reading End-Of-Grade (EOG) assessment;
- Continued improvement on the Science EOG;
- Continued improvement on the Math I End-Of-Course (EOC) assessment; and
- Continued improvement on attendance.

However, LIFT also continued to face challenges in Year Three, including:

- Relatively low performance on the Math and Reading EOG exams and the Math I and English II EOC exams; and
- Increased use of out-of-school suspensions (OSS) at some LIFT elementary/middle schools.

The stabilization of key elements of the initiative itself, along with improvement in most short-term outcomes, generally align with the LIFT Theory of Action shown in Figure 1. Improvement on some student academic outcomes and not on others is to be expected in Year 3 of the initiative.

**Figure 1. Project LIFT Theory of Change**



This memo provides in-depth findings for Year Three outcomes, presented in the following sections:

- Section II. LIFT Student Academic Performance** includes the main impact analysis and descriptive comparisons of LIFT students and comparison students.<sup>1</sup>
- Section III. Climate at LIFT Elementary/Middle Schools** includes descriptive comparisons of LIFT students' and comparison students' attendance and behavior over time.
- Section IV. Climate at WCHS** includes a discussion of graduation rates and an analysis of Early Warning Indicators (EWI) for dropout with descriptive comparisons of LIFT students and comparison students over time.
- Section V. Continuous Learning Calendar Schools** includes comparisons of the academic performance of LIFT students in CLCs with those in non-CLC schools over the first two years of the initiative.

## II. LIFT Student Academic Performance: End of Grade and End of Course Assessments

In this section we examine academic achievement of students in LIFT schools against those of a set of comparison schools. We examine end of grade (EOG) and end of course (EOC) assessments in reading, math, and science during the three years of the LIFT initiative.<sup>2</sup>

To evaluate the academic performance of LIFT students, we compare their reading, math, and science achievement scores to those of similar students within the district.<sup>3</sup> For each subject area, we provide the following:

1. **Descriptive analyses.** Descriptive comparisons were made between the percentage of LIFT and comparison students that scored proficient or above on each EOG/EOC assessment using data from 2013-14 and 2014-15—Years Two and Three of the LIFT initiative. We utilized the full three years of data to compare the percentage of students that achieved College and Career Readiness between the LIFT and comparison school students. Next, we conducted a set of statistical tests (t-tests) to assess the significance of gains in the percentage of students achieving College and Career Readiness over the three year period of the LIFT initiative.
2. **Main impact analyses.** The main impact analysis results were generated from a set of predictive analysis models (i.e., Logit regression models) designed to assess the effects of the LIFT initiative on the likelihood of achieving College and Career Readiness on each EOG/EOC assessment. Each model controls for the following factors among the LIFT students and comparison students: prior academic achievement on North Carolina EOG/EOC assessments; 2014-15 attendance rate; whether a student received at least one OSS; race; gender; special education status; and grade level.

---

<sup>1</sup> See Appendix B for a complete list of comparison schools.

<sup>2</sup> RFA also performed additional analyses to measure academic growth during the 2014-15 school year using Discovery Education assessments for reading and math. However, because these assessments were limited to Project LIFT schools, we were unable to compare LIFT students to comparison students using their Discovery Education scores. See Appendix A for LIFT schools' growth in Discovery Education Reading and Math assessment scores for 2014-15.

<sup>3</sup> In Year One of this study we worked with CMS to identify schools in CMS that had similar characteristics as LIFT schools. See Appendix B for a list of the variables used to select comparison schools and a list of comparison schools.

## Contextual Factors Affecting the Analysis

Three important contextual factors affect our analysis and interpretation of these results. Each is described below.

### New Assessment in 2012-13

Leading up to Project LIFT’s implementation, the LIFT Governance Board established the goal of 90% proficiency in math and reading, in part based on LIFT’s 2011-12 proficiency rates.<sup>4</sup> However, North Carolina implemented a new state assessment in the 2012-13 school year—Year One of Project LIFT. As documented throughout North Carolina, and similar to research on new assessment implementation,<sup>5</sup> proficiency rates across the state, including those in the Project LIFT schools, plummeted in 2012-13. The percentage of LIFT students who scored proficient or above was 20% in the Reading EOG; 25% in the English II EOC; 23% in the Math EOG; and 12% in the Math I EOC in 2012-13. While Project LIFT’s proficiency rates rose in 2013-14, Project LIFT remains well below the proficiency rates it posted under the old assessment.

### Changes in Performance Levels in 2013-14

Prior to the 2013-14 academic year, the North Carolina Department of Public Instruction added a fifth performance level to the EOG and EOC assessments, creating two separate scales for Year One (2012-13) and all subsequent years of the LIFT initiative (see Table 1):

**Table 1. North Carolina EOG/EOC Proficiency Levels: 2012-13 and Subsequent Years**

2012-13 PERFORMANCE LEVELS	2013-14 & 2014-15 PERFORMANCE LEVELS
Level 1: Limited Command of Knowledge and Skills	Level 1: Limited Command of Knowledge and Skills
Level 2: Partial Command of Knowledge and Skills	Level 2: Partial Command of Knowledge and Skills
Level 3: Solid Command of Knowledge and Skills	Level 3: Sufficient Command of Knowledge and Skills*
Level 4: Superior Command of Knowledge and Skills	Level 4: Solid Command of Knowledge and Skills
Level 5: Superior Command of Knowledge and Skills	Level 5: Superior Command of Knowledge and Skills

 Proficiency represented in these levels

\*Newly added performance level

Using this updated performance scale, the state identified students performing at Level 3 as proficient in 2013-14 and 2014-15, whereas in previous years they would have been considered basic. Due to this change in the state proficiency scale, a valid comparison of the percentage of students who scored proficient or higher can be made only between Years Two (2013-14) and Three (2014-15) of the LIFT initiative. The College and Career Readiness scale was not affected by this change. Beginning in 2013-14, Levels 4 and 5 represented students who were on the way to College and Career Readiness, which were equivalent to Levels 3 and 4 from 2012-13. Thus, we can validly assess changes in the percentage of students who were College and Career Ready across all three years of the LIFT initiative, 2012-13 through 2014-15.<sup>6</sup>

<sup>4</sup> The 2011-12 proficiency rates were: Math: 64% EOG/34% EOC; Reading: 49% EOG/56% EOC; Science: 57% EOG/42% EOC.

<sup>5</sup> Koretz, D.M. (2002). Limitations in the use of achievement tests as measures of educators’ productivity. *Journal of Human Resources*, 37(4), 752-777.; Linn, R.L. (2000). Assessment and accountability. *Educational Researcher*, 29(2), 4-16.

<sup>6</sup> In the Year Two external evaluation report, we presented figures that showed proficiency and College and Career Readiness in the same figure to draw comparisons between the 2012-13 proficiency scale and the 2013-14 modified proficiency scale. These figures are included in Appendix C.

## Exit and Entry of Students into LIFT Schools

There has been notable mobility in the LIFT schools over the three years of the initiative. For example, only 50% of students in grades 3 through 8 who began in LIFT schools in 2012-13 were still in a LIFT school in 2014-15. Also in 2014-15, 55% of 3<sup>rd</sup> through 8<sup>th</sup> graders in LIFT schools were not in LIFT schools in 2012-13.

The high mobility of LIFT students could potentially alter the underlying characteristics of the LIFT student sample and, thus, lead to a false conclusion about true LIFT effects. For example, it is possible that the exit of high-achieving students could mask the true effect of the LIFT intervention. Alternatively, an influx of high-achieving students into LIFT schools after Year One of the initiative could make it appear that LIFT has a strong effect on student achievement when in reality gains are only due to student mobility. In order to determine if changes in achievement are due to the effect of LIFT interventions or student mobility, we conducted a number of analyses.

We compared the percent of College and Career Ready students who exited or entered LIFT schools in grades 3-8 after Year One (2012-13) to that of students who stayed at LIFT schools all three years of the initiative (between 2012-13 and 2014-15). Figure 2 shows that students who exited LIFT schools after 2012-13 (exiters) and those that entered after 2012-13 (entrants) had higher achievement than the remaining students. This suggests that bias on test scores due to student mobility into or out of LIFT schools goes in opposite directions. That is, the exit of high achievers lowered average Math or Reading EOG scores while the entrance of high achievers increased the averages, and, thus, the net student mobility effect depends on the relative magnitude of the two. Figure 2 also shows that there was a larger gap between exiting and remaining students' College and Career Readiness on the Year One Reading EOG (8%) assessment compared to the gap between remaining students and entering students' Year Three Reading EOG (3%) assessment. This suggests that student mobility (i.e., exits of relatively higher performers) might have led to a downward bias on estimated LIFT effects on Reading EOG achievement. On the other hand, the two opposite effects have the same magnitude (5% higher for both exiters and entrants) for Math, suggesting that student mobility is not likely to bias estimated LIFT effects on Math EOG.

**Figure 2. Percent College and Career Readiness for 3<sup>rd</sup>-8<sup>th</sup> Graders that Exited, Stayed, or Entered LIFT Schools between 2012-2013 and 2014-2015**



It is important to note that some of these entering students are entrants due to aging into the program and some of the exits are due to aging out of the program. For simplicity, both students who age-in and age-out of LIFT schools are included in this figure.

## LIFT Student Academic Performance Findings

Below, we provide an overview of our findings by subject area: reading, math, and science. Each subject area begins with an overview of the major findings related to student proficiency and College and Career Readiness and then moves into additional detail regarding the descriptive and main impact analyses.<sup>7</sup>

### C. Reading EOG and English II EOC

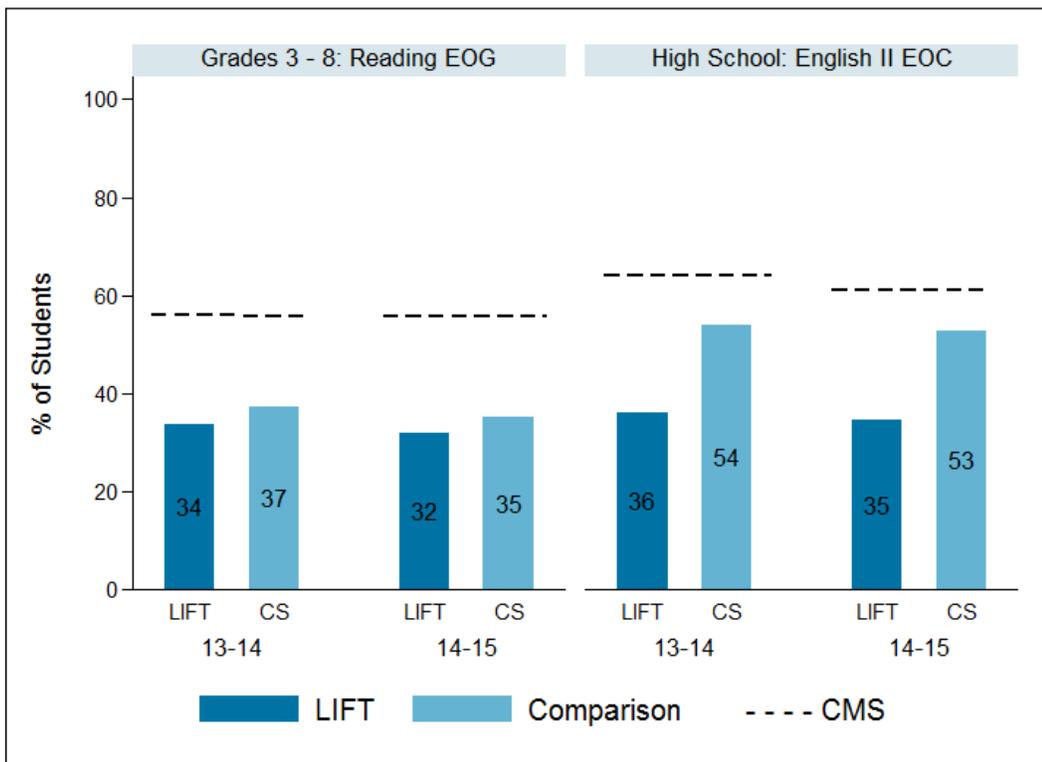
 **There is little change in the student proficiency levels on the Reading EOG for the LIFT schools and the comparison schools between 2013-14 and 2014-15. However, LIFT students made significantly greater gains in College and Career Readiness than did the comparison students on the Reading EOG since Year One of the initiative.**

**Both LIFT and comparison students' proficiency levels and College and Career Readiness remained roughly unchanged on the English II EOC.**

#### DESCRIPTIVE ANALYSIS

Figure 3 presents the percentage of LIFT and comparison students in grades 3-8 who scored proficient or above on the Reading EOG assessment, as well as high school students who scored proficient or above on the English II EOC in 2013-14 and 2014-15.

**Figure 3. Proficiency Levels on Reading EOG and English II EOC: LIFT Students vs. Comparison Students, 2013-14 and 2014-15**



<sup>7</sup> For academic outcomes, by subject area, of each LIFT school, see Appendix D, Figures 1-6.

- LIFT proficiency levels on the Reading EOG were close to that of the comparison schools, while WCHS students' performance on the English II EOC remained well below that of comparison high school students' in both 2013-14 and 2014-15.
  - Reading EOG (LIFT vs. Comparison): 34% vs. 37% in 2013-14 and 32% vs. 35% in 2014-15
  - English II EOC (LIFT vs. Comparison): 36% vs. 54% in 2013-14 and 35% vs. 53% in 2014-15
- Student proficiency levels on the Reading EOG and English II EOC assessments remained almost unchanged between 2013-14 and 2014-15.

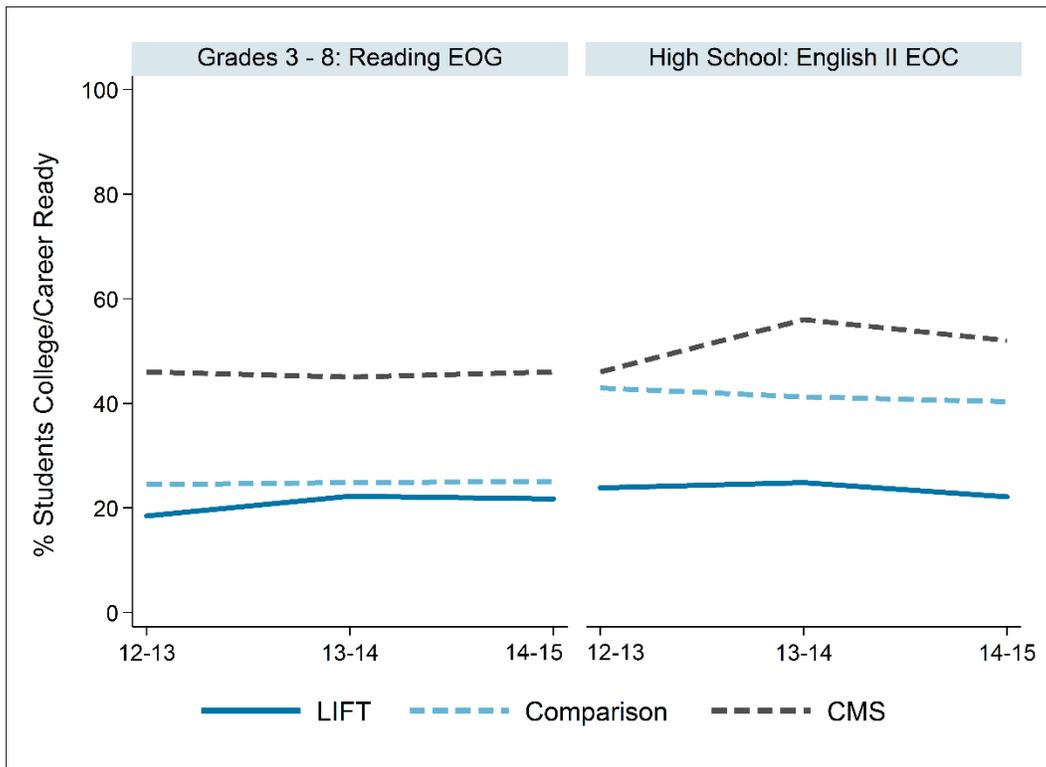


**On the Reading EOG, LIFT students achieved significantly greater gains in College and Career Readiness in 2013-14 and maintained these gains in 2014-15.**

**Performance on the English II EOC has remained unchanged.**

Figure 4 presents the percentage of LIFT and comparison students who achieved College and Career Readiness on the Reading EOG and English II EOC during the first three years of the initiative. In the table below Figure 4, we assess the significance of gains in the percentage of students achieving College and Career Readiness in years 2013-14 and 2014-15 compared to the 2012-13 school year.

**Figure 4. Percent of Students Achieving College and Career Readiness on the Reading EOG and English II EOC, 2012-13 to 2014-15**



	READING EOG			ENGLISH II EOC		
	2012-13	2013-14	2014-15	2012-13	2013-14	2014-15
LIFT - % College and Career Ready	18%	22%+	22%+	24%	25%	22%
Comparison - % College and Career Ready	24%	25%	25%	43%	41%	40%

+ Statistically significant gains compared to 2012-13

- On the Reading EOG, LIFT students have made significant gains in College and Career Readiness since Year One of the initiative.
  - The performance of comparison students in Reading has remained roughly unchanged throughout the initiative.
- On the English II EOC, the performance of LIFT and comparison students has remained roughly unchanged throughout the initiative.
  - The percentage of LIFT students achieving College and Career Readiness was well below that of the comparison students.
- On both the Reading EOG and the English II EOC, the percentage of both LIFT and comparison students that achieved College and Career Readiness remained well below CMS levels.

**Note on Interpretation of Main Impact Analyses**

In sub-sections throughout this document entitled Main Impact Analyses, we present rigorous analyses of impact that are based on logistic regressions. Results are presented in terms of odds ratios. Odds ratios greater than one indicate that LIFT students were more likely to achieve an outcome than were non LIFT students. Odds ratios below 1 indicate that LIFT students were less likely to achieve an outcome than were non-LIFT students. If the odds ratio does not have a symbol indicating statistical significance, there is no meaningful difference between the two groups.

Logistic regression analyses were conducted to examine the effects of the LIFT initiative on the likelihood of LIFT students achieving College and Career Readiness relative to that of the comparison students. Odds ratios reported in Table 2 indicate the likelihood of LIFT students achieving College and Career Readiness compared to comparison students, while controlling for prior academic achievement, 2014-15 attendance, behavior, and student demographics. An odds ratio greater than 1 suggests that LIFT students are more likely to achieve college and career readiness, while odds ratios below 1 suggest that LIFT students are less likely to achieve College and Career Readiness than the comparison students.



**Compared to similar students within the comparison group, LIFT students had an equal or greater likelihood of achieving College and Career Readiness on the Reading EOG and English II EOC during the first three years of the LIFT initiative (see Table 2).**

**Table 2. Difference in the Likelihood of Achieving College and Career Readiness on the Reading EOG and English II EOC between LIFT and Comparison Students**

	READING EOG			ENGLISH II EOC		
	2012-13	2013-14	2014-15	2012-13	2013-14	2014-15
Odds Ratio: LIFT vs. Comparison	0.90	1.46**	1.08	NA	1.03	1.27

**Notes:**

- <sup>^</sup>  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$
- Controlling for prior academic achievement, current year attendance, behavior, and student demographics
- Odds ratios greater than 1 suggests that LIFT students are more likely to achieve College and Career Readiness, while odds ratios below 1 suggest that LIFT students are less likely to achieve College and Career Readiness than the comparison students.

After controlling for prior academic achievement, current year attendance, behavior, and student demographics, we find that:

- In 2013-14, LIFT students were more likely to achieve College and Career Readiness on the Reading EOG than the comparison students.
- LIFT and comparison students were just as likely to achieve College and Career Readiness on the Reading EOG in 2012-13 and 2014-15.
- LIFT and comparison students were equally likely to achieve College and Career Readiness on the English II EOC in 2013-14 or 2014-15.

D. Math EOG and Math I EOC



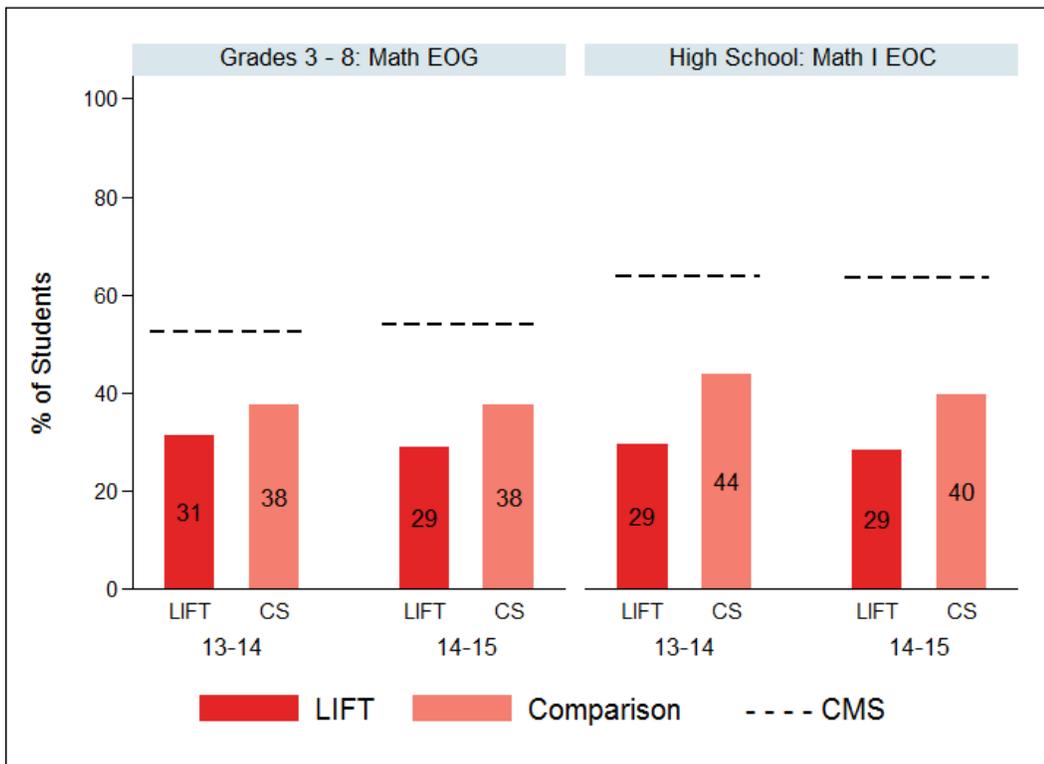
**Both LIFT and comparison students' proficiency levels and College and Career Readiness remained roughly unchanged on the Math EOG.**

**The percentage of WCHS students achieving College and Career Readiness on the Math I EOC has steadily increased since Year One of the LIFT initiative. WCHS students' gains in College and Career Readiness significantly outpaced those of the comparison students between 2013-14 and 2014-15.**

*DESCRIPTIVE ANALYSIS*

Figure 5 presents the percentage of LIFT and comparison students in grades 3-8 who scored proficient or above on the Math EOG assessment, as well as high school students who scored proficient or above on the Math I EOC in 2013-14 and 2014-15.

**Figure 5. Proficiency Levels on Math EOG and Math I EOC: LIFT Students vs. Comparison Students, 2013-14 and 2014-15**



- On both the Math EOG and the Math I EOC, a greater percentage of comparison students scored proficient or above than did LIFT students in 2013-14 and 2014-15.
  - Math EOG (LIFT vs. Comparison): 31% vs. 38% in 2013-14 and 29% vs. 38% in 2014-15
  - Math I EOC (LIFT vs. Comparison): 29% vs. 44% in 2013-14 and 29% vs. 40% in 2014-15
- On the Math EOG, the percentage of LIFT students who scored proficient declined slightly in 2014-15 while it stayed at the same level for comparison students.

- In contrast, the percentage of comparison students who scored proficient or above on the Math I EOC declined slightly in 2014-15 while that of LIFT students remained at the same level between 2013-14 and 2014-15.
  - Math EOG (LIFT vs. Comparison): -2 % vs. 0%
  - Math I EOC (LIFT vs. Comparison): 0% vs. -4%

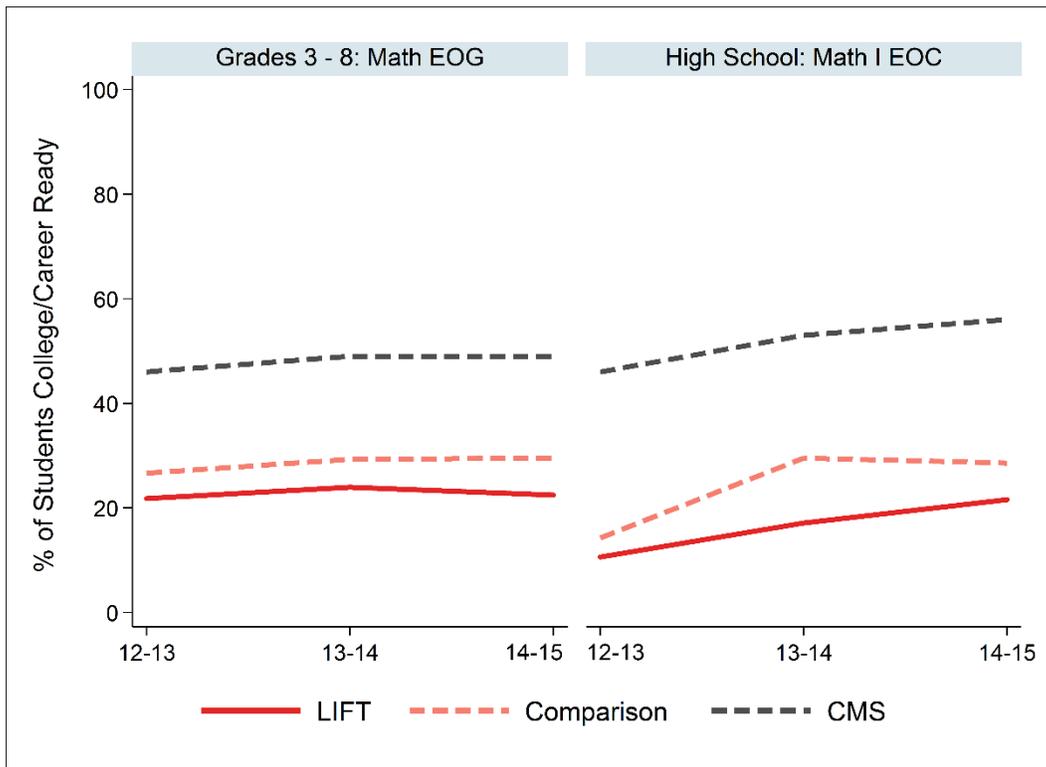
While LIFT students' Math I EOC proficiency levels remained at 29%, the percentage of students who reached the level of College and Career Readiness increased notably from 2013-14 to 2014-15.



**Between 2013-14 and 2014-15, LIFT students' gains in College and Career Readiness on the Math I EOC assessment significantly outpaced that of the comparison students. However, the percentage of LIFT students who reached College and Career Readiness on Math EOG assessments remained constant over the three years of the initiative.**

Figure 6 presents the percentage of LIFT and comparison students who achieved College and Career Readiness on the Math EOG and Math I EOC during the first three years of the initiative. In the table below Figure 6, the significance of gains in the percentage of students achieving College and Career Readiness was assessed by comparing 2013-14 and 2014-15 scores to 2012-13 scores.

**Figure 6. Percent of Students Achieving College and Career Readiness on the Math EOG and Math I EOC, 2012-13 to 2014-15**



	MATH EOG			MATH I EOC		
	2012-13	2013-14	2014-15	2012-13	2013-14	2014-15
LIFT - % College and Career Ready	23%	24%	22%	11%	16%+	22%+
Comparison - % College and Career Ready	28%	29%	29%	14%	30%+	29%+

+ Significantly different from 2012-13

- On the Math EOG, neither the LIFT students nor the comparison students have made significant improvements in College and Career Readiness since 2012-13.
- On the Math I EOC, both the LIFT and comparison students made significant gains in College and Career Readiness since in Year One of the initiative.
- On both the Math EOG and the Math I EOC, the percentage of the LIFT and comparison students achieving College and Career Readiness remained well below CMS levels.

#### MAIN IMPACT ANALYSES

Results presented in this section were generated from a set of logistic regression analyses designed to assess the difference in the likelihood of achieving College and Career Readiness on the Math EOG and Math I EOC between LIFT and comparison students, controlling for prior academic achievement, 2014-15 attendance, behavior, and student demographics.



- Compared to similar students, LIFT students had an equal or greater likelihood of achieving College and Career readiness on the Math EOG and Math I EOC assessments during the three years of the LIFT initiative.
- Compared to similar students, LIFT students were twice as likely to reach college and career readiness in Math I EOC in 2014-15. (See Table 3).

**Table 3. Difference in the Likelihood of Achieving College and Career Readiness on the Math EOG and Math I EOC Assessments between LIFT and Comparison Students**

	MATH EOG			MATH I EOC		
	2012-13	2013-14	2014-15	2012-13	2013-14	2014-15
Odds Ratio: LIFT vs. Comparison	1.40*	1.38	1.19	NA	1.14	2.27^

**Notes:**

- ^  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$
- Controlling for prior academic achievement, current year attendance, behavior, and student demographics
- Odds ratios greater than 1 suggests that LIFT students are more likely to achieve College and Career Readiness, while odds ratios below 1 suggest that LIFT students are less likely to achieve College and Career Readiness than the comparison students.

After controlling for prior academic achievement, current year attendance, behavior, and student demographics we found that:

- On the Math EOG, LIFT students were slightly more likely to achieve College and Career Readiness than the comparison students in 2012-13.
- LIFT and comparison students were just as likely to achieve College and Career Readiness on the Math EOG in 2013-14 and 2014-15.
- On the Math I EOC, LIFT students were more than twice as likely as the comparison students to achieve College and Career Readiness in 2014-15, while no significant difference was found in 2013-14.

**E. Science EOG and Biology EOC**



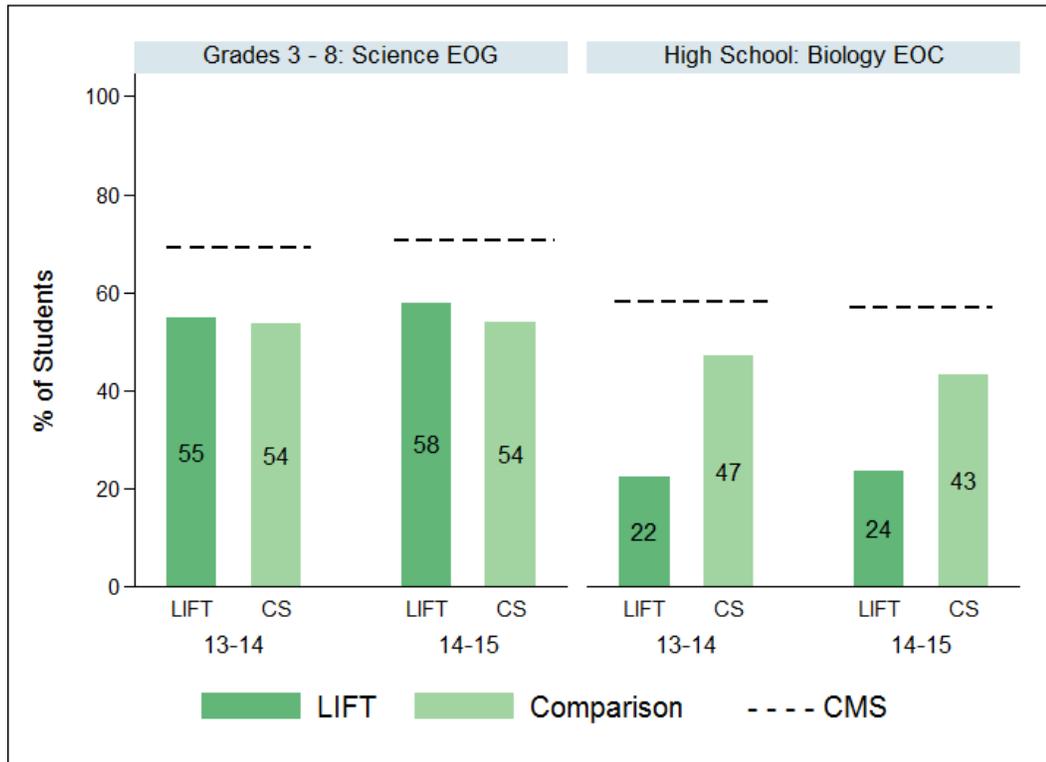
**On the Science EOG, LIFT students have outpaced the comparison students in both proficiency levels and College and Career Readiness since Year One of the LIFT initiative.**

**While WCHS students' proficiency levels increased slightly on the Biology EOC between 2013-14 and 2014-15, their proficiency and College Readiness levels remained considerably lower than those of the comparison group since Year One of the LIFT initiative.**

*DESCRIPTIVE ANALYSIS*

Figure 7 presents the percentage of LIFT and comparison students in grades 5 and 8 who scored proficient or above on the Science EOG assessment, as well as high school students who scored proficient or above on the Biology EOC in 2013-14 and 2014-15.

**Figure 7. Proficiency Levels on Science EOG and Biology EOC: LIFT Students vs. Comparison Students, 2013-14 and 2014-15**



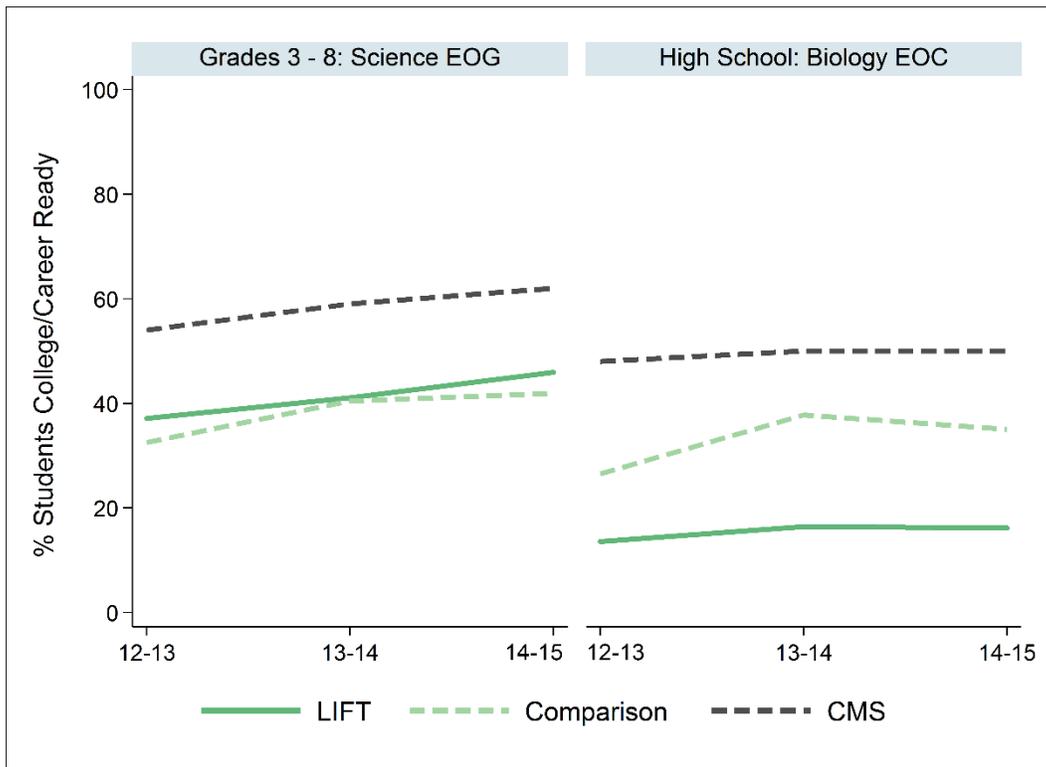
- On the Science EOG, a slightly higher percentage of LIFT students scored proficient or above than did the comparison students in both 2013-14 and 2014-15.
  - Science EOG (LIFT vs. Comparison): 55% vs. 54% in 2013-14 and 58% vs. 54% in 2014-15
- On the Biology EOC, a much greater percentage of comparison students scored proficient or above than the LIFT students in both years.
  - Biology EOC (LIFT vs. Comparison): 22% vs. 47% in 2013-14 and 24% vs. 43% in 2014-15
- On both the Science EOG and the Biology EOC, gains in student proficiency were greater at the LIFT schools than the comparison schools between 2013-14 and 2014-15.
  - Science EOG (LIFT vs. Comparison): +3 % vs. 0%
  - Biology EOC (LIFT vs. Comparison): +2% vs. -4%



**In 2014-15, LIFT students continued to make College and Career Readiness gains on the Science EOG assessment in grades 3-8. In contrast, LIFT students had much lower levels of College and Career Readiness on the Biology EOC compared to students in the comparison schools.**

Figure 8 presents the percentage of LIFT and comparison students who achieved College and Career Readiness on the Science EOG and Biology EOC during the first three years of the initiative. In the table below Figure 8, the significance of gains in the percentage of students achieving College and Career Readiness was assessed by comparing 2013-14 and 2014-15 scores to 2012-13 scores.

**Figure 8. Percent of Students Achieving College and Career Readiness on the Science EOG and Biology EOC, 2012-13 to 2014-15**



	SCIENCE EOG			BIOLOGY EOC		
	2012-13	2013-14	2014-15	2012-13	2013-14	2014-15
LIFT - % College and Career Ready	37%	41%	46%+	14%	16%	16%
Comparison - % College and Career Ready	32%	40%+	42%+	27%	38%+	35%+

+ Significantly different from 2012-13

- On the Science EOG, the percentage of both the LIFT and the comparison students achieving College and Career Readiness has steadily increased since 2012-13 and was significantly greater in 2014-15 than in Year One of the initiative.
  - Between 2013-14 and 2014-15, LIFT students made greater gains than did the comparison students (5% vs. 2%).
- On the Biology EOC, the percentage of students achieving College and Career Readiness has remained consistently low, while the comparison schools have made significant improvements since 2012-13.
- On both the Science EOG and the Biology EOC, the percentage of LIFT and comparison students achieving College and Career Readiness remains well below CMS levels.

MAIN IMPACT ANALYSES

Results presented in this section were generated from a set of logistic regression analyses designed to assess the significance of the difference between the LIFT and comparison students in the likelihood of achieving College and Career Readiness on the Science EOG and Biology EOC, controlling for prior academic achievement, current year attendance, behavior, and student demographics.

-  • **Compared to similar students, LIFT students performed equally or notably better than comparison students in the Science EOG assessment.**
- **In contrast, when compared to similar students, LIFT students performed notably worse than comparison students in the Biology EOC assessment.**

**Table 4. Difference in the Likelihood of Achieving College and Career Readiness on the Science EOG and Biology EOC, LIFT vs. Comparison Students**

	SCIENCE EOG			BIOLOGY EOC		
	2012-13	2013-14	2014-15	2012-13	2013-14	2014-15
Odds Ratio: LIFT vs. Comparison	1.73*	1.61^	1.81	NA	.43***	.46***

**Notes:**

- ^  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$
- *Controlling for prior academic achievement, current year attendance, behavior, and student demographics*
- *Odds ratios greater than 1 suggests that LIFT students are more likely to achieve College and Career Readiness, while odds ratios below 1 suggest that LIFT students are less likely to achieve College and Career Readiness than the comparison students.*

After controlling for prior academic achievement, current year attendance, behavior, and student demographics we found that:

- On the Science EOG, LIFT students were significantly more likely to achieve College and Career Readiness than were the comparison students in 2012-13 and 2013-14.
- While the likelihood of LIFT students achieving College and Career Readiness remained higher than that of the comparison students in 2014-15, it was not statistically significant.
- LIFT students were less than half as likely as the comparison students to achieve College and Career Readiness on the Biology EOC assessment in 2013-14 and 2014-15.

F. Summary of Academic Performance Over Three Years

**Since the first year of the initiative, students in LIFT schools have made statistically significant gains in College and Career Readiness on the Reading EOG, Math I EOC, and Science EOG:**

-  • **Reading EOG: an increase from 18% to 22%**
- **Math I EOC: an increase from 11% to 22%**
- **Science EOG: an increase from 37% to 46%**
- **In the other three assessments—English II EOC, Math EOG, and Biology EOC—there were no statistically significant differences in percent College and Career Ready between Years One and Three.**

In Reading in 2014-15, LIFT 3<sup>rd</sup>-8<sup>th</sup> graders maintained the significant gains they achieved in the percent College and Career Ready on the Reading EOG during the 2013-14 school year. On the Math I EOC, LIFT students continued to make substantive gains in College and Career Readiness in 2014-15.

Overall proficiency levels in the LIFT schools remain below those of both the comparison schools and CMS proficiency levels, particularly in math and reading. However, with the exception of Math I and Biology, when we compare the likelihood of achieving College and Career Readiness among similar students in similar schools, the differences between LIFT students and students in comparison schools are statistically insignificant.



- **Across all EOG assessments in Reading, Math and Science, LIFT and comparison students in grades 3-8 were as likely to achieve College and Career Readiness in 2014-15, after taking into account their prior academic achievement, attendance, behavior, and demographics.**
- **In high school level subjects, LIFT students were more than twice as likely to achieve College and Career Readiness as were the comparison students on the Math I EOC. LIFT students had similar levels of College and Career Readiness on the English II EOC but were significantly less likely to achieve College and Career Readiness than the comparison students in Biology in 2014-15.**

While LIFT students made substantial progress on the Math I EOC, WCHS remains an area of concern for Project LIFT. WCHS students' proficiency levels were very low across all the EOC assessments, and their performance on the Biology EOC remained significantly below that of the comparison students in 2014-15.

### III. Climate at LIFT Elementary/Middle Schools: Student Attendance and Behavior

In Year Three, Project LIFT focused on improving and promoting positive school culture through three types of support: No Nonsense Nurturing, Pulse Checks, and Peer Coaching.<sup>8</sup> These supports may have affected how school climate indicators such as OSS were identified and reported.

School-level changes, including staff turnover and changes in reporting systems, may also influence changes along key climate indicators across the first three years of the initiative. For example, the increased focus on school culture caused at least one school to reevaluate the accuracy of the school's student discipline and referral reporting in 2014-15. Said the principal,

*I'm not going to be surprised if our actual discipline numbers go up because one thing I learned is that I'm not sure we had accurate reporting [in previous years]. [For 2014-15] we have actual data reporting. We know when a student gets a referral. We know when out-of-school suspensions are getting put into the computer system. All those kinds of things may or may not have been happening before.*

For Year Three, we analyzed attendance and OSS as key school climate indicators. A summary of our results is below.<sup>9</sup>

---

<sup>8</sup> For additional information regarding these supports, see the Year Three Implementation Memo.

<sup>9</sup> Enrollment and attendance data for each LIFT school can be found in Appendix D, Figures D7-8.

## Attendance



**Average daily attendance at LIFT schools remained above 94% for the third year in a row. The overall attendance of the LIFT students improved compared to the comparison group students.**

As can be seen in Table 5, LIFT schools have maintained high levels of attendance and have closed the gap in attendance between LIFT and comparison schools that existed prior to the initiative.

**Table 5. Average Annual Attendance in Percent for K-8 Students by Year, LIFT vs. Comparison Students**

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
<b>LIFT</b>	94.5	94.7	94.2	94.2	94.1	94.7
<b>Comparison</b>	95.2	95.2	95.3	94.6	94.8	94.9
	<i>Pre-LIFT</i>			<i>Post-LIFT</i>		



**Attendance in LIFT schools improved considerably in grades 2, 5, 6 and 8, compared to similar students in comparison schools.**

We examined six years of longitudinal data and utilized an interrupted time series regression analysis to evaluate the effects of the LIFT initiative on K-8<sup>th</sup> graders' annual attendance rate. This time-series design identifies the impact that the LIFT initiative had on students' average annual attendance rate by measuring the deviation of LIFT students' attendance rate after the initiative from its baseline trend prior to the initiative as well as from the trend of the comparison group students' attendance rates over time. Since the distribution of attendance rates varies significantly across grades, we conducted separate time series regression analyses for each grade.

The regression coefficients below indicate the average percent change in the annual attendance rate between the LIFT and comparison groups, controlling for the underlying trend prior to the LIFT intervention (2009-10 through 2011-12).

**Table 6. Time Series Regression Analyses: Effects of LIFT on Annual Attendance by Grade**

Year	Grade									
	K	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>	8 <sup>th</sup>	Overall
<b>12-13</b>	N.E.	0.92*	0.95*	-0.81 <sup>^</sup>	N.E.	1.64***	2.11***	N.E.	2.39**	0.90***
<b>13-14</b>	N.E.	0.15	1.36*	-0.65	N.E.	2.47***	2.09**	N.E.	2.62**	0.79***
<b>14-15</b>	N.E.	0.17	2.16**	-0.49	N.E.	2.94***	3.35***	2.18*	5.21***	1.62***

<sup>^</sup>  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ ; N.E. means no statistically significant LIFT effect.

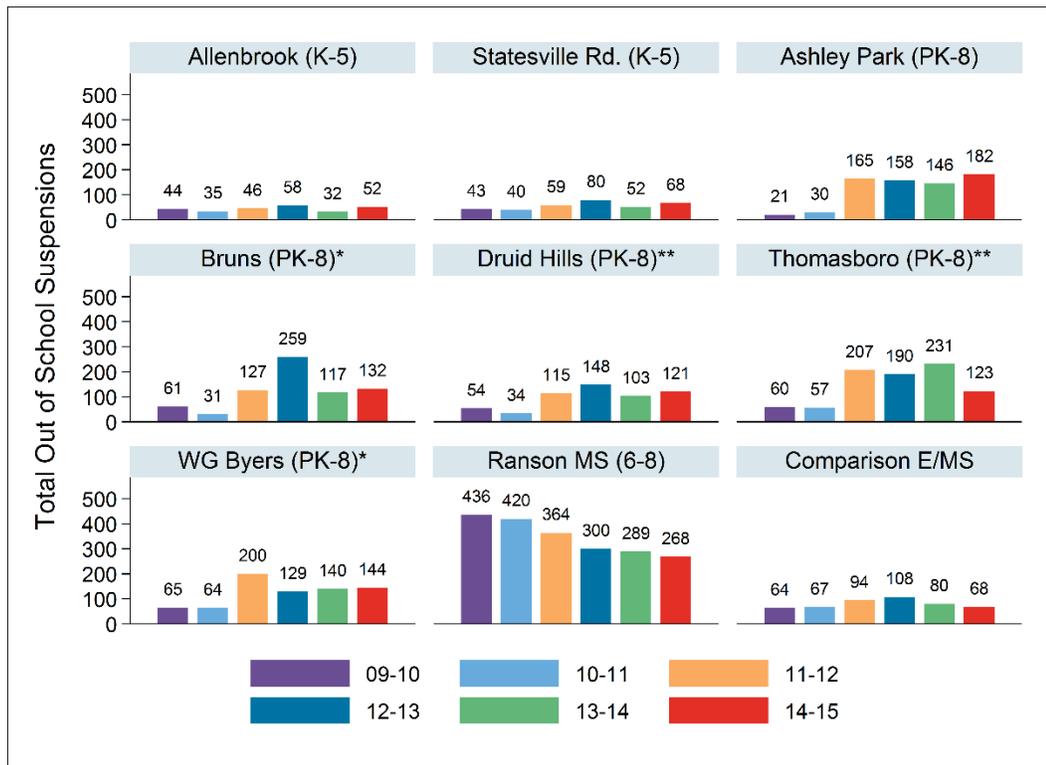
- In contrast to the comparison group, attendance among LIFT students considerably improved in grades 2, 5, 6 and 8.
- In these grades, the average attendance rates increased by about 1% to 5% since Year One of the LIFT initiative.

## Out-of-School Suspensions



**There was considerable variation in the use of OSS across individual LIFT schools.** Figure 9 presents the total number of students who received at least one OSS at LIFT schools from 2011-12 to 2014-15.

**Figure 9. Total Students with at least One OSS at LIFT Schools, 2011-12 to 2014-15**

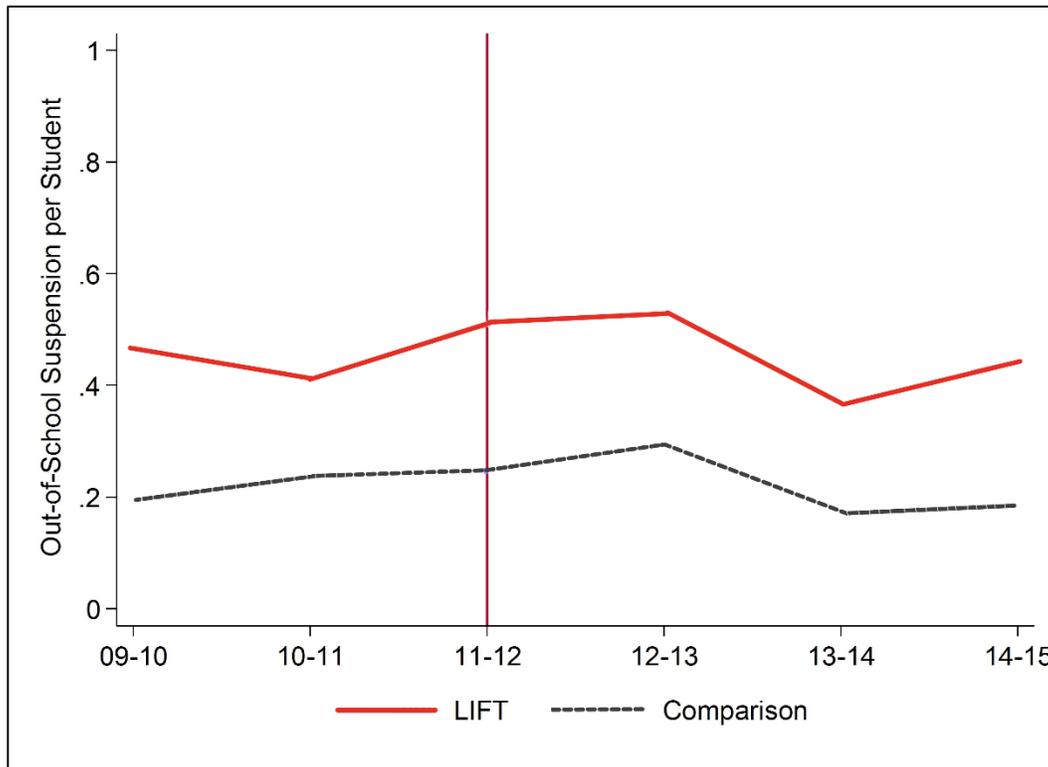


- The number of students with at least one OSS declined substantially at Thomasboro Academy, and more modestly at Ranson Middle School.
- The number of students with at least one OSS increased at all other LIFT elementary/middle schools in 2014-15.



**Overall, the number of OSS per student per year for K-8<sup>th</sup> grade LIFT students remained twice as high as that of the comparison school students during the 2009-10 through 2014-15 school years (see Figure 10).**

**Figure 10. Number of OSS per Student, 2009-10 to 2014-15**



	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
<b>LIFT</b>	0.46	0.41	0.51	0.53	0.37	0.44
<b>Comparison</b>	0.20	0.24	0.25	0.29	0.17	0.19
<b>Difference</b>	0.27***	0.18***	0.26***	0.23***	0.20***	0.26***
	<i>Pre-LIFT</i>			<i>Post-LIFT</i>		

<sup>^</sup>  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

- The difference in suspension rates between the LIFT and Comparison students was slightly narrower in Years 2012-13 and 2013-14, but it was wider in 2014-15.

Similar to the attendance analysis reported in Section A above, we used six years of longitudinal data and an interrupted time series regression analyses to evaluate the effects of the LIFT initiative on K-8<sup>th</sup> graders' annual OSS rates. This time-series design identifies the impact that the LIFT initiative had on students' average annual OSS rate by measuring the deviation of LIFT students' OSS rate after the initiative from its baseline trend prior to the initiative as well as from the trend of the comparison group students' OSS rates over time. Since the distribution of OSS rates varies significantly across grades, we conducted separate time series regression analyses for each grade.



- The LIFT effects on the number of OSS per student were not consistent across K-8<sup>th</sup> grades during the three years of the initiative.
- OSS declined in grades 1 and 5 but increased in grades 3 and 4 among similar students in LIFT schools and comparison schools.

In Table 7, the regression coefficients indicate the average difference in the number of OSS per student between the LIFT and comparison groups, controlling for the underlying trend prior to the LIFT intervention (Year 2009-10 through 2011-12).

**Table 7. Time Series Regressions Analyses: Effects of LIFT on the Number of OSS per Student by Grade**

YEAR	GRADE									
	K	1 <sup>ST</sup>	2 <sup>ND</sup>	3 <sup>RD</sup>	4 <sup>TH</sup>	5 <sup>TH</sup>	6 <sup>TH</sup>	7 <sup>TH</sup>	8 <sup>TH</sup>	OVERALL
12-13	N.E.	-0.15***	N.E.	0.38***	N.E.	-0.18***	N.E.	N.E.	N.E.	N.E.
13-14	N.E.	-0.24***	N.E.	N.E.	0.30***	-0.26***	N.E.	N.E.	N.E.	N.E.
14-15	N.E.	-0.27***	N.E.	N.E.	0.29***	N.E.	N.E.	N.E.	N.E.	N.E.

<sup>^</sup>  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ ; N.E. means no statistically significant LIFT effect.

- The number of OSS per student significantly dropped for the LIFT group in grade 1 during all three LIFT years (2012-13 to 2014-15) and in grade 5 during the first two LIFT years (2012-13 and 2013-14).
- The number of suspensions per student increased in grade 3 during 2012-13 and in grade 4 during 2013-14 and 2014-15.

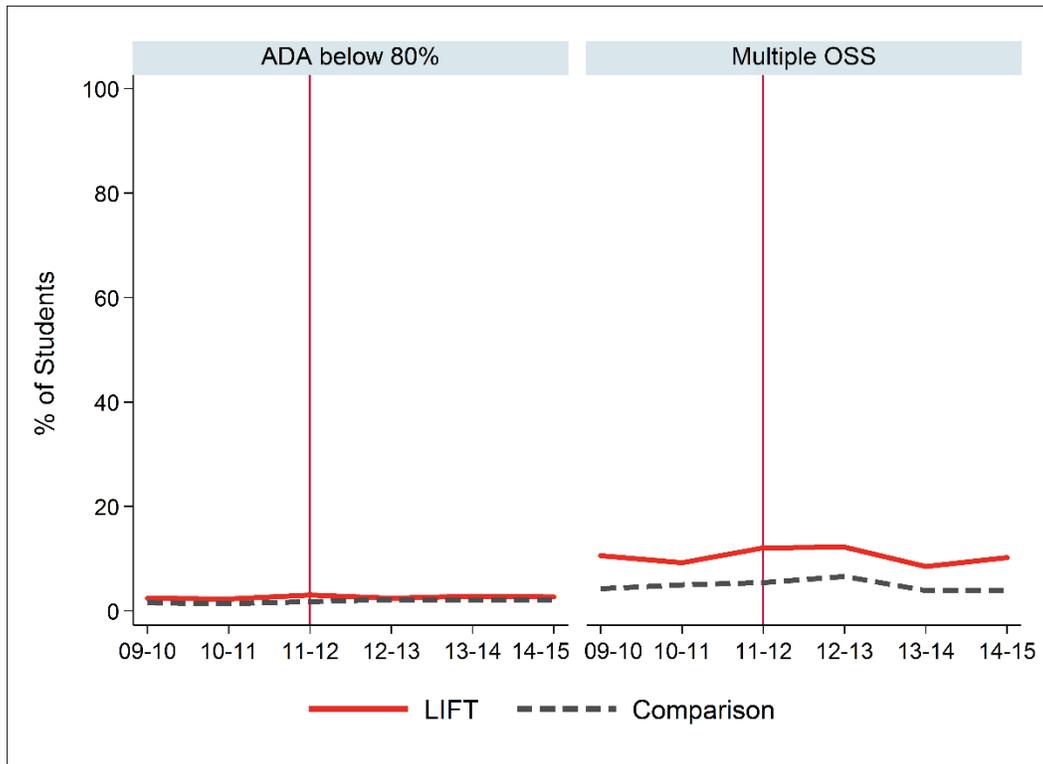
### Changes Over Time in Elementary/Middle School Climate Risk Factors



**As in previous years, a very low, roughly equivalent percentage of LIFT K-8 and comparison students had attendance rates below 80% in 2014-15. However, a substantially greater percentage of LIFT K-8 students received more than one OSS than did students at comparison schools.**

Figure 11 presents a comparison between LIFT students and students from the comparison schools who finished the school year with attendance rates below 80%, or with two or more OSS from 2011-12 to 2014-15. In Figure 11, the red lines represent the year prior to the start of Project LIFT, the 2011-12 school year.

**Figure 11. Percent of K-8 Students with At-Risk Attendance or Multiple OSS, 2009-10 to 2014-15**



<b>ADA BELOW 80%</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>
<b>LIFT</b>	2%	1%	2%	2%	2%	2%
<b>Comparison</b>	2%	2%	3%	2%	3%	3%
<b>MULTIPLE OSS</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>
<b>LIFT</b>	4%	5%	5%	7%	4%	4%
<b>Comparison</b>	11%	9%	12%	12%	8%	10%

- A roughly equivalent percentage of LIFT elementary/middle students finished the school year with an attendance rate below 80%.
- A substantially greater percentage of LIFT students received multiple OSS than did students in the comparison schools in the first three years of the initiative: 2012-13 to 2014-15.

### School Climate in Each LIFT Elementary/Middle School

The findings presented in this section point to somewhat mixed success in sustaining positive school climate improvements in Year Three of LIFT. Attendance remained high, while there were increases in OSS observed in many of the LIFT elementary/middle schools. The observed increases in suspensions at LIFT schools may be the result of multiple factors, including: increased use of suspensions associated with the transition to the No Nonsense Nurturing approach to school discipline in the LIFT elementary/middle schools, improved accuracy in reporting OSS at individual schools, or simply greater disciplinary infractions among students at LIFT schools.

Table 8 summarizes the performance of the LIFT schools along these key climate measures in Years One through Three.

**Table 8. LIFT School Climate Measures in Years One through Three**

LIFT SCHOOLS	ADA ABOVE 90%			OSS REDUCTIONS FROM PREVIOUS SCHOOL YEAR		
	2012-13	2013-14	2014-15	2012-13	2013-14	2014-15
Allenbrook (K-5)	✓	✓	✓	X	✓	X
Statesville Rd (K-5)	✓	✓	✓	X	✓	X
Ashley Park (PK-8)	✓	✓	✓	✓	✓	X
Bruns (PK-8)	✓	✓	✓	X	✓	X
Druid Hills (PK-8)	✓	✓	✓	X	✓	X
Thomasboro (PK-8)	✓	✓	✓	✓	X	✓
WG Byers (PK-8)	✓	✓	✓	✓	✓	X
Ranson MS (6-8)	✓	✓	✓	✓	✓	✓

✓ Performance remained stable or improved

#### IV. Climate at WCHS: Graduation Rates, Early Warning Indicators, Attendance, and Credits Earned

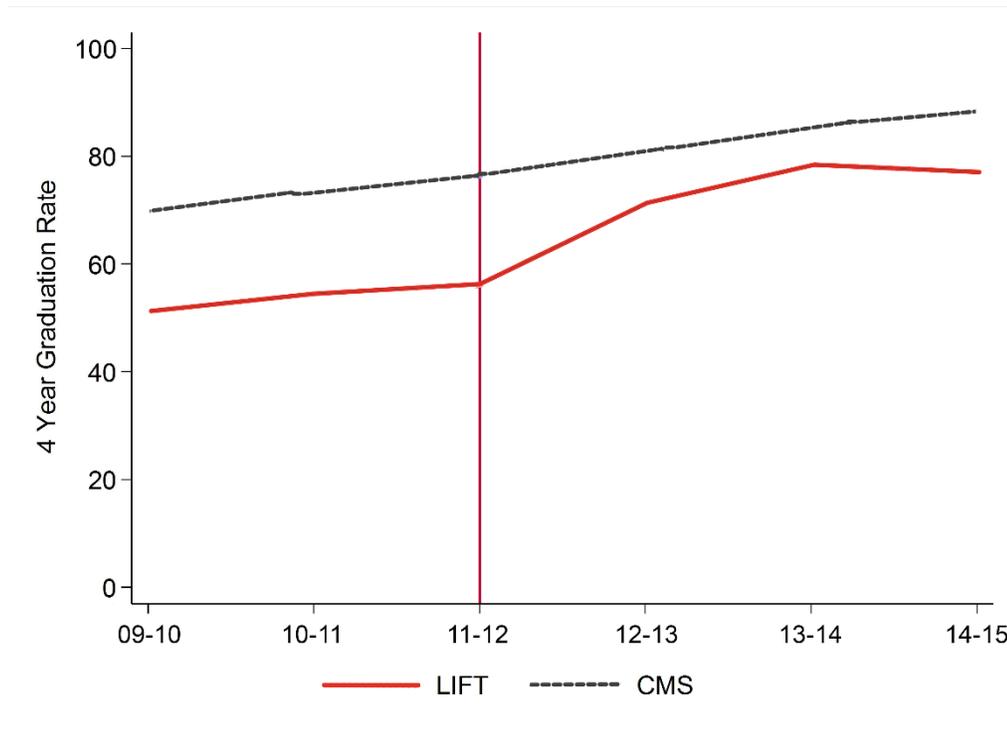
This section examines trends in graduation rates, characteristics of the incoming 9<sup>th</sup> grade cohort, and trends in attendance, behavior, and credits earned at WCHS.

##### High School Graduation Rates

 **Over the first three years of the initiative, the four year graduation rate at WCHS has increased substantially compared to pre-initiative levels.**

Figure 12 presents the state-reported, four-year graduation rates for WCHS and CMS for the three years prior to the start of Project LIFT and the first three years of the initiative.

**Figure 12. Percent of Students Graduating from High School in Four Years, 2009-10 to 2014-15**



- The four year graduation rate at WCHS has increased substantially from 56.1% in the year prior to the start of Project LIFT to 76.9% after Year Three of the initiative.<sup>10</sup>
- The gap in graduation rates between WCHS and other CMS high schools has decreased since the start of LIFT.

### Early Warning Indicators for First-Time 9th Graders

Students' 9<sup>th</sup> grade performance, in particular, is one of the strongest predictors of high school graduation. To track 9<sup>th</sup> grade cohorts' likelihood of dropping out, RFA analyzed students' status in four Early Warning Indicator (EWI) domains:

1. Daily attendance below 80%
2. Multiple OSS
3. Course failure
4. Earning three or fewer credits.

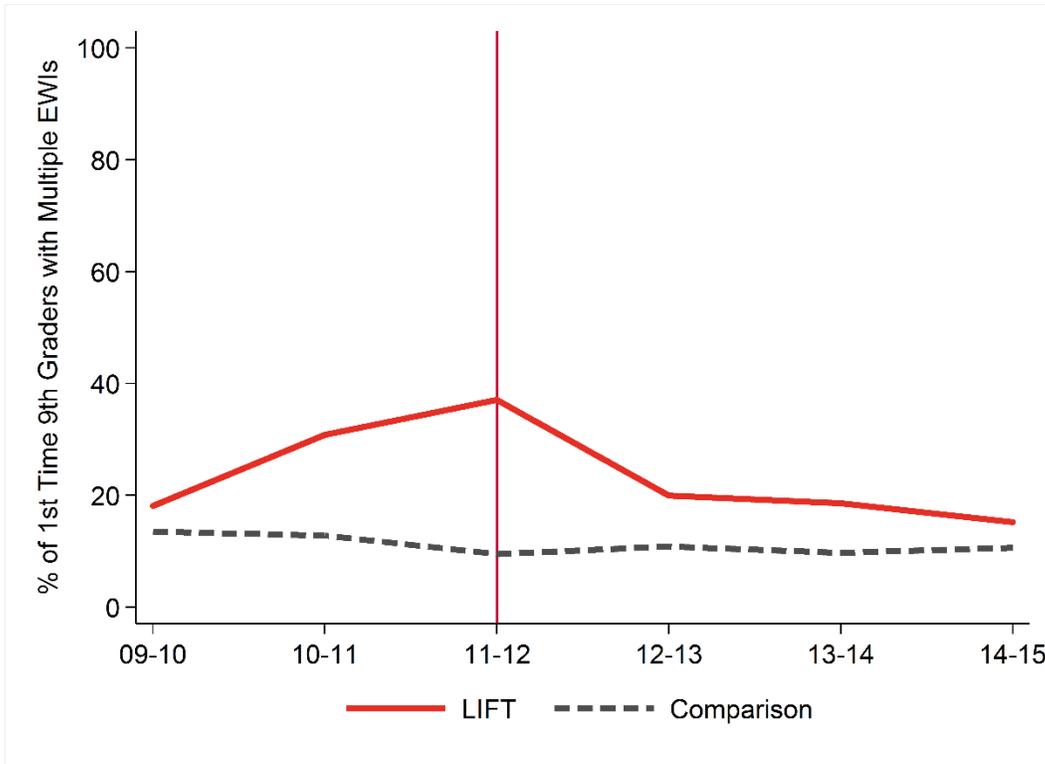
First, we describe the percentage of first-time 9<sup>th</sup> graders accumulating EWIs both at WCHS and at comparison schools. Then, we examine how the percentage of incoming 9<sup>th</sup> graders accumulating multiple EWIs has changed over the course of the LIFT initiative. The section concludes with a detailed examination of individual EWIs, and how percentages of 9<sup>th</sup> graders with each EWI has changed from LIFT's inception.

<sup>10</sup> <http://www.ncpublicschools.org/accountability/reporting/cohortgradrate>



Since the Project LIFT was implemented, there have been sizable reductions in the percentage of WCHS incoming 9<sup>th</sup> graders accumulating multiple EWIs during their first year in high school. Figure 13, below, presents the percentage of WCHS and comparison high school students who accumulated multiple EWIs during their first year in high school during the first three years of the initiative.<sup>11</sup>

**Figure 13. Percentage of Incoming 9<sup>th</sup> Graders Accumulating Multiple EWIs, 2009-10 - 2014-15**



	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
<b>LIFT - % of students with multiple EWIs</b>	18%+	31%+	37%	20%+	19%+	15%+
<b>Comparison - % of students with multiple EWIs</b>	13%+	13%+	9%	11%	10%	11%

<sup>+</sup> Significantly different from 2011-12

- In the years leading up to the start of the Project LIFT initiative at WCHS, an increasing percentage of incoming 9<sup>th</sup> grade cohorts were accumulating multiple EWIs during their first year in high school.
- The percentage of WCHS students in each incoming 9<sup>th</sup> grade cohort who have completed their first year in high school with multiple EWIs significantly declined since Year 1 of the LIFT initiative compared to the 2011-12 cohort.

<sup>11</sup> See Appendix E for more details regarding changes in EWIs over time.

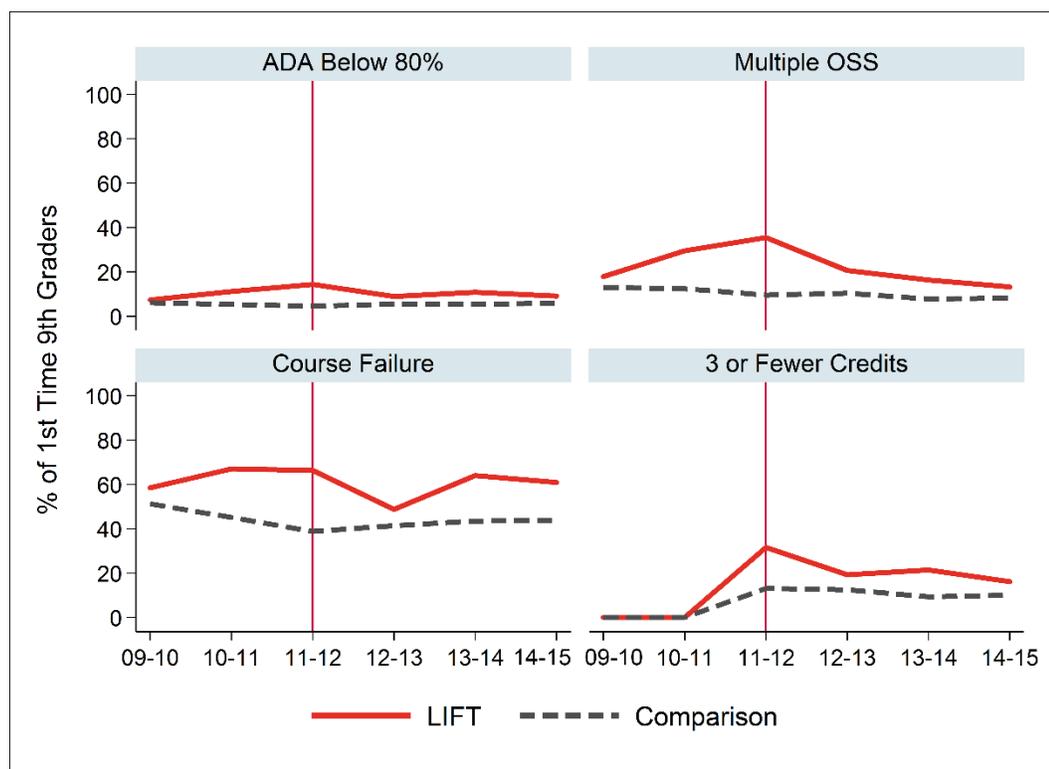
- At the comparison high schools, the percentage of incoming first-time 9<sup>th</sup> graders who have accumulated multiple EWIs during their first year in high school has remained roughly consistent and below WCHS rates since 2011-12.



**The percentage of incoming 9<sup>th</sup> graders who accumulated Early Warning Indicators declined across every EWI in 2014-15.**

Figure 14 presents the percentage of WCHS 9<sup>th</sup> graders and comparison school 9<sup>th</sup> graders who accumulated an EWI during their freshman year in the following areas: Attendance below 80%; Multiple OSS; Course Failure; or Earning 3 or Fewer Credits.

**Figure 14. Early Warning Indicator Accumulation for First-Time 9th Grade Students: LIFT Students vs. Comparison Students by EWI, 2009-10 - 2014-15**



- Compared to previous years, the percentage of first-time 9<sup>th</sup> graders at WCHS who finished the 2014-15 school year with EWIs declined across every measure.
- Since the start of the initiative, risk levels for first-time 9<sup>th</sup> graders at WCHS have declined across all EWI, while risk levels for first-time 9<sup>th</sup> graders at the comparison schools have remained roughly stable or increased from 2011-12 to 2014-15.

### Credits Earned as Indicator of On-Track Graduation Status for 9th Grade Students

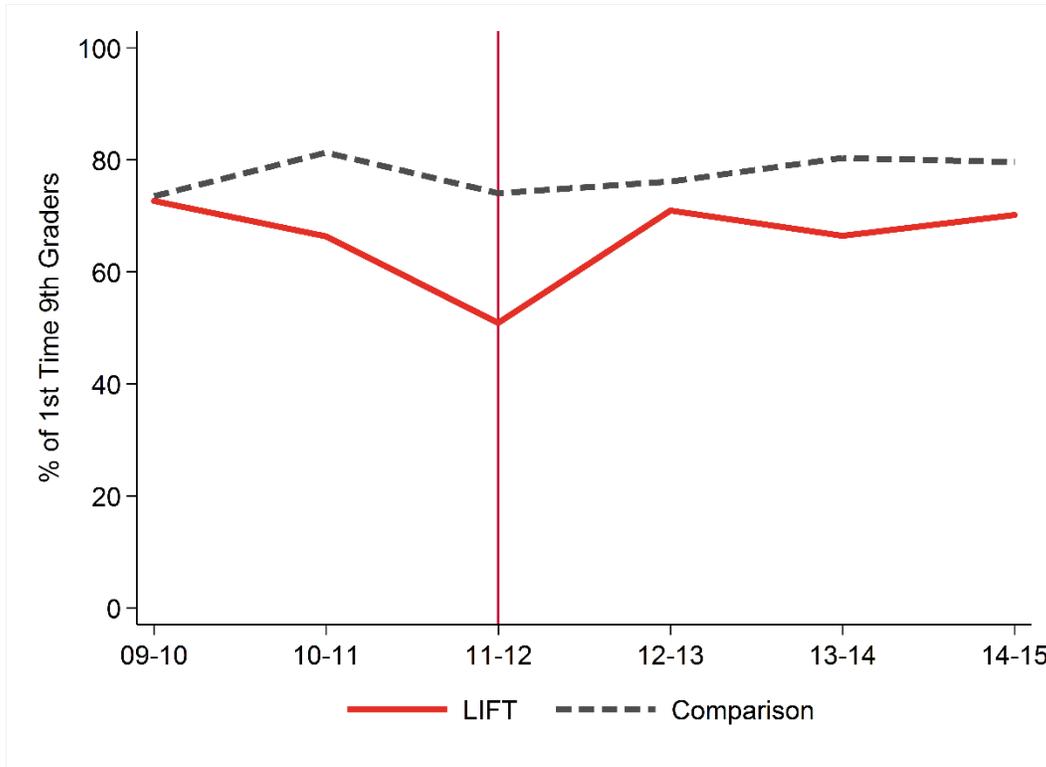
RFA also examined credits earned by incoming 9<sup>th</sup> graders in each of six years (2009-10 through 2014-15) to identify the percentage of the cohort that is on-track to graduation. We used the accumulation of six or more credits in 9<sup>th</sup> grade as a proxy measure for on-track to graduation. This analysis provides intermediate data on LIFT's progress toward meeting its 90% graduation goal.



**In 2014-15, the percentage of incoming 9<sup>th</sup> graders at WCHS who finished the school year on-track to graduation (earned six or more credits) increased—maintaining the considerable gains achieved since the start of the initiative.**

Figure 15 presents the percentage of 9<sup>th</sup> grade students at WCHS and the comparison high schools who were on-track to graduate between 2009-10 and 2014-15.

**Figure 15. Percent of 9th Grade Cohorts On-Track to Graduation after 9th Grade: WCHS vs. Comparison High Schools, 2009-10 – 2014-15**



	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
<b>LIFT - % of students on track to graduation</b>	73%+	66%+	51%	71%+	66%+	70%+
<b>Comparison - % of students on track to graduation</b>	74%	81%+	74%	77%+	81%+	80%+

<sup>+</sup> Significantly different from 2011-12

- At WCHS, 70% of first-time 9<sup>th</sup> graders finished their freshman year on-track to graduate in 2014-15—continuing a trend of significant improvements for incoming freshman cohorts since the LIFT initiative began.
- At both WCHS and the comparison high schools, an increasing percentage of incoming 9<sup>th</sup> grade cohorts have completed their freshman year on track to graduation during the first three years of the initiative.

## Summary: EWIs and On-Track Graduation Indicators



**Over the first three years of the initiative, the risk levels of incoming cohorts of 9<sup>th</sup> graders at WCHS have declined substantially, and an increasing percentage of 9<sup>th</sup> graders finished their freshman year on-track to graduate.**

Table 9 presents a summary of the year-to-year progress of incoming cohorts of 9<sup>th</sup> graders at WCHS over the first three years of the initiative.

**Table 9. WCHS EWI Measures in Years One through Three**

	2012-13	2013-14	2014-15	% CHANGE FROM 2011-12 TO 2014-15
Fewer Students with ADA below 80%	✓	✗	✓	-35%+
Reductions in OSS	✓	✓	✓	-71%+
Reductions in Course Failure	✓	✗	✓	-8%+
Reductions in Students Earning 3 or Fewer Credits	✓	✗	✓	-50%+
% of 9 <sup>th</sup> Grade Cohort On-Track to Graduate	71%	66%	70%	37%+

+ Significantly different from 2011-12; ✓ Performance remained stable or improved

The considerable reduction of the overall risk levels for incoming cohorts of 9<sup>th</sup> grade students at WCHS represents a positive sign for the initiative overall. While a sizable minority of incoming 9<sup>th</sup> graders continue to accumulate EWIs and fall off-track during their freshman year, the additional supports provided by LIFT partners and the LIFT Academy are designed to provide the additional academic and socio-emotional support they need to get back on-track and graduate on time. As the initiative continues, ensuring that incoming 9<sup>th</sup> graders start off on the right foot will continue to be a critical intermediate benchmark for meeting the longer term graduation targets at WCHS.

## V. Continuous Learning Calendars: Student Academic Achievement in (CLC) Schools Compared to Non-CLC Schools

In 2013-14 four Project LIFT schools began operating on Continuous Learning Calendars: Bruns Academy, Druid Hills Academy, Thomasboro Academy, and Walter G. Byers Elementary. The Continuous Learning Calendars were implemented to: 1) mitigate the effects of summer learning loss and 2) enhance the overall amount of quality instructional time for students in these schools. Continuous Learning Calendars redistribute the academic school days (180 days) across the calendar year to shorten the amount of time students are out of school during the summer months. In addition to more evenly distributing school days, Druid Hills and Thomasboro also added 19 instructional days to their school year.

In non-CLC LIFT schools, students may participate in the Building Educated Leaders for Life Summer Program (BELL). The BELL summer program provides academic programming, mentoring, and cultural enrichment during the summer. LIFT teachers and principals intentionally select low-performing students for participation in BELL Summer programming.

This analysis provides an initial overview of the academic performance of students in the Continuous Learning Calendar Schools. We compare Math and Reading EOG assessments for the following six groups of students:

1. LIFT students who did not attend CLC schools but were enrolled in BELL (LIFT Non-CLC BELL)
2. LIFT students who attended CLC schools with 180-day calendars (LIFT CLC 180)
3. LIFT students who attended CLC schools with 199-day calendars (LIFT CLC 199)
4. LIFT students who were not exposed to either CLC or BELL (LIFT Non-CLC Non BELL)
5. A comparison group of students in K-8 schools who did not participate in LIFT, CLC or BELL (K-8 Comparison)
6. A comparison group of students who were in non K-8 schools who did not participate in LIFT, CLC or BELL (non K-8 Comparison)

### **Note on Interpretation of Findings**

These findings should not be considered a definitive assessment of the effectiveness of CLC in LIFT schools. There are a number of key methodological limitations that constrain our ability to provide conclusive findings about CLCs. These include:

1. **Small Sample Size.** With only two LIFT schools operating under each CLC model, it is not possible to disentangle the effect of the academic calendar from the effect of simply attending the school itself.
2. **Non-Equivalent Comparisons.** There are substantial differences between the CLC and non-CLC LIFT schools that complicate comparisons of student performance between these schools. These include:
  - a. **Different Grade Levels.** All four CLC LIFT schools are PK-8 schools, but only one non-CLC LIFT school is PK-8; two are K-5 elementary schools and one is a 6-8<sup>th</sup> grade middle school.
  - b. **Different Student Populations.** The CLCs operate in some of the highest need schools within the LIFT Learning Community. In particular, students attending Bruns Academy and Druid Hills Academy are recognized throughout the Learning Community as some of the most challenging to serve. In addition, the vast majority of students who attend Ranson Middle School did not attend a LIFT elementary school prior to enrollment at Ranson. And, as seen in the results below, students at the CLC schools have historically lower academic performance among all the LIFT schools.
3. **Inadequate Time to Fully Capture Effects.** The introduction of a new academic calendar at a school represents a substantial change for the entire school community – staff, teachers, students, parents, and the community. Research shows that the full effect of complex school reform typically does not emerge within the first two years of implementation. As a result, it is still very early to attribute any changes in students’ performance to the new calendars.

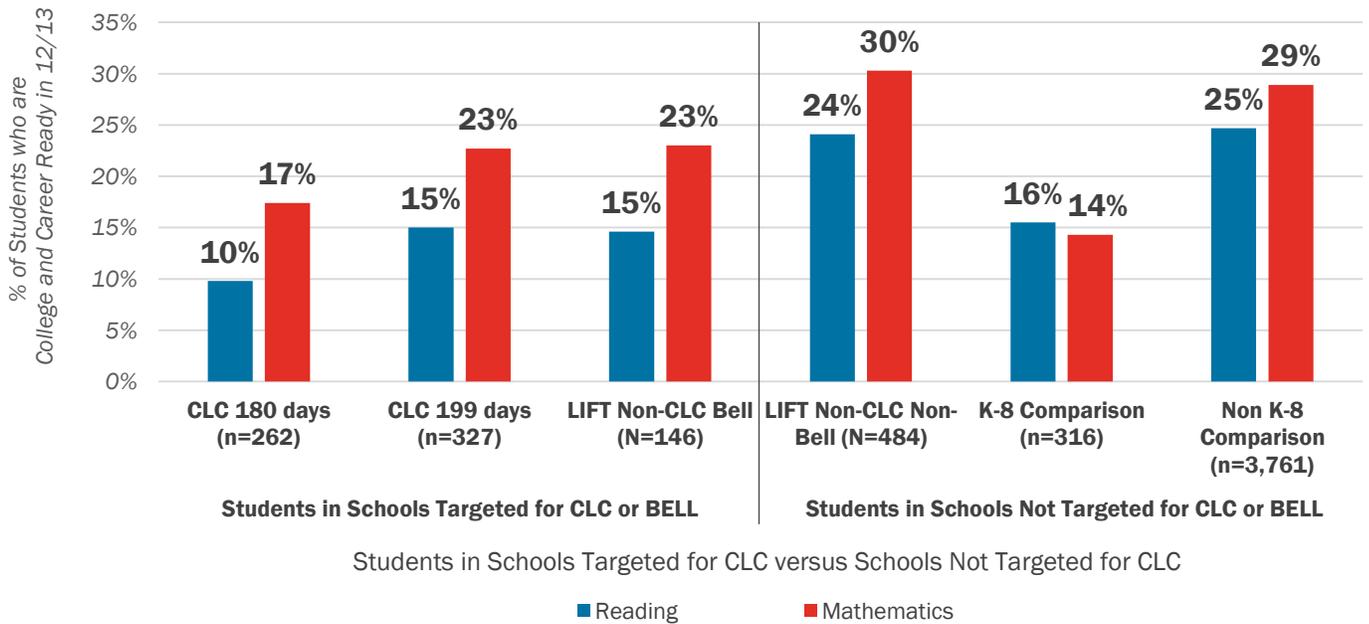
## Findings



**Student performance prior to the implementation of CLCs was lower in schools that adopted CLCs.**

In the year prior to the implementation of CLC (2012-13), the academic performances of schools that would adopt the CLC the following year were substantially below those of almost all schools that did not adopt CLCs. Schools targeted for CLCs had achievement levels in 2012-13 similar to the K-8 comparison schools. Figure 16 summarizes these initial differences.

**Figure 16. College and Career Ready Proficiency Levels in the Reading and Math EOG Assessments Prior to Implementation of a CLC: CLC vs. Non-CLC Schools**



**Despite their initial lower performance, the CLC students have made significant gains in the Reading EOG assessment from 2012-13 to 2014-15. CLC students have greater gains than students in the K-8 comparison schools and comparable gains to students in other comparison groups.** Table 10, below, presents the average scaled scores for students on the Reading EOG assessments in 2012-13 and 2014-15 across the five groups.<sup>12</sup>

**Table 10. Average Scaled Scores on Reading EOG, CLC vs. Non-CLC Students**

	Reading Scaled Scores		
	2012-13	2014-15	Difference
LIFT CLC 180 (n=262)	438.6	444.4	5.8***
LIFT CLC 199 (n=327)	440.1	446.6	6.5***
LIFT Non-CLC Bell (N=146)	440.8	447.4	6.6***
LIFT Non-CLC Non Bell (N=484)	444.2	451.0	6.8***
K-8 Comparison (N=316)	440.9	446.3	5.4***
Non K-8 Comparison (n=3,761)	441.3	447.9	6.6***

<sup>^</sup>  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

- All students at CLC schools, non-CLC LIFT schools, and the comparison schools have made significant gains in their average scaled scores on the Reading EOG.
- Students in K-8 comparison schools have exhibited the lowest scaled score gains on the Reading EOG since 2012-13.

<sup>12</sup> Similar analyses using Math EOG scaled score averages were not possible given the structure of the Math EOG scaled score ranges from one grade level to the next. The decision to not include analyses of Math EOG scaled score gains was made in consultation with LIFT staff and CMS administrators in the office of School Performance.

- Students at the 180 day CLC schools have made greater gains than the K-8 comparison schools but have lower scaled score gains on the Reading EOG than all of the other groups over the first three years of the initiative.
- Students who attended the 199 day CLC schools and non-CLC students who attended the BELL summer program made similar gains on the Reading EOG. Both groups also had similar initial 2012-2013 Reading EOG scores.



**Similar to most of their peers, the percentages of CLC students achieving College and Career Readiness on the Math and Reading EOG assessments have not significantly increased over the first three years of the initiative.**

Table 11 presents the percentage of students achieving College and Career Readiness on the Reading and Math EOG in 2012-13 and 2014-15 across the five groups.

**Table 11. College and Career Readiness on the Reading and Math EOG, CLC vs. Non-CLC Students**

	% College and Career Ready: Reading EOG			% College and Career Ready: Math EOG		
	2012-13	2014-15	Difference	2012-13	2014-15	Difference
LIFT CLC 180 (n=262)	9.8%	13.4%	3.6%	17.4%	6.9%	-10.5%***
LIFT CLC 199 (n=327)	15.0%	14.6%	-0.3%	22.7%	17.8%	-4.8%
LIFT Non-CLC Bell (N=146)	14.6%	19.0%	4.5%	23.0%	24.6%	1.6%
LIFT Non-CLC Non-Bell (N=484)	24.1%	29.1%	5.1%^	30.3%	28.2%	-2.1%
K-8 Comparison (N=316)	15.5%	17.3%	1.8%	14.3%	15.0%	0.7%
Non K-8 Comparison (n=3,761)	24.7%	23.0%	-1.7%	28.9%	28.0%	-0.9%

^  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

- On the Reading EOG, CLC students have shown no significant gains in College and Career Readiness.
- On the Math EOG, significantly fewer students in 180 day CLC schools achieved College and Career Readiness over time, while students' performance in 199 day CLC schools has not significantly changed from 2012-13 to 2014-15.
- Students in CLC LIFT schools and students in non-CLC LIFT schools who attended the BELL summer program have much lower initial academic achievement than students in non-K-8 comparison schools and students in non-CLC LIFT schools who did not attend the BELL summer program.

As noted above, student performance at the CLC schools historically is substantially lower than that of students at non-CLC LIFT schools. An additional set of analyses were conducted to estimate how likely LIFT students in the CLC and non-CLC schools were to achieve College and Career Readiness on the Math and Reading EOG assessments, taking into account students' prior academic achievement, attendance, behavior, and demographics.



**Students in the 199 day CLC schools were just as likely to achieve College and Career Readiness in both Reading and Math EOG as students at the non-CLC LIFT schools in 2014-15, after controlling for students’ prior academic performance, attendance, behavior and demographics.**

Table 12<sup>13</sup> presents the significance of odds ratios estimated for students in 180 day and 199 day CLC schools—with and without accounting students’ prior academic achievement, attendance, behavior, and demographics students. Odds ratios represent how more or less likely students in the CLC schools were to achieve College/Career Readiness in Math and Reading than LIFT students in non-CLC schools during the 2014-15 school year.

**Table 12. Odds Ratios for CLC Students Likelihood of Achieving College/Career Readiness in Reading and Math EOG in 2014-15, CLC vs. Non-CLC Students**

	Reading EOG w/o Controls	Reading EOG w/ Controls	Math EOG w/o Controls	Math EOG w/ Controls
LIFT CLC 180 vs. LIFT Non-CLC	.46***	.72*	.23***	.29***
LIFT CLC 199 vs. LIFT Non-CLC	.50***	.63	.57*	.93

**Notes:**

- <sup>^</sup> p<.10; \* p<.05; \*\* p<.01; \*\*\* p<.001, \*, \*\*, \*\*\* indicate statistically significant effects
- Controlling for prior academic achievement, current year attendance, behavior, and student demographics
- Odds ratios greater than 1 suggests that LIFT students are more likely to achieve College and Career Readiness, while odds ratios below 1 suggest that LIFT students are less likely to achieve College and Career Readiness than the comparison students.
- Students at the 180 day CLC schools were significantly less likely than students at non-CLC schools to achieve College and Career Readiness on both the Math and Reading EOG assessments in 2014-15.
- Students at the 199 day CLC schools were just as likely as students at non-CLC schools to achieve College and Career Readiness in both the Math and Reading EOG assessments in 2014-15.

**Summary: CLC Schools versus Non-CLC Schools**

The results presented in this section suggest that the CLC schools serve a student population that has historically under-performed in comparison to students at other LIFT schools – particularly the 180 day CLC schools. In addition, students in non-CLC schools who attended the BELL summer program also historically under-performed compared to students in non-CLC schools who did not attend the BELL summer program, with the exception of K-8 comparison schools. CLC schools made greater gains in average reading performance (measured by scaled scores) between 2012-13 and 2014-15 than other K-8 schools from the comparison group. After the first two years of CLC implementation, the academic performance in mathematics of students in the 180 day CLC schools continues to be significantly below that of student in non-CLC LIFT schools. However, all LIFT students, including those in CLC schools, have made significant gains in their reading achievement over the first three years of the initiative.

<sup>13</sup> The comparison schools were excluded from the logistic regression analyses presented in Table 12 in an attempt to most effectively isolate the effect of the academic calendars on student performance. By limiting the sample to only LIFT schools, these analyses control for the presence of all elements of the LIFT initiative in these schools so the analyses can focus on the differences between those LIFT schools operating on different academic calendars.

## VI. Summary & Preview of Year Four Evaluation

Student achievement during Year Three of the Project LIFT initiative was mixed. There have been gains in reading, mathematics, and science since the first year of the LIFT initiative in three out of the six assessments (Reading EOG, Science EOG, and Math I EOC). Most notably, LIFT students continued to outperform students in the comparison schools on the Science EOG. In addition, the gains that LIFT elementary/middle school students achieved in Reading in 2013-14 were largely sustained in Year Three. And at the high school level, LIFT students continued to make substantial gains in College and Career Readiness on the Math I EOC in 2014-15, although the overall levels of College and Career Readiness on this assessment remain quite low. Across all math, reading, and science assessments, except for biology, LIFT students in the 2014-2015 school year scored as well or better than students in comparison schools, when comparing similar students.

In addition, student gains in the Reading EOG assessments at the CLC schools after the first two years of the CLC program were slightly above those of students in comparison K-8 schools. However, it was below the performance of students in non-CLC LIFT and other comparison schools. Yet, all LIFT students, including those in CLC schools, have made significant gains in their reading achievement over the first three years of the initiative.

LIFT saw some of its largest gains in school climate and graduation rates. LIFT schools continued to make considerable gains in improving school climate, particularly at WCHS. At WCHS, the considerable reduction of the overall risk levels for incoming cohorts of 9<sup>th</sup> grade students represents a positive sign for the initiative overall. Across every EWI for high school dropout, risk levels for incoming cohorts of 9<sup>th</sup> graders at WCHS have continued to drop over the first three years of the initiative. In addition, overall attendance rates remained very high at all LIFT schools. However, OSS did increase at a number of LIFT elementary/middle schools in 2014-15.

Moving into Year Four of the initiative, it will remain critically important for the LIFT schools to remain focused on steady implementation of key strategies driving the initiative and to continue to focus on improving performance on the EOG and EOC assessments. The overall stabilization of key strategies within the initiative itself in Year Three, combined with ongoing improvements to the climate at LIFT schools and reductions in student risk levels all generally align with the theory of action for the Project LIFT Initiative. Indeed, the ongoing improvements in the WCHS four year graduation rate also represent early successes for LIFT overall. In the years ahead, ongoing improvements in the LIFT schools will largely depend on the LIFT schools' ability to sustain the progress they have made in these areas, while continuing to enhance their supports to drive student achievement on the EOG and EOC assessments.

## Appendix A: Growth in Achievement during the 2014-15 School Year Based on the Discovery Education Assessments

Before examining the EOG and EOC assessments in detail, it is important to note that during the 2014-15 academic year, students made considerable gains in math and reading achievement as measured by the quarterly Discovery Education assessments. Discovery Education is the assessment tool that is used for data-driven instruction in LIFT, primarily in grades 2-8.

- **During the 2014-15 year, average achievement for LIFT students in grades 2-8 increased by 5% in mathematics and 3% in reading, based on the Discovery Education assessments.**

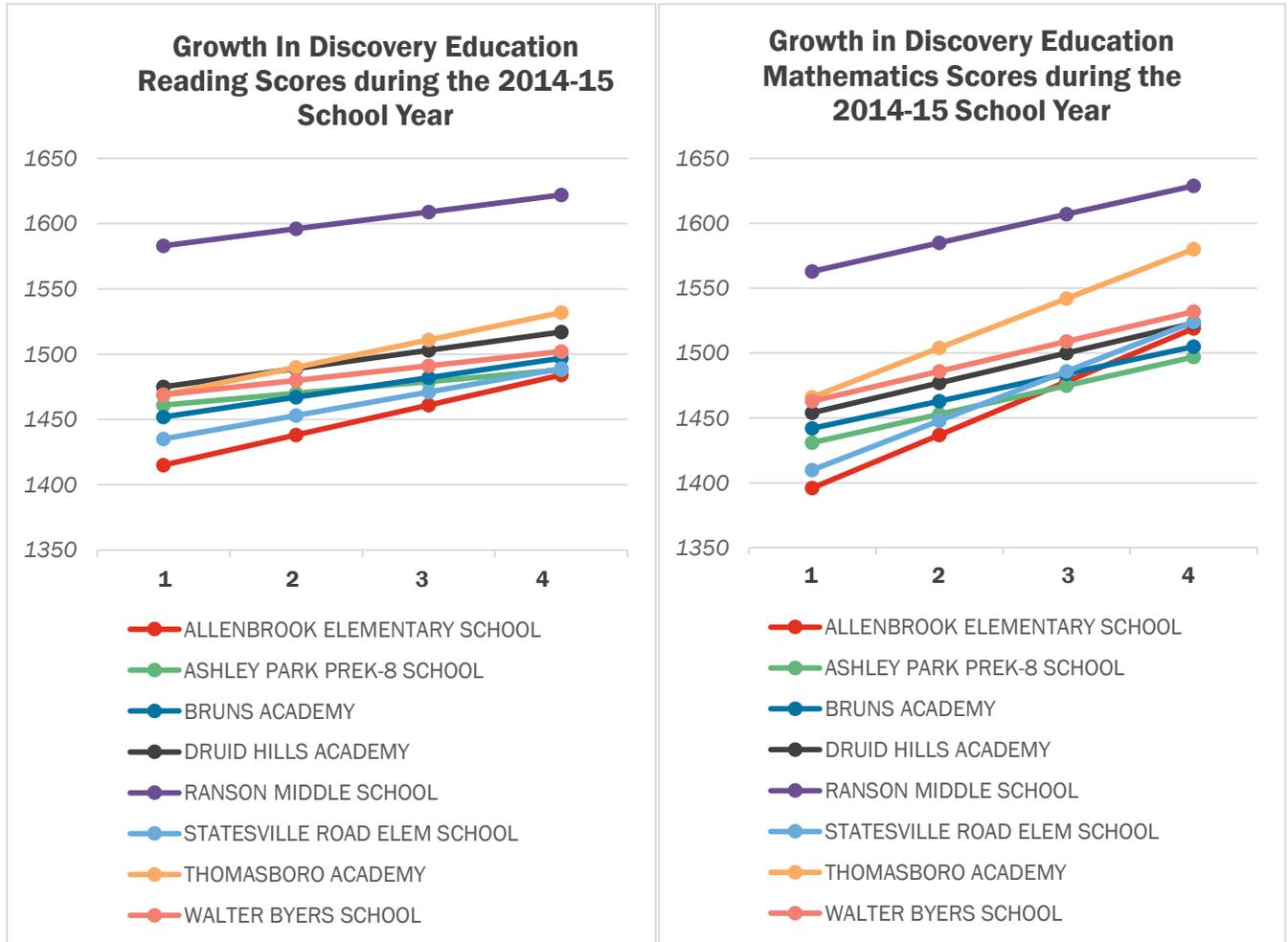
Since the Discovery Education assessments were only administered to LIFT students, they can only be used to examine growth over time within LIFT schools; no comparisons between LIFT and non-LIFT schools can be made.

During the 2014-2015 school year, LIFT staff required K-8 LIFT schools to administer at least three of the four Discovery Education assessments in math and reading to provide formative feedback for teachers in these subjects. In keeping with these requirements, 86% of LIFT K-8 students completed three reading assessments, and the same percentage of students completed three math assessments.

We used these four assessments per student to calculate a line that describes the achievement growth for each student in math and reading. We then used these individual student growth curves to calculate the average of achievement growth for each K-8 school and for all K-8 students. We found that over the course of the 2014-2015 year, based on the Discovery Education assessment, average mathematics achievement in LIFT schools increased by 5% and average reading achievement increased by 3%. Allenbrook, Statesville Road, and Thomasboro had the highest growth rates of 8-9% improvement in mathematics and 4-5% improvement in reading. Ranson Middle School had the lowest rate of improvement in mathematics and Allenbrook had the lowest rate of improvement in reading (see Figure A1).

Figure A1 shows the initial Discovery Education scores and the rate of growth during the 2014-15 school year for each K-8 students in LIFT. It is important to note that a number of the lower growth rates among K-8 schools are in schools that started the year with lower achievement levels than the K-5 schools. Additionally, because the Discovery Education scores are vertically scaled so that students in older grades have higher scores, we see that Ranson Middle, which starts in 6<sup>th</sup> grade, has a higher initial score. However, the rate of growth at Ranson is lower than the elementary schools.

**Figure A1. Growth in Discovery Education Scores for Reading and Mathematics**



## Appendix B. Comparison School Selection

### Comparison School Selection

Comparison schools were selected through the following process:

In consultation with the CMS Office of Accountability's Research, Evaluation and Analytics department, a set of comparison schools was identified for each LIFT school based on their similarity along the following *school-level* factors in the 2011-12 school year:

- Percent male
- Percent Asian, Hispanic, black, Native American, multiracial and white;
- School size (total school enrollment)
- Percent student with disabilities and gifted
- Percent Limited English Proficiency (LEP) and English as a Second Language (ESL)
- Percent who repeated a grade
- Percent overage-for-grade
- Percent of student enrollment in each grade level in the school
- Percent dropout
- Mean rate of attendance that accounts for excused absences, unexcused absences, in-school and out-of-school suspensions
- Percent of students that were mobile at the school
- Percent proficient in math, reading, and science
- Mean growth across math and reading

\*3<sup>rd</sup> Grade students did not have EOG Math or Reading scores available for matching.

Through these analyses, CMS identified 33 unique district comparison schools for the study. Each LIFT school was matched to multiple comparison schools as a way to control for school-level factors that may influence the behavioral and academic performance of the comparison group of students. Each LIFT elementary school was matched to the six most similar CMS elementary schools; Ranson Middle School was matched the five most similar CMS middle schools; and West Charlotte High School was matched to the four most similar CMS high schools. Table C1.1 shows which comparison schools were matched to each LIFT school.

**Table B1. LIFT Comparison Schools**

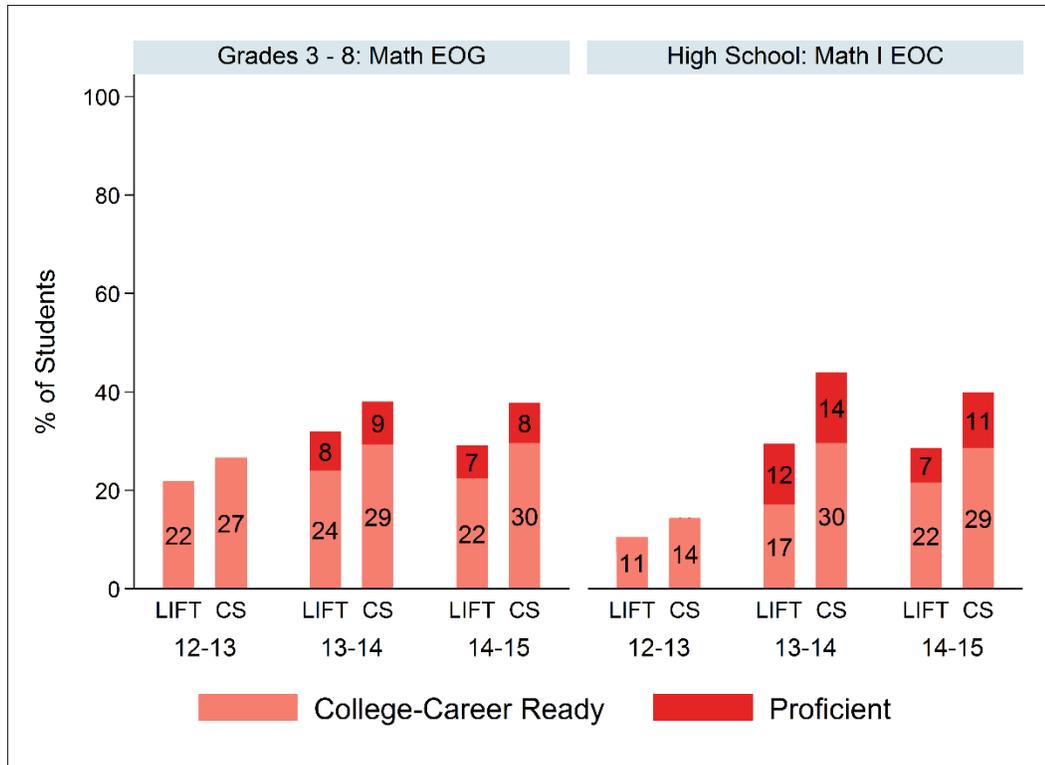
<b>ALLENBROOK ELEMENTARY</b>	<b>ASHLEY PARK ELEMENTARY</b>	<b>BRUNS ACADEMY</b>
• Paw Creek Elementary	• Billingsville Elementary	• Reid Park Academy
• Pinewood Elementary	• Montclair Elementary	• Tuckaseegee Elementary
• Shamrock Gardens Elementary	• Devonshire Elementary	• Sedgefield Elementary
• Montclair Elementary	• Sterling Elementary	• Winding Springs Elementary
• Devonshire Elementary	• Paw Creek Elementary	• Newell Elementary
• Sterling Elementary	• Hornet's Nest Elementary	• Hidden Valley Elementary

<b>DRUID HILLS ACADEMY</b>	<b>STATESVILLE ROAD ELEMENTARY</b>	<b>THOMASBORO ACADEMY</b>
• Rama Road Elementary	• Sterling Elementary	• Winding Springs Elementary (67)
• Merry Oaks Intl Academy	• Montclair Elementary	• Reid Park Academy (81)
• Nations Ford Elementary	• Devonshire Elementary	• Tuckaseegee Elementary (92)
• Winterfield Elementary	• Hornets Nest Elementary	• J H Gunn Elementary (62)
• Oakdale Elementary	• River Oaks Academy	• Newell Elementary (80)
• Whitewater Academy Elementary	• Nations Ford Elementary	• Reedy Creek Elementary (74)

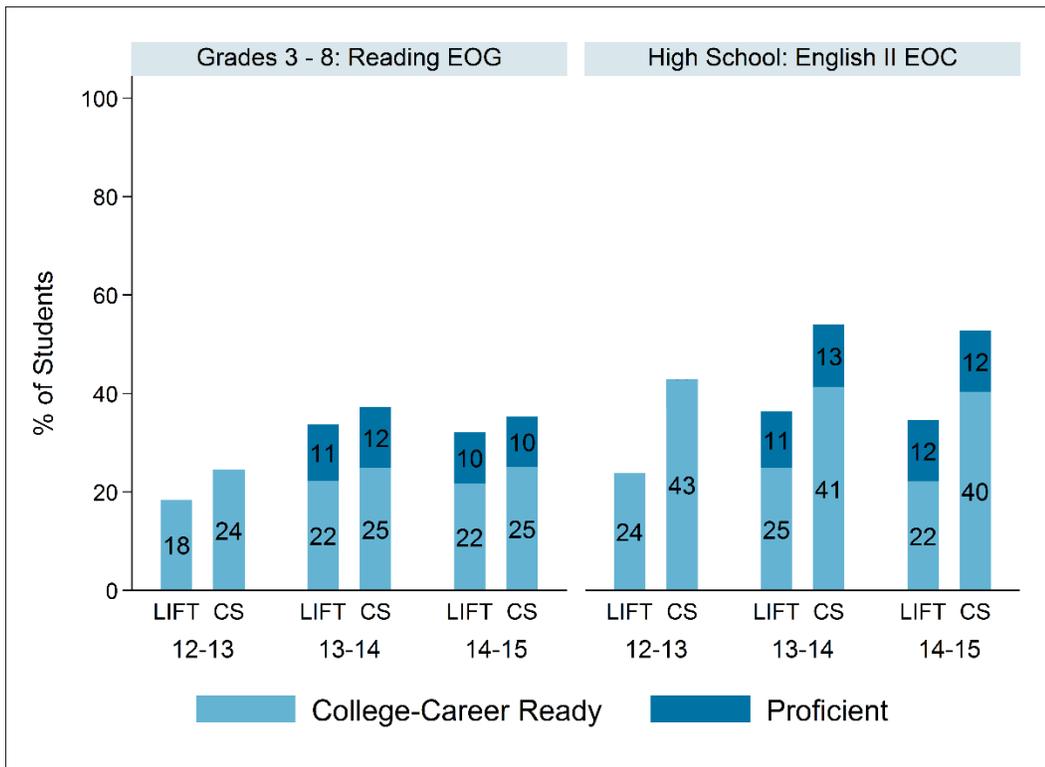
<b>WALTER G BYERS</b>	<b>RANSON MIDDLE SCHOOL</b>	<b>WEST CHARLOTTE HS</b>
• Billingsville Elementary	• Albemarle Road Middle	• West Mecklenburg High
• Montclair Elementary	• Quail Hollow Middle	• East Mecklenburg High
• Devonshire Elementary	• Whitewater Middle	• Rocky River High
• Sterling Elementary	• Sedgefield Middle	• Zebulon B Vance High
• Paw Creek Elementary	• Martin Luther King Jr Middle	
• Westerly Hills Academy		

## Appendix C: Comparison of Proficiency and College and Career Ready Scores during Years 1-3 of the Project LIFT Initiative

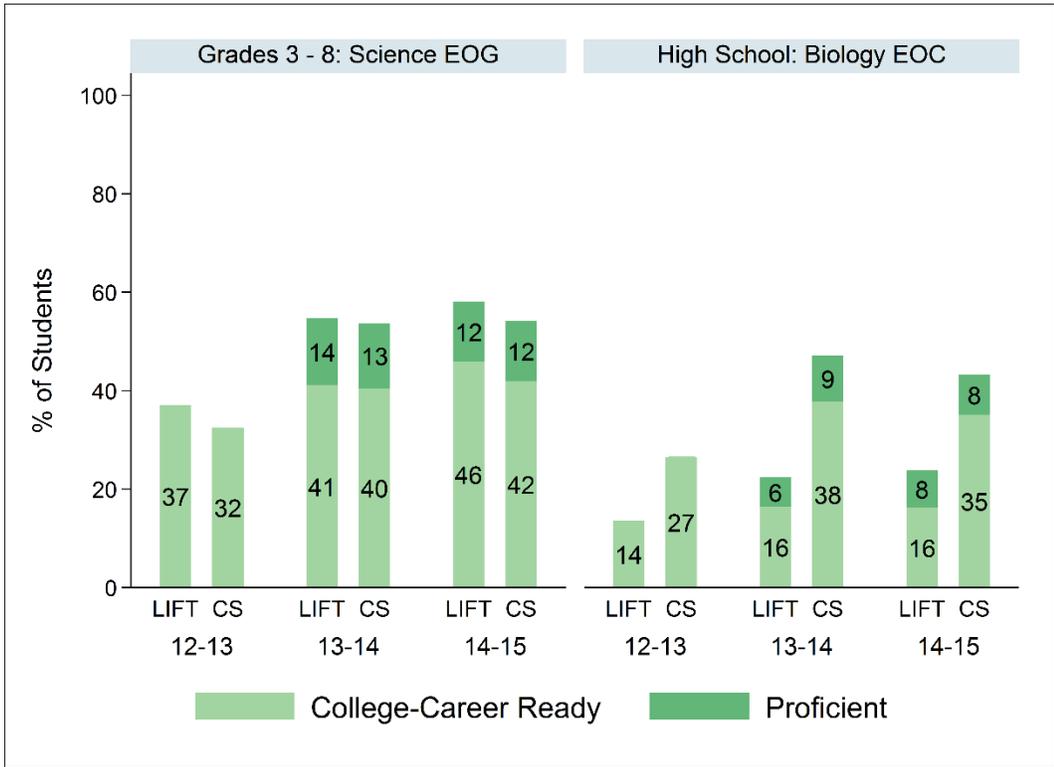
**Figure C1. Proficiency Levels on Math EOG and Math I EOC - LIFT Students versus Comparison Students**



**Figure C2. Proficiency Levels on Reading EOG and English II EOC - LIFT Students versus Comparison Students, Years 2013-14 and 2014-15 Only**

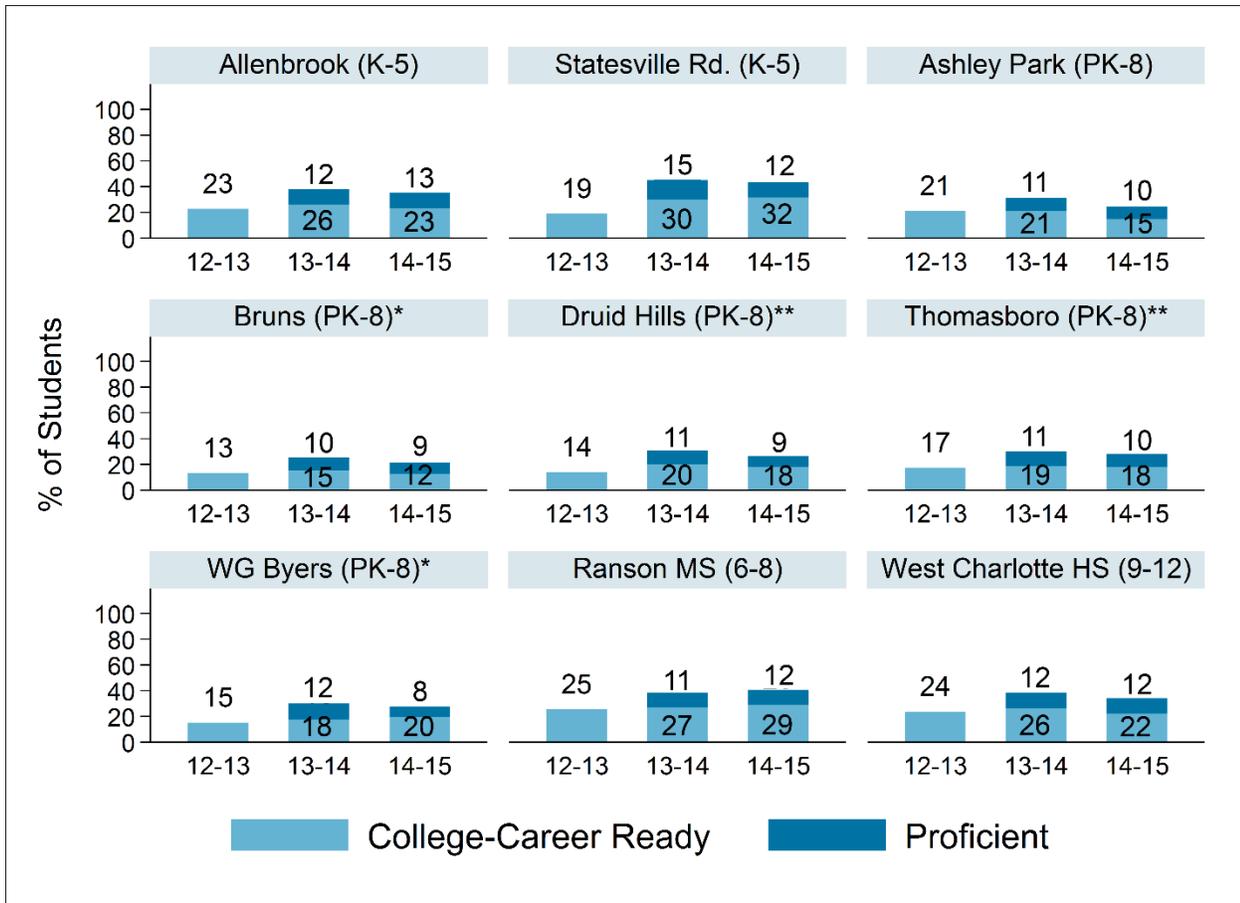


**Figure C3. Proficiency Levels on Science EOG and Biology EOC - LIFT Students versus Comparison Students**

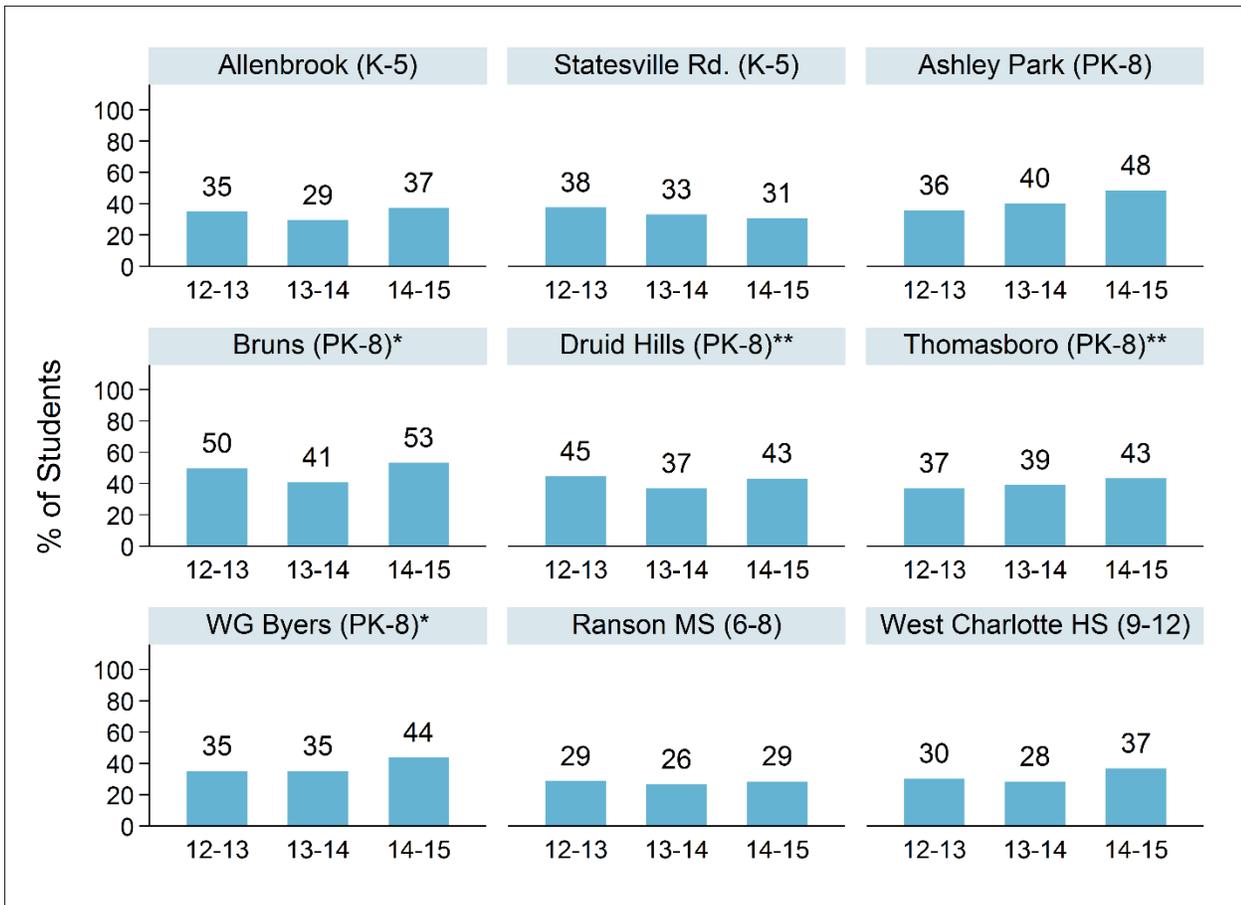


## Appendix D: Supplemental Figures

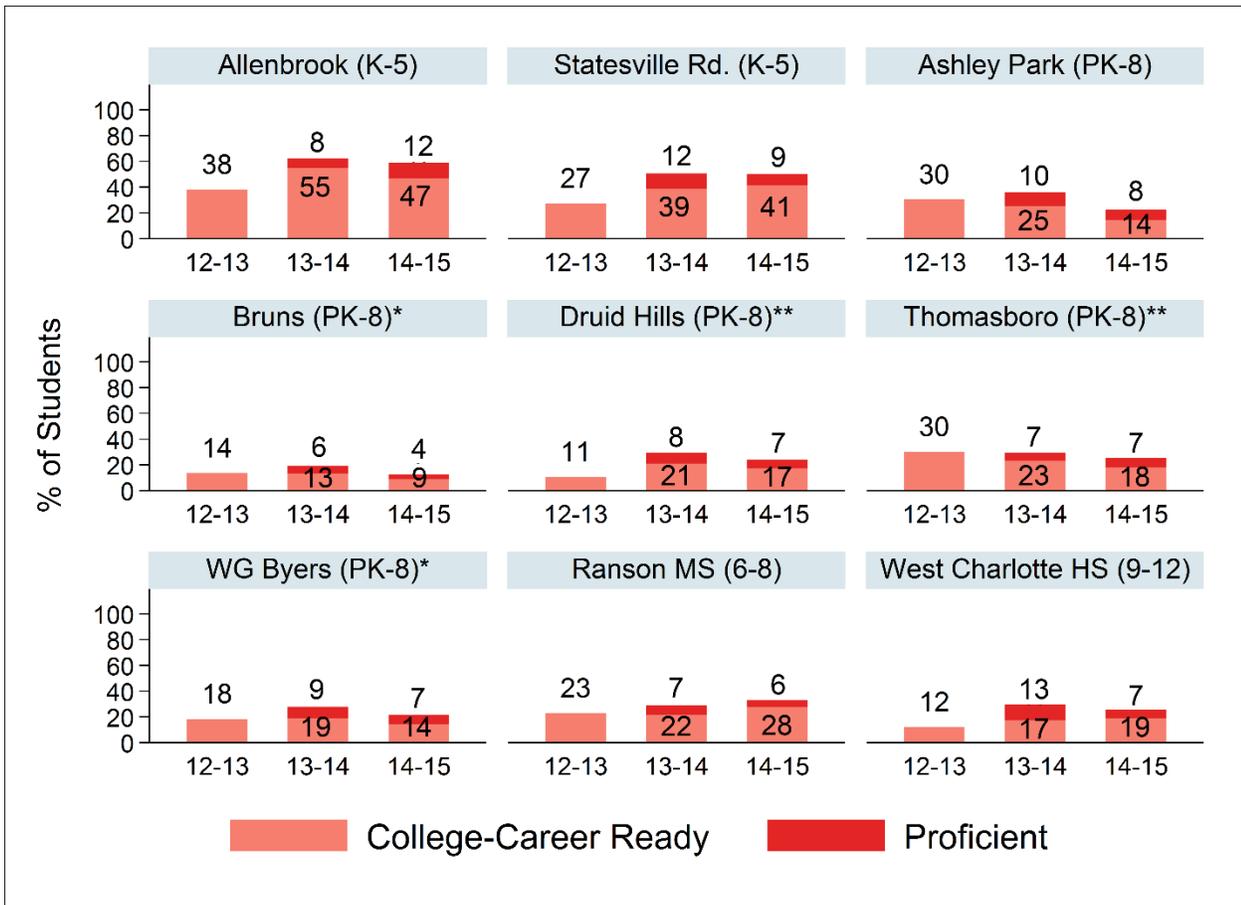
Figure D1. Reading EOG: Percent Proficient or Above, by School



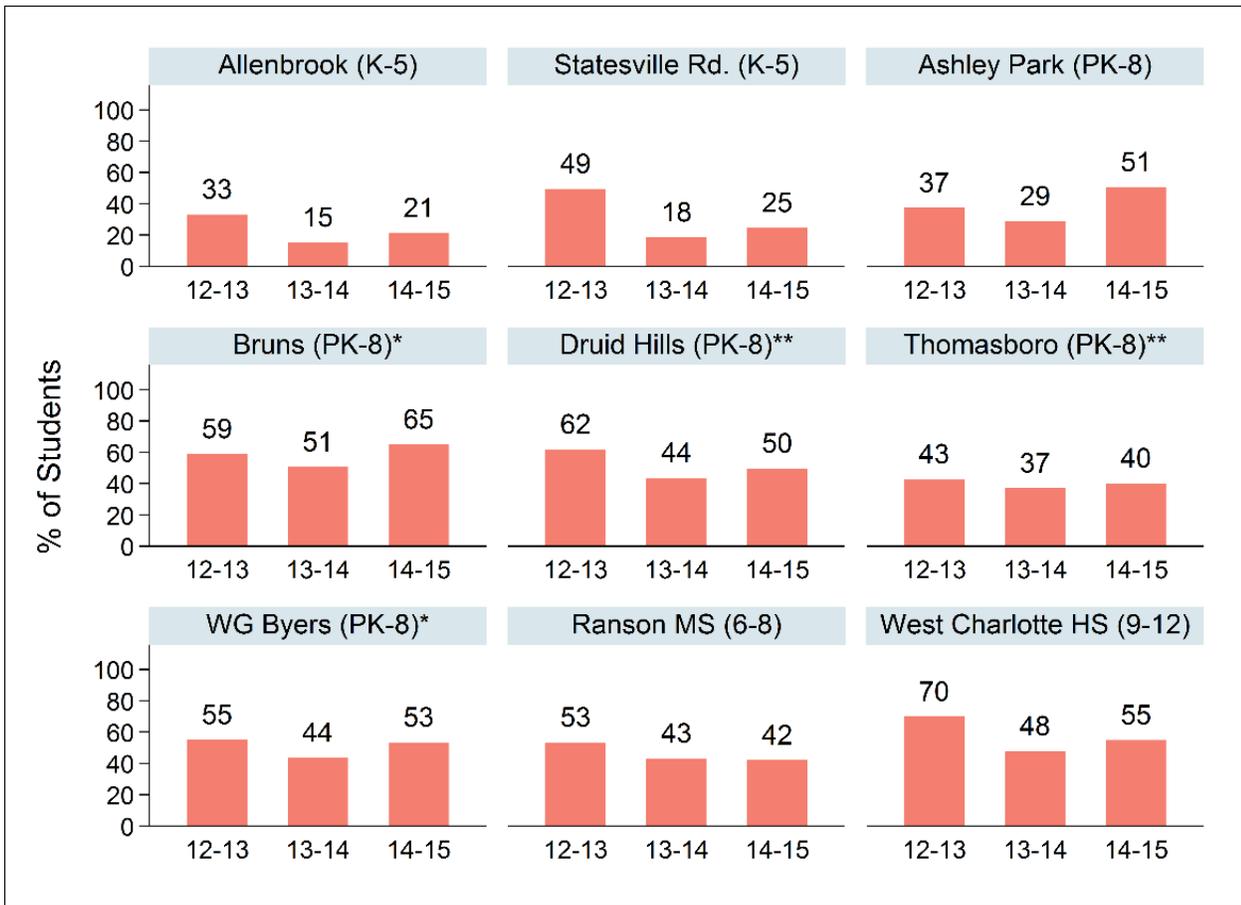
**Figure D2. Reading EOG: Percent Below Basic, by School**



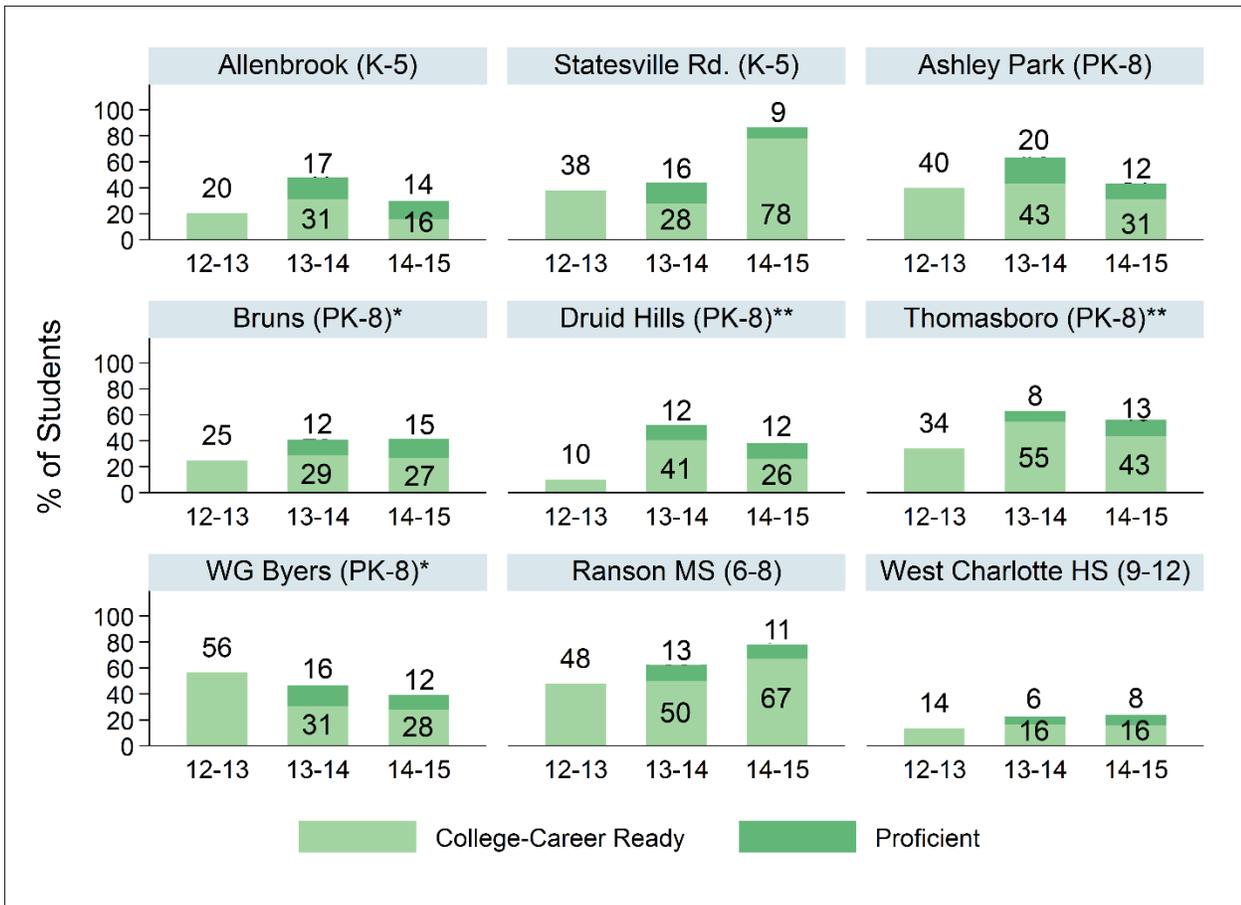
**Figure D3. Math EOG: Percent Proficient or Above, by School**



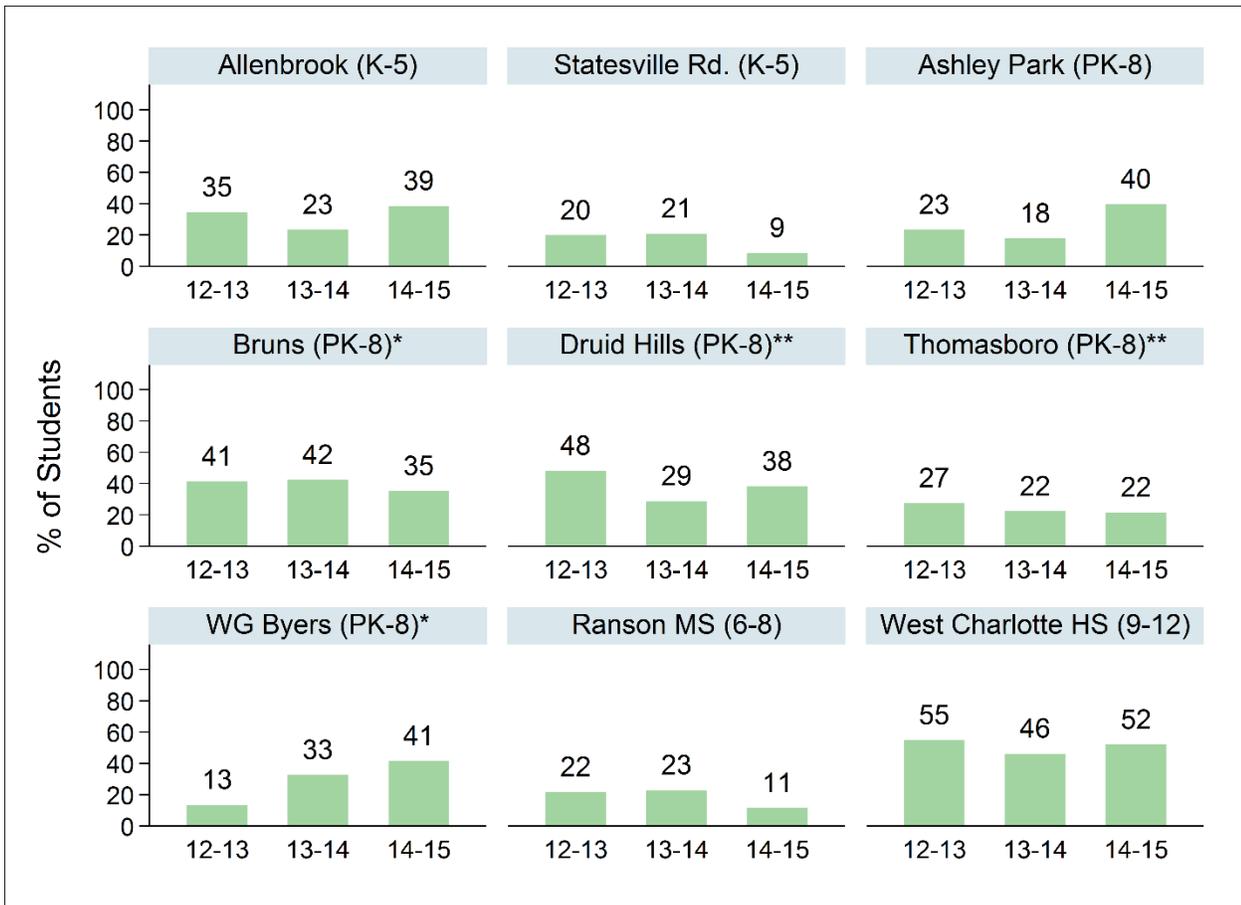
**Figure D4. Math EOG: Percent Below Basic, by School**



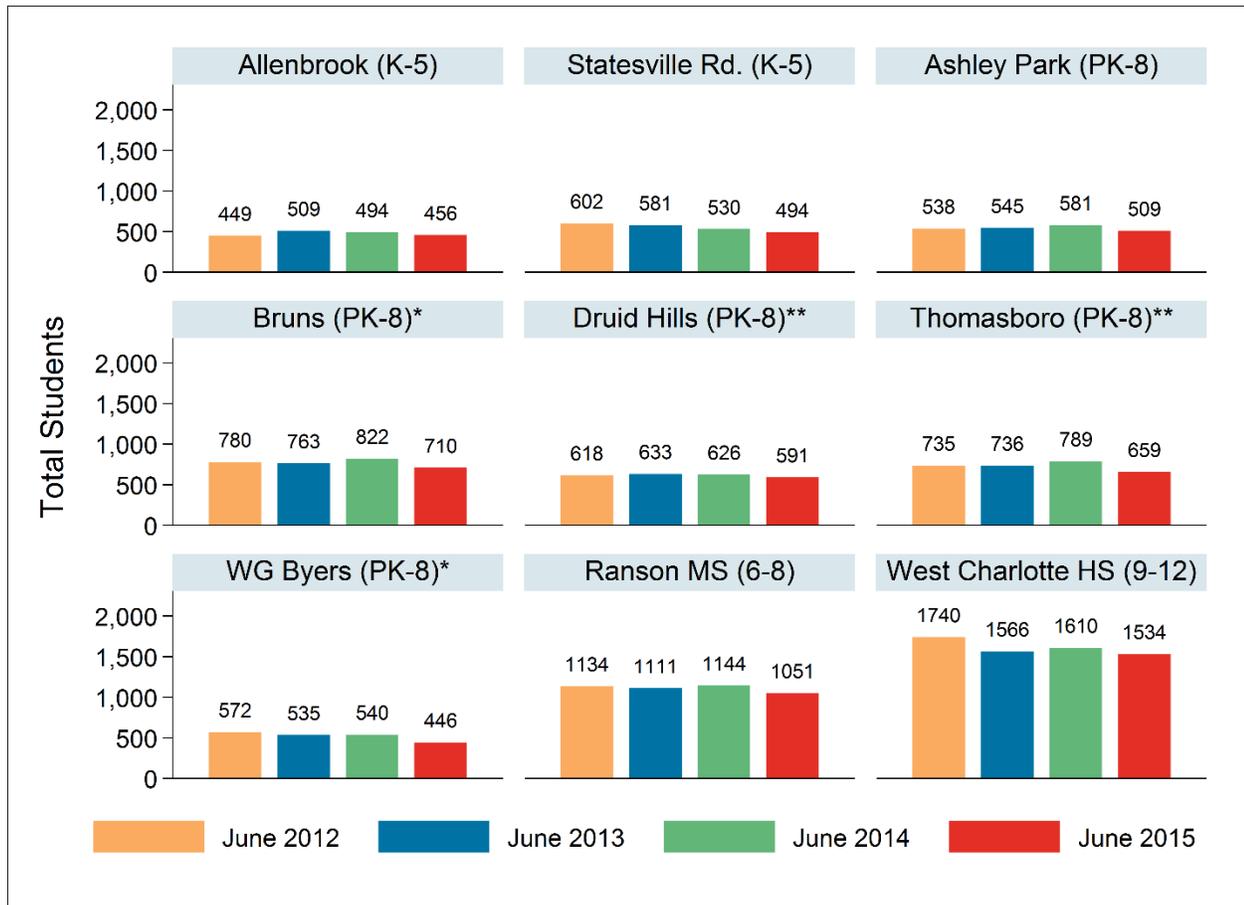
**Figure D5. Science EOG: Percent Proficient or Above, by School**



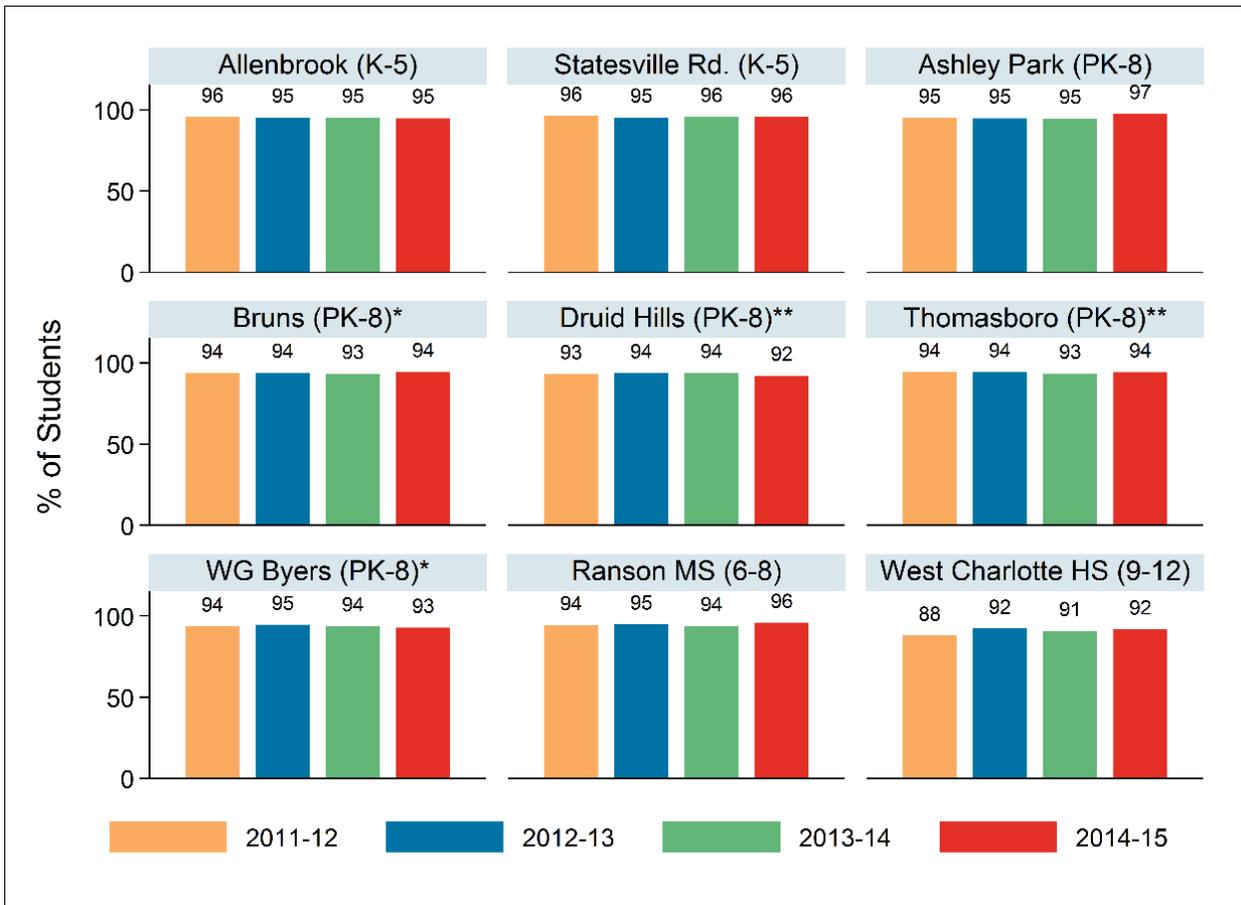
**Figure D6. Science EOG: Percent Below Basic, by School**



**Figure D7. Total End of Year Enrollment, by School**



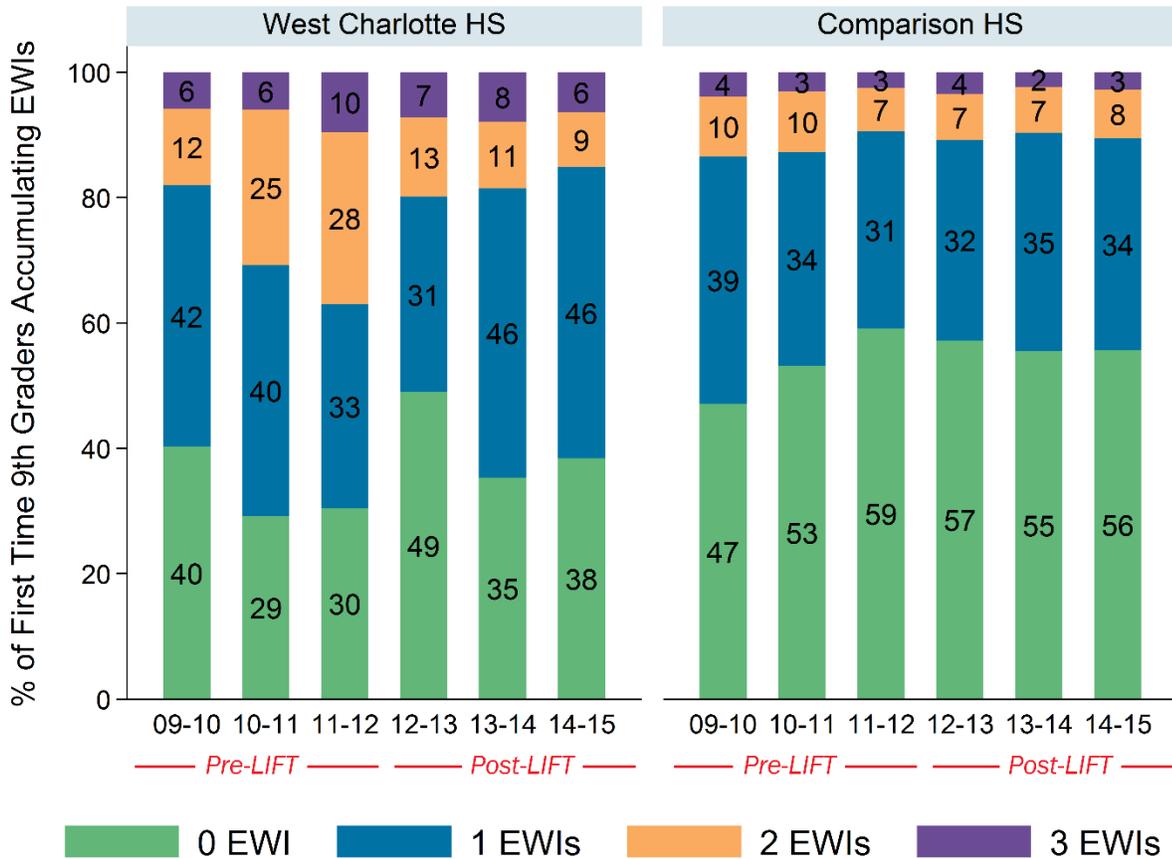
**Figure D8. Average Daily Attendance, by School**



## Appendix E: Distribution of Early Warning Indicators over Time

In 2014-15, WCHS 9<sup>th</sup> graders continued to have lower risk levels, measured by 2 or more Early Warning Indicators, than WCHS cohorts prior to the start of the initiative. Figure E1 presents the percentage of first time 9<sup>th</sup> grade students at WCHS and at the comparison high schools that accumulated 0, 1, 2, or 3 EWIs from 2011-12 to 2014-15: Attendance below 80%; Multiple Out of School Suspensions; or Course Failure.

Figure E1. Early Warning Indicator Accumulation for First Time 9th Grade Students: 2009-10 - 2014-15



- At WCHS, since the start of the LIFT initiative in 2012-13, the number of incoming 9<sup>th</sup> grade students with two or more early warning indicators have declined substantially to levels observed prior to the start of the initiative.
- At the comparison high schools, since the start of the LIFT initiative in 2012-13, the overall number of incoming 9<sup>th</sup> grade students with two or more EWIs has remained roughly similar to levels observed prior to the start of the initiative.





RESEARCH  
*for* ACTION

---

Land Title Building • 100 South Broad Street, Suite 700 • Philadelphia, PA 19110

 267-295-7760 •  [www.researchforaction.org](http://www.researchforaction.org) •  [www.twitter.com/Research4Action](https://www.twitter.com/Research4Action)