

A+ Schools Program Evaluation Phase 1 – School Selection and Analysis of Multi-Year Achievement Data

Alison LaGarry Educational Consulting

Alison LaGarry
Clinical Assistant Professor of Education
University of North Carolina at Chapel Hill
7006 Falconbridge Road
Chapel Hill, NC 27517
alisonlagarry@gmail.com
607-227-5904

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Phase I - a quantitative examination of existing NC READY data on student achievement for schools that began participation with A+ in 2014, 2015, and 2016. The purpose of this analysis is to examine any trends in student achievement, disaggregated by race/ethnicity, socioeconomic status (Title I schools), etc. Phase 1 will also include selection of 3 schools for further study. As such, this phase would also include consultation with A+ director for contextual and logistical information.

The A+ Schools Program is an arts-based whole-school reform initiative, currently housed in the North Carolina Arts Council, a division of the North Carolina Department of Cultural Resources. With over twenty years of experience in implementation, the A+ Schools Program has been evaluated, and found to be an effective model of school reform. So much so, that the model has spawned additional A+ programs in Oklahoma and Arkansas, as well as other pilot sites across the country.

Whole-school reform is an ambitious project that involves all school stakeholders, and demands a complex lens for evaluation and analysis. In Phase I we begin our larger analysis with one important slice of data: student achievement. Necessarily, school reform implies that students and schools become more *successful*, and one of the primary ways that outsiders are able to see this improvement is in student test scores. We believe that defining school success also involves a number of other factors, including students' feelings of well-being, school climate and community, opportunities for teachers' professional growth, administrative support, and involvement of parents and caregivers (to name a few). That said, we do think it is instructive to start our analysis with data available to the public. In other words, what is the public perception of school improvement for participating schools, simply based on school achievement data. Further, we note that each school context is unique: demographics are different, school and community priorities vary, and both teachers and students have multiple concerns that are not accounted for in achievement data. Because of this uniqueness of context, it is not instructive to make school-to-school comparisons. Furthermore, any findings in this report cannot be directly attributed to A+ Schools alone. Many, though not all, of the participating schools selected for this analysis are identified as low-performing schools. In such cases, we note that schools often take on *several* initiatives and make significant personnel changes to help students succeed. Phase II will provide us with a more nuanced picture of the impact of the A+ Schools Program as a driving factor for change in three selected schools.

In Phase II, we will delve into deeper analysis of three participating schools in action, through on-site ethnographic observations and interviews. In conversation with Director Michelle Burrows, we have selected three schools for this in-depth analysis. One of these schools, **Creedmoor Elementary**, began participation in Summer 2014. The other two schools, **North Graham Elementary** and **New Bridge Middle**, began participation in Summer 2015. Michelle recommended each of these sites as notable examples of A+ Schools implementation. We would have also selected E.K. Powe as an observation site, however, Durham County has strict application deadlines and requirements for research which we were unable to meet. For budgetary purposes, we note that North Graham and Creedmoor are both within commuting distance for our evaluation team. New Bridge is approximately 2.5 hours from Chapel Hill and will necessitate overnight hotel and mileage costs. As of today (January 15, 2017), we have obtained permission to begin on-site evaluation tasks at North Graham Elementary and New Bridge Middle. We are working with Michelle on this permissions process, and hope to obtain permission from Creedmoor Elementary within the next few weeks.

A+ Schools' Multi-Year Achievement Data

In approaching analysis of any school reform initiative, it is necessary to state that school reform is a long process that cannot be accomplished over the course of one or two academic years. According to prior longitudinal analyses of the A+ Schools Program, this particular initiative has a record of *sustained* school reform, which remains apparent over the course of subsequent academic years (Noblit, Corbett, Wilson, & McKinney, 2009). Despite this knowledge of this long arc of school reform, we were most interested in studying implementation in schools that have only recently begun participation (cohorts beginning in summers 2013-2016). Thus, we note that student achievement scores do not reflect a full picture of where student achievement these schools *might go* given further engagement with the A+ Schools model – simply a picture of where they began, and where they are now. Initially, we planned only to study those cohorts beginning in summers 2014-2016. This was due to the change in testing structure and student achievement reporting that occurred in 2012-2013, primarily due to the implementation of the Common Core State Standards in North Carolina. Test scores across the state experienced a dip that year, which makes comparison across years difficult and somewhat inauthentic. That said, once we began our analysis, we noted that we needed to be able to compare trends we saw in year-to-year achievement data of A+ Schools against those schools who have participated for a longer period of time. Thus, we opted to include some data from the cohort beginning in summer 2013 (referred to moving forward as *Cohort 2013*).

School Performance and Growth Data (EVAAS)

Using publicly available data from the North Carolina Department of Public Instruction, Table 1 shows school performance and growth data for A+ Schools in *Cohorts 2013-2016*. Nearly all participating schools' baseline¹ performance grades were "C" or lower, with R.J. Reynolds High being the exception with a baseline grade of "B." Some of the schools "Met" growth targets in their baseline year, despite low school performance grades. From this data, we take away three findings worth particular note:

- 1) Nearly all participating schools "Met" growth targets after two years of participation in the A+ Schools Program. Exceptions include E.K. Powe² and Elizabeth City Middle³.
- 2) According to data for the 2015-2016 academic year, all schools but one in Cohorts 2013-2015 "Met" growth targets.
- 3) All Cohort 2013 schools have improved their performance grades by one at least one letter-grade, according to 2015-2016 data. This performance grade improvement does not appear to occur consistently after one or two years of participation.

In sum, the data on school performance and growth in A+ Schools (*Cohorts 2013-2015*) is promising, especially after multiple years of participation. At this time, there is only baseline data available for Cohort 2016, so those schools have not been included in this analysis.

¹ Baseline data is taken from the year prior to beginning participation with the A+ Schools Program. For Cohort 2013, baseline data is taken from 2012-2013.

² E.K. Powe has had multiple changes in administration over the course of their participation, which could contribute to these anomalous results.

³ Elizabeth City Middle did experience gains in the school performance score, despite being rated as "Did Not Meet."

Table 1: EVASS School Performance Data: Cohorts 2013-2016

EVASS School Performance Data	2013-2014			2014-2015			2015-2016		
School	Grade	Score ⁴	Growth Status	Grade	Score	Growth Status	Grade	Score	Growth Status
<i>Cohort 2013</i>									
Comfort Elementary	D	54	Met	D	51	Met	C	64	Met
First Ward Elementary	D	52	Met	C	60	Exceeded	C	63	Met
Elizabeth City Middle	F	39	Did Not Meet	D	44	Did Not Meet	D	50	Met
University Park	D	46	Did Not Meet	C	57	Exceeded	C	60	Met
<i>Cohort 2014</i>									
E.K. Powe Elementary	D	51	Exceeded	D	49	Met	D	49	Did Not Meet
Creedmoor Elementary	F	38	Did Not Meet	D	45	Met	D	49	Met
R.J. Reynolds High	B	72	Did Not Meet	B	77	Met	B	76	Met
<i>Cohort 2015</i>									
North Graham Elementary	D	40	Did Not Meet	D	53	Met	D	52	Met
New Bridge Middle	C	67	Met	C	67	Met	C	68	Met
Townsend Middle	F	32	Met	F	26	Did Not Meet	F	30	Met
Z.E.C.A. Charter	F	28	Did Not Meet	F	29	Met	F	32	Met
<i>Cohort 2016</i>									
Yadkinville Elementary	C	57	Met	C	62	Exceeded	C	62	Met
Scotts Elementary	D	50	Did Not Meet	C	62	Met	C	56	Did Not Meet
Hickory Career and Arts	D	44	Did Not Meet	D	45	Did Not Meet	C	59	Did Not Meet

*Grey indicates years of A+ Implementation

⁴ This column represents the School Performance Score, which is based on the school's achievement score (80%) and growth score (20%). The resulting score is converted in to a grade according to the following intervals: A: 85-100; B: 70-84; C: 55-69; D: 40-54; F: Below 40.

Student Achievement – All EOC/EOG Tested Subjects

For each of the cohorts addressed in this report, we analyzed multi-year data on the percentage of students who achieved a rating of *Grade Level Proficient* or *College and Career Ready* on all EOC/EOG tested subjects. Students are rated on a five-point scale, with Achievement Level 3 indicating grade-level proficiency or “sufficient” command of the subject. Achievement Levels 4 and 5 indicate career and college readiness, or “solid” and “superior” command of the subject. *College and Career Ready* was not offered as a designation until 2013-2014.

For all cohorts, the net average change was positive for both *Grade Level Proficient* and *Career and College* ready. Table 2 shows the mean change in the percentage of students who achieved a rating of *Grade Level Proficient* or *College and Career Ready* for each cohort. These averages were calculated based on the difference between the most recent data available (2015-2016) and the appropriate baseline data year for each cohort. For *Cohort 2013*, 2013-2014 data was used as baseline for *College and Career Ready*, since this designation was not offered during that cohort’s true baseline data year.

**Table 2: Average Change Over Course of Participation in A+ Schools Program
(% of students)**

	Grade Level Proficient	College and Career Ready
Cohort 2013 (Average change 2013-2016)	+22.23	+6.70
Cohort 2014 (Average change 2014-2016)	+5.77	+3.63
Cohort 2015 (Average change 2015-2016)	+1.25	+2.20

It is clear that student achievement in these A+ Schools is improving, and the effect of positive change is greater for schools who have completed more years of participation. This suggests a hopeful cumulative effect of prolonged engagement. There was only one instance where an individual school showed a decrease in the percentage of students who were *Grade Level Proficient*. We note that this school has only participated in the program for one year, and that a slight decrease in early years of participation is not uncommon. Also, there was one school that showed a decrease in the percentage of students who were *College and Career Ready*. Despite this decrease, this school from *Cohort 2013*, had the highest net gain in the percentage of *Grade Level* proficient students (+27.3).

In Tables 3, 4, 5, and 6 we have provided data for each of the analyzed cohorts, showing progress through each year of participation. We also gathered data to observe any potential differences in English Language Arts and mathematics scores for each school, but found no significant patterns worth reporting at this time. We have included these data for your perusal at the end of this report in Appendices A, B, and C.

Table 3: Cohort 2013 Student Achievement
All EOC/EOG Tested Subjects

	All EOC/EOG Subjects (% of students)			
School	2012-2013	2013-2014	2014-2015	2015-2016
<i>Cohort (2013-2014)</i>				
Comfort Elementary				
Grade Level Proficient	32.0	46.3	43.9	58.8
College and Career Ready	*	32.9	34.4	48.3
First Ward Elementary				
Grade Level Proficient	33.3	44.4	53.2	60.6
College and Career Ready	*	34.7	43.6	33.7
Elizabeth City Middle				
Grade Level Proficient	27.1	38.6	39.9	44.0
College and Career Ready	*	29.6	29.2	33.7
University Park				
Grade Level Proficient	33.5	46.2	48.5	55.6
College and Career Ready	*	35.8	40.2	44.1

*Grey indicates years of A+ Implementation

Table 4: Cohort 2014 Student Achievement
All EOC/EOG Tested Subjects

	All EOC/EOG Subjects (% of students)		
School	<i>2013-2014</i>	<i>2014-2015</i>	<i>2015-2016</i>
<i>Cohort 2014</i>			
E.K. Powe Elementary			
Grade Level Proficient	41.5	41.9	45.2
College and Career Ready	33.7	33.1	37.5
Creedmoor Elementary			
Grade Level Proficient	32.8	35.3	40.2
College and Career Ready	24.4	25.5	26.9
Reynolds High			
Grade Level Proficient	48.7	55.7	54.6
College and Career Ready	40.4	46.3	45.0

*Grey indicates years of A+ Implementation

Table 5: Cohort 2015 Student Achievement
All EOC/EOG Tested Subjects

	All EOC/EOG Subjects (% of students)	
School	<i>2014-2015</i>	<i>2015-2016</i>
<i>Cohort 2015</i>		
North Graham Elementary		
Grade Level Proficient	46.4	44.6
College and Career Ready	34.7	36.4
Z.E.C.A. Charter		
Grade Level Proficient	17.9	21.0
College and Career Ready	11.9	15.0
New Bridge Middle		
Grade Level Proficient	62.3	63.6
College and Career Ready	52.6	54.7
Townsend Middle		
Grade Level Proficient	16.2	18.6
College and Career Ready	9.5	11.4

*Grey indicates years of A+ Implementation

Table 6: Cohort 2016 Student Achievement
All EOC/EOG Tested Subjects

Baseline Data	All EOC/EOG Subjects (% of students)
School	<i>2015-2016</i>
<i>Cohort 2016</i>	
Yadkinville Elementary	
Grade Level Proficient	56.2
College and Career Ready	44.4
Scotts Elementary	
Grade Level Proficient	53.0
College and Career Ready	41.9
Hickory Career and Arts Magnet	
Grade Level Proficient	39.6
College and Career Ready	32.9

*Grey indicates years of A+ Implementation

Student Achievement – Demographic Breakdown – All EOC/EOG Tested Subjects

Alongside the analysis of overall school performance, we were interested to know *who* is benefitting most from school reform initiatives. The North Carolina Department of Public Instruction provides disaggregated data for a number of groups, and we have analyzed the change for several of these groups over the course of participation. Because each school has differing demographic make-ups, we have opted not to provide cohort means. For each calculation, we noted the difference between the baseline year (the year prior to participation) and 2015-2016 data results. We note that results are not consistent across all participating schools but, as shown in Table 7 below, there are several trends worth noting.

- 1) Gains appear to be cumulative and increase as schools participate longer in the A+ Schools Program.
- 2) In many cases, though not all, Hispanic students are making the largest gains. Additionally, in some cases Hispanic students are making said gains earlier in participation. This is particularly evident for all schools in *Cohort 2013*, as well as Creedmoor and R.J. Reynolds from *Cohort 2014*.
- 3) By the second year of participation, Economically Disadvantaged Students are making steady gains. Again, this is evident for all schools in *Cohort 2013*, as well as Creedmoor and R.J. Reynolds from *Cohort 2014*.
- 4) Black students are also making steady gains by the second year of participation. As with most categories, the largest gains appear in the third year of participation.
- 5) Though not consistent across schools, some schools are making remarkable gains in achievement of Students with Limited English Proficiency (First Ward, University Park, and R.J. Reynolds).
- 6) Students with Disabilities are also making steady gains in achievement. For many of the schools the baseline percentage for these schools was listed as <5, and small incremental improvements represent meaningful improvements. Most notable, for this category, are the *Cohort 2015* schools, who made some of their largest and most consistent (across cohort) gains here.

**Table 7: Change Over Course of Participation in A+ Schools Program – Demographic Breakdown
(% of students)**

All EOG/EOC Subjects	Black Students	Hispanic Students	White Students	Limited English Proficient Students	Students with Disabilities	Economically Disadvantaged Students
<i>Cohort 2013</i>						
Comfort Elementary						
Grade Level Proficient	At least +33.7	+30.0	+27.5	ND	At least +11.7	+24.9
First Ward Elementary						
Grade Level Proficient	+29.1	+44.6	+3.4	+47.3	At least +16.6	+30.1
Elizabeth City Middle						
Grade Level Proficient	+10.2	+14.1	+20.2	+2.3	+3.1	+14.5
University Park						
Grade Level Proficient	+20.6	+34.7	+16.7	+35.2	At least +15	+22.1
<i>Cohort 2014</i>						
E.K. Powe Elementary						
Grade Level Proficient	+2.7	-7.4	-4.2	+1.3	+6	-2.1
Creedmoor Elementary						
Grade Level Proficient	+1.2	+8.8	+6.8	+1.4	At least +.1	+7.3
R.J. Reynolds High						
Grade Level Proficient	+4.4	+8.6	+5.3	At least +20.3	At least +1.8	+7
<i>Cohort 2015</i>						
North Graham Elementary						
Grade Level Proficient	-1.7	-.6	+4.9	-11.5	+5.5	-4.5
New Bridge Middle						
Grade Level Proficient	-.7	-2.6	+1.7	ND	+8.4	-1.8
Townsend Middle						
Grade Level Proficient	+2.1	+14.4	-2.7	-6.4	At least +4.2	+4.2
Z.E.C.A. Charter						
Grade Level Proficient	-3.6	ND	+19.3	ND	At most .0	+3.6

Summary

To summarize, we see many positive and promising trends present in the available student achievement data. Participating schools in the selected cohorts are making incremental positive progress in school performance and growth, as indicated by EVAAS accountability ratings. The average change in student performance on EOC/EOG tests, calculated for each cohort, is positive and increases for each year of participation (for both *Grade Level Proficient* and *College and Career Ready* designations). Additionally, there are several promising trends apparent in student achievement data disaggregated by demographic, indicating that the A+ Schools Program may be having an effect on the persistent issue of achievement and opportunity gaps between privileged and marginalized students.

Our team is looking forward to elaborating on and deepening these findings in our upcoming site visits. One of the selected schools is in the midst of their third year of participation, and two are in the second. We are especially interested to see if these schools duplicate the results of Cohort 2013.

References:

- Accountability and testing data (n.d). <http://www.ncpublicschools.org/accountability/reporting/>
Retrieved on January 15, 2017.
- Noblit, G. W., Corbett, H. D., Wilson, B. L., & McKinney, M. B. (2009). *Creating and sustaining arts-based school reform: The A+ schools program*. Routledge.

APPENDIX A:

	All EOC/EOG Subjects (% of students)			EOG Reading (Gr. 3/4/5) (% of students)			EOG Math (Gr. 3/4/5) (% of students)		
School	2013-2014	2014-2015	2015-2016	2013-2014	2014-2015	2015-2016	2013-2014	2014-2015	2015-2016
<i>Cohort 2014</i>									
E.K. Powe Elementary									
Grade Level Proficient	41.5	41.9	45.2	40.0/29.6/36.4	40.5/38.1/41.1	52.5/35.1/41.0	47.1/38.9/38.6	43.2/38.1/44.6	58.8/32.4/42.3
College and Career Ready	33.7	33.1	37.5	37.6/25.9/27.3	33.8/31.0/26.8	43.8/27.0/32.1	37.6/29.6/34.1	36.5/33.3/35.7	45.0/31.1/35.9
Creedmoor Elementary									
Grade Level Proficient	32.8	35.3	40.2	38.6/15.1/38.0	30.3/42.2/34.4	36.6/34.4/47.1	31.8/7.5/40.8	22.7/34.5/27.9	38.8/27.5/42.6
College and Career Ready	24.4	25.5	26.9	33.3/20.8/26.8	33.3/39.7/18.0	25.4/30.0/25.0	19.7/15.5/33.8	13.6/27.6/21.3	22.4/23.8/30.9
				EOC English (English 2) (% of students)			EOC Math (Math 1) (% of students)		
Reynolds High									
Grade Level Proficient	48.7	55.7	54.6	59.9	61.7	58.6	40.9	53.6	47.9
College and Career Ready	40.4	46.3	45.0	51.8	55.1	50.3	31.1	40.3	36.7

APPENDIX B:

	All EOC/EOG Subjects (% of students)		EOG Reading (Gr. 3/4/5) (% of students)		EOG Math (Gr. 3/4/5) (% of students)	
School	<i>2014-2015</i>	<i>2015-2016</i>	<i>2014-2015</i>	<i>2015-2016</i>	<i>2014-2015</i>	<i>2015-2016</i>
<i>Cohort 2015</i>						
North Graham Elementary						
Grade Level Proficient	46.4	44.6	51.5/37.0/44.0	38.6/51.7/31.6	48.5/31.5/54.9	47.4/31.0/56.1
College and Career Ready	34.7	36.4	31.8/25.9/34.0	29.8/41.4/26.3	39.4/20.4/47.1	31.6/27.6/47.4
Z.E.C.A. Charter						
Grade Level Proficient	17.9	21.0	35.7/6.7/12.3	28.1/21.9/7.8	25.0/6.7/15.8	25.0/25.0/5.9
College and Career Ready	11.9	15.0	31.3/6.7/5.3	25.0/12.5/<5	18.8/<5/10.5	12.5/18.8/5.9
			EOG Reading (Gr. 6/7/8) (% of students)		EOG Math (Gr. 6/7/8) (% of students)	
New Bridge Middle						
Grade Level Proficient	62.3	63.6	68.4/61.7/63.0	74.9/67.5/57.5	49.7/46.1/51.5	51.5/48.5/50.0
College and Career Ready	52.6	54.7	58.5/51.5/49.1	65.3/56.2/43.1	41.5/40.7/40.6	43.1/42.0/43.8
Townsend Middle						
Grade Level Proficient	16.2	18.6	12.5/25.4/28.0	11.6/25.0/25.5	10.7/16.9/6.0	7.0/13.3/21.4
College and Career Ready	9.5	11.4	<5/5.4/13.6	<5/11.7/10.9	7.1/10.2/<5	<5, 8.3, 14.3

APPENDIX C:

Baseline Data	All EOC/EOG Subjects (% of students)	EOG Reading (Gr. 3/4/5) (% of students)	EOG Math (Gr. 3/4/5) (% of students)
School	<i>2015-2016</i>	<i>2015-2016</i>	<i>2015-2016</i>
<i>Cohort 2016</i>			
Yadkinville Elementary			
Grade Level Proficient	56.2	55.7/45.9/52.4	65.7/45.9/40.5
College and Career Ready	44.4	47.1/30.6/36.9	50.0/41.2/33.3
Scotts Elementary			
Grade Level Proficient	53.0	56.5/50.0/52.4	58.4/44.1/48.4
College and Career Ready	41.9	40.3/41.2/38.7	42.9/35.3/46.8
		EOC English (English 2) (% of students)	EOC Math (Math 1) (% of students)
Hickory Career and Arts Magnet			
Grade Level Proficient	39.6	66.0	18.8
College and Career Ready	32.9	52.0	14.6