Elementary Support Model Implementation and Outcomes: 2014-15 to 2017-18

WAKE COUNTY PUBLIC SCHOOL SYSTEM

DATA, RESEARCH & ACCOUNTABILITY

Elementary Support Model Implementation and Outcomes: 2014-15 to 2017-18

Abstract

The Elementary Support Model (ESM) was implemented in Wake County Public School System's (WCPSS) 12 lowest performing elementary schools. ESM is designed to improve teacher and student outcomes by addressing governance, staffing, professional development, resources, calendar and schedule, and provides leadership and instructional coaching. Qualitative methods were used to assess implementation and a quasi-experimental design was utilized to examine ESM's intermediate and long-term outcomes. The implementation of ESM in WCPSS was strong. ESM was also successful in meeting, or mostly meeting, its short-term goals related to professional development, coaching, and governance. Results related to intermediate and long-term goals were mixed. Three areas of strength were principal support to teachers, reduction of beginning teachers, and increases in the number of ESM schools meeting EVAAS growth; however, additional goals related to student outcomes were either only partially met or not met. Recommendations focus on strengthening implementation and continuing to monitor progress toward reaching program goals.

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Summary

The Elementary Support Model (ESM), implemented in 2015-16, is a Wake County Public School System (WCPSS) initiative designed to improve teacher and student outcomes for the district's lowest performing schools. Twelve elementary schools[1] comprise the WCPSS' ESM Area and are supported by an area superintendent along with a cross-functional instructional team. Twelve elementary schools were selected (based on a multiple indicators ranking) as ESM schools to receive additional supports beginning in 2015-16. The model addresses governance, staffing, professional development, resources, calendar and schedule, and provides leadership and instructional coaching.

Results

As of 2016-17 (the second year of implementation), the implementation of ESM in WCPSS was strong: four implementation goals related to governance, instructional coaching, and staffing were fully met; and two goals related to classroom walkthroughs or "look fors" and the adoption of calendars and schedules were mostly met. ESM was also successful in meeting or mostly meeting its short-term goals related to professional development, coaching, and governance. Only one short-term goal—teachers implementing targeted best practices with fidelity—could not be determined as "Met" due to lack of classroom observation data.

Results related to intermediate and long-term ESM goals as of 2017-18 were mixed. Goals related to principal support to teachers, reduction of beginning teachers, and increases in the number of ESM schools meeting Education Value-Added Assessment System (EVAAS) growth were met. Goals related to teacher absenteeism, teacher evaluation ratings, student absenteeism, teacher-student relationships, achievement gaps, and sixth grade achievement were only partially met, and goals related to proficiency goals related to Dynamic Indicators of Basic Early Literacy Skills® (DIBELS) composite, End-of-Grade (EOG) proficiency, and exceeding EVAAS growth were not met.

Recommendations

The following recommendations are based on the findings in this study:

- **More consistent school to school data collection efforts.** Clarify expectations regarding the completion of student surveys. Centralize the collection of walkthrough or "look for" data.
- **Utilize an observational tool to inform instruction.** School staff should use a 'look for' tool in order to inform teacher planning and monitor the success of classroom implementation of professional learning and the application of learning shared via coaching support. Use of the 'Look-for' should provide school administrators and other school staff formative information on classroom practices going forward.
- **Unpack principal concerns regarding ESM Coaches' roles.** Based on principal feedback, the role of the two full-time ESM coaches should be more flexible and responsive to school needs. ESM support teams focus group feedback indicated that beginning in 2017-18, each individual school's needs would guide the coach's role at that school.

[1] Barwell Road, Brentwood, Bugg, Creech Road, East Garner, Fox Road, Hodge Road, Lincoln Heights, Lynn Road, Smith, Walnut Creek, Wilburn.

- **Clarification regarding accessing support from coordinating teachers.** ESM principals requested improved communication for identifying (and the process for receiving) support from coordinating teachers needs clarification.
- **Continue to align ESM goals with MTSS Framework.** Given that 2017-18 represents the third year of ESM implementation, and according to implementation science it takes three to five years to realize full implementation, ESM staff should revise (annually) and continue use of the ESM logic model as a tool for tracking progress toward reaching ESM goals. Furthermore, since the MTSS Framework is the broader umbrella under which the ESM initiative fits, staff should ensure ESM goals continue to align with the MTSS Framework.
- **Use successful ESM strategies and ESM school exemplars to inform the district's Collaborative System of School Support.** ESM's structured support and leadership/mentoring strategy have shown success in reducing the number of beginning teachers, increasing the percentage of teachers feeling consistently supported by leadership, and increasing school's meeting growth.

Background

In 2015-16, WCPSS began providing support to 12 elementary schools grouped within the newly created ESM Area based on multiple indicators including achievement, teacher characteristics, demographics, school climate, and school leadership. The 12 elementary schools rated lowest on these indicators were grouped for supervision by a newly hired Area Superintendent. This area superintendent was tasked with the creation of the ESM framework and strategies and was supported by a cross-functional instructional team. The ESM model that was developed addresses governance, staffing, professional development, resources, calendar and schedule and provides instructional coaching. Due to a change of leadership midway through ESM's first year of implementation when the first ESM Area Superintendent left the district, a new ESM Area Superintendent had to be selected, which resulted in some changes in terms of how schools were supported. While all ESM schools continued to be required to participate in structured meetings, beginning in 2016-17 ESM central staff also tiered additional support (e.g., more frequent site visits) to schools based on need (e.g., school performance data and/or school leadership changes). While ESM's basic structure remained the same (with some modifications), the new ESM Area Superintendent added an instructional focus, described as "back to basics." In 2015-16, the structural support was established (i.e., structured meeting schedule and central support staff), but the content and focus of professional learning and coaching support were not established until well into the 2015-16 school year due to this leadership transition. As such, this focus was not fully implemented until 2016-17 (the second year of ESM implementation).

ESM Expenditures

In 2017-18, ESM expenditures were $2,490,451 (see Table 1). The vast majority ($1,981,155 or 80%) of ESM expenditures was federally funded by Title I dollars. A smaller balance of the total expenditures was supported by local funds ($453,484 or 18%) and state funds ($55,813 or 2%). Overall, the ESM expenditures were reduced by approximately one million each year of implementation. The 2015-16 budget (year 1) of $4,500,724 was reduced to $3,499,540 in 2016-17 and to $2,490,451 in 2017-18. Reductions in ESM funding could be explained by changes in Title I funding requirements. ESM was funded by a Title I "set aside" in 2015-16 (year 1). However, this one-year waver did not apply in years 2 and 3; thus, ESM schools received similar funding to other Title I schools with similar free or reduced-price lunch (FRL) populations.

Table 1
2017-18 (Year 3) Expenditures by Funding Source

	Federal	Local	State	Total
Central-Based Salary		327,986	39,573	367,558
Salary/Benefits	451,451	112,753	16,240	580,444
School-Based Salary	1,242,318			1,242,318
Supplies and Materials		3,202		3,202
Training/Salary	287,386	5,242		292,627
Misc.		2,536		2,536
Travel		1,767		1,767
Grand Total	**$1,981,155**	**$453,484**	**$55,813**	**$2,490,451**

Data Source: WCPSS Budget Department
Note: All figures have been rounded to the nearest dollar which may have resulted in slightly different totals.

Furthermore, Title I schools with similar FRL percentages were required to provide coaching at the same level (i.e., two coaches per school) and in 2016-17 ESM schools were required to participate in district-wide professional development. These changes resulted in a reduction in specific ESM funding above and beyond what other Title I schools received.

Comprehensive School Reform

In essence, ESM can be considered a customized schoolwide support model, or comprehensive school reform (CSR) model. CSR models are school-level initiatives that are intended to improve entire schools instead of implementing a series of independent improvement efforts (Borman, Hewes, Overman, & Brown, 2003). Often, the goal of implementing these models is to improve instruction at continually low-performing schools in an effort to improve educational outcomes for at-risk students. Research on CSR has found that the success of these reform efforts rests on the quality of implementation (Datnow, Borman, & Stringfield, 2000; Stringfield et al., 1997); internally developed CSR models tend to be implemented with less fidelity than those externally developed (Bodilly, 1996, 1998; Nunnery, 1998). Effective CSR models emphasize professional development and support during initial implementation, and stakeholder buy-in is critical to the success of these initiatives (Borman et al., 2000; Datnow & Stringfield, 2000).

Leadership / Mentoring

One major component of the WCPSS ESM initiative is leadership mentoring provided by the area superintendent and the ESM instructional team. North Carolina's Standards for School Executives focus on seven main facets of principal leadership: Strategic (including vision and improvement plans), Instructional, Cultural, Human Resource (including evaluating, developing, and hiring teachers), Managerial (including budget management and interpersonal relationships), External Development (including family/community outreach and compliance with state and district mandates), and Micro-Political (including creating an environment where school staff can take on leadership opportunities and safely deliver feedback) (NCDPI, 2011). By having fewer schools within the ESM area, the ESM central-based support team (including the ESM Area Superintendent) are able to have regular (monthly or more frequent) structured meetings with school administrators with the goal of removing administrative

obstacles (e.g., providing hiring priority) and strengthening principals in areas consistent with the NC Standards for School Executives. Moreover, research literature on principal leadership generally favors principals who espouse a school vision, create goals based on that vision, and support teachers and staff in realizing these goals (Marshall, 2015; Rutherford, 1985; Saban & Wolfe, 2009). As such, the structured meeting schedule and the leadership/mentoring components of ESM are designed to enable adequate time and focused collaboration with school administration around these key areas.

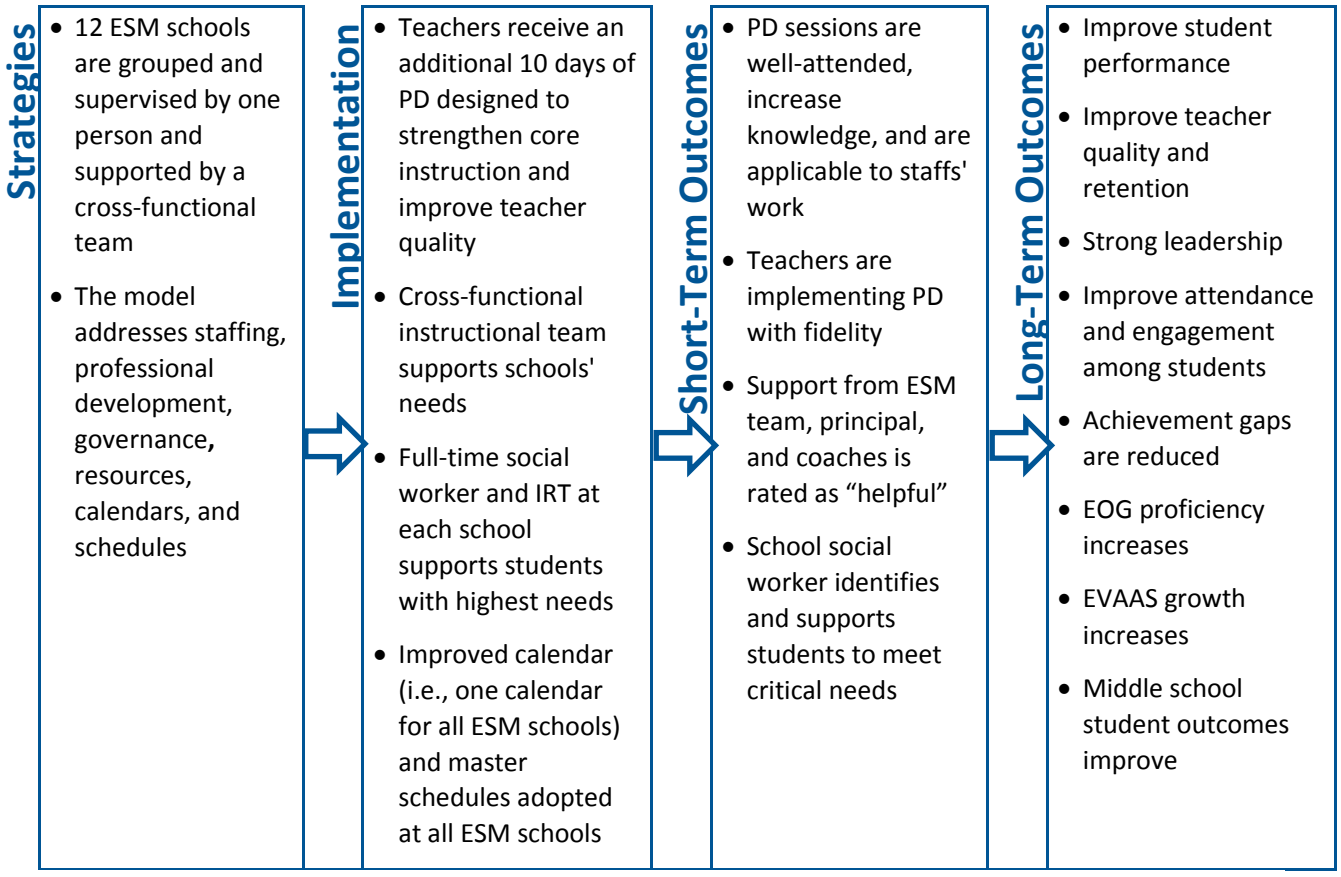
Principal mentorship and coaching represent a key method of helping principals develop leadership skills (Bush & Chew, 1999). Conceptualizing a successful mentoring relationship is difficult given that characteristics of the school environment, the mentee, and the mentor all contribute to a relationship's success (Dominguez & Hager, 2013; Parylo, Zepeda, & Bengston, 2012). Successful mentorship relationships are based on mutual trust, shared visions and goals, and effective communication of strengths and weaknesses (Armstrong, Allinson, & Hayes, 2002; Bloom, Castagna, & Warren, 2003; Dominguez & Hager, 2013; Parylo, Zepeda, & Bengston, 2012). One model of mentorship is the Coaching Leaders to Attain Student Success model (CLASS), as described by Bloom, Castagna, and Warren (2003). According to this model, successful mentoring relationships: 1) offer a fresh perspective of circumstances and possibilities, 2) are based upon trust and permission, 3) utilize instructional and facilitative strategies based on experience and reflection, 4) focus on student success, and 5) develop goals based on professional standards (Bloom et al., 2003). While the CLASS model is generally used to train principal coaches who have no authoritative power over principals, it may also have benefits in the informal mentorship between the area superintendent and ESM principals irrespective of the supervisor/subordinate component to the relationship that also exists in this setting.

Program Goals

The Elementary Support Model (ESM) had several goals as shown in Figure 1. The primary goal was for ESM to increase student learning by strengthening teacher quality and school leadership.

Figure 1
Pathway of Change

Effort: Elementary Support Model
Need: Through a close review of data and a formal presentation process involving both school staff and Central Services staff, the district has identified 12 elementary schools that have been consistently low performing as measured by state assessments and additional data points. The selected schools have a higher number of students with chronic absenteeism, homelessness, and critical needs that negatively impact student achievement. Additionally, these schools have approximately 190 new beginning teachers (BT1s—65; BT2s—58; and BT3s—67) who require four observations each on a yearly basis.



Methods

The 12 ESM elementary schools were selected based on a pre-ESM ranking based on multiple factors. In 2014-15, the 12 elementary schools with the lowest composite Multiple Factors Index (MFI) scores were designated as ESM schools based on 2013-14 data. The factors within the MFI included achievement (e.g., percentage of students scoring at "Benchmark" level on the DIBELS composite, and percentage of students scoring proficient on end-of-grade exams), teacher characteristics (e.g., teacher turnover rate), demographics (e.g., percentage of students with disabilities), school climate (e.g., short-term suspensions), and school leadership (e.g., teacher survey results). Utilizing a variety of data sources (see Table 2), we used a quasi-experimental design to examine ESM's intermediate and long-term outcomes.

Data Sources

Table 2

Data Sources for the Study

Data Source	2014-15 (baseline)	2015-16	2016-17	2017-18
Principal Focus Groups (2 focus groups with 6 principals in each)			✓	
ESM Central Services Administrative Staff Focus Group			✓	
Professional Development SRN Data			✓	
WCPSS Annual Teacher Survey			✓	✓
Walkthrough or "look for" data collected from ESM schools		✓	✓	
Teacher absences tables provided by Human Resources	✓	✓	✓	✓
Teacher counts provided by Human Resources	✓	✓	✓	✓
Educator Effectiveness file from NCDPI	✓	✓	✓	✓
Student Data (Demographics, EOG, and DIBELS)	✓	✓	✓	✓
WCPSS Annual Student Engagement Survey	✓	✓	✓	✓

Note: Blanks indicate data not collected for that year.
NCDPI = North Carolina Department of Public Instruction

Study Design

This evaluation is based on a quasi-experimental design where each ESM school was matched to a comparison school. Twelve comparison elementary schools were selected based on a matching procedure that accounted for school and student-level characteristics. The study's relatively small sample size of 24 schools (12 ESM and 12 comparison schools) meant that the study had limited power to detect significant differences. In other words, the impact of ESM would need to be large for significant effects to be found. Another limitation of the study design was that the absolute lowest 12 schools (based on the multiple factors) were designated ESM which made finding comparison schools problematic. To help strengthen the similar comparisons between ESM (ranked the 12 lowest in 2013-14) and comparison schools (ranked above ESM in 2013-14) schools were matched both on school and student-level characteristics.

Multilevel Analyses

In addition to descriptive analyses conducted throughout, we conducted a series of multilevel analyses to control for possible effects of prior student achievement, student demographic characteristics, and school effects. Such statistical control allowed for a more precise measurement of outcomes and improved the ability to attribute any observed results to the implementation of ESM. To explore whether ESM had any differential effects on subgroups of students, we included cross-level interactions between the school-level predictor (ESM vs. comparison schools) and student-level predictors, such as Limited English Proficient (LEP) status and special education (SWD) status in our model.

Table 3
Nature of the Data Provided and Valid Uses

Research Design	Conclusions that Can be Drawn
☐ Experimental	We can conclude that the program or policy caused changes in outcomes because the research design used random assignment.
☑ Quasi-Experimental	We can reasonably conclude that the program or policy caused changes in outcomes because an appropriate comparison strategy was used.
☑ Descriptive ☑ Quantitative ☐ Qualitative	These designs provide outcome data for the program or policy, but differences cannot be attributed directly to it due to lack of a comparative control group.

Sources: List, Sadoff, & Wagner (2011) and What Works Clearinghouse (2014)

Implementation

Program Implementation: Was ESM implemented as planned?

Implementation goals were examined in 2015-16 (year 1) and 2016-17 (year 2) to establish fidelity of ESM implementation. As of the 2016-17 school year, four of the six implementation goals were fully met, and two goals was mostly met.

Prior to examining ESM outcomes, it is imperative that the strength of program implementation be determined. Thus, the extent to which ESM was implemented with fidelity in 2015-16 (year 1) and 2016-17 (year 2) was evaluated and is reflected in Table 4:

- Structured ESM meetings were scheduled as planned, and the tiering support to ESM schools was viewed as more effective in meeting individual school needs.
- The regular support and guidance received by principals from the Central Services ESM Team members was appreciated.

- Principals reported that in 2015-16 a vendor developed walkthrough tool was adopted but never made available to schools; thus, a Google form for classroom observations was created by ESM Team members and Human Resources staff specifically for ESM schools. While principals utilized the Google form in 2016-17, they reported that the tool was too general to meet their school's needs. Therefore, in 2015-16 and for part of 2016-17 principals used their own tools and methods to conduct the majority of formal and informal observations. In 2017-18, a districtwide 'look for' tool was adopted. However, these data were used formatively and thus not captured centrally.
- While the principals found having two full-time coaches beneficial, they suggested that the role of the ESM coach should be more flexible and responsive to school needs. In 2016-17, each school was assigned two full-time coaches (an instructional and a content area coach) in an effort to respond to the reported gaps in service caused by sharing coaches in 2015-16.
- Master schedules were adopted; however, calendar changes were not approved by WCPSS' Board.
- Each school had a full-time social worker and instructional resource teacher to support students with the highest needs.

Table 4

Implementation Status Ratings

Implementation Goals	2015-16	2016-17
Governance		
1. Structured ESM meetings scheduled as planned and included a tiered system of support	★★★	★★★
2. Principal mentoring/coaching provided by ESM Area Superintendent	N/A	★★★
Professional Development and Coaching		
3. Walkthroughs or "look fors" are conducted regularly at all 12 schools	★☆☆	★★☆
4. Two full-time school-based coaches for each ESM school	N/A	★★★
Calendars and Schedules		
5. One ESM calendar and master schedules adopted at all ESM schools	★★☆	★★☆
Staffing		
6. Full-time social worker and IRT at each school supports students with highest needs	★★★	★★★

Goal Status: fully met ★★★ mostly met ★★☆ partially met ★☆☆ not met ☆☆☆

Results

Has ESM met its short-term goals?

Three of the five ESM short-term goals were fully met (goals related to Professional Development and coaching), one was mostly met (goals related to the use of walkthrough or "look for" data) and one goal—teachers implementing targeted best practices with fidelity—could not be determined due to a lack of baseline data.

- Within the majority (54%) of ELA lessons observed there was evidence of small group instruction and/or guided reading groups, which are considered best practices and emphasized within the ESM professional development. However, the annual increase in teachers implementing targeted best practices with fidelity could not be determined due to a lack of two years of available data (i.e., no baseline data in 2015-16 and no centrally collected data in 2017-18).
- The vast majority (>80%) of teachers reported positively on the effectiveness of ESM professional development in meeting classroom needs in 2016-17.
- In 2017-18, 47% of teachers in ESM schools reported having received coaching at least monthly or with greater frequency, compared to 33% of teachers in comparison schools and 25% in non-ESM schools (results were similar in prior years).
- In 2017-18, a higher percentage of teachers at ESM schools (92%) reported favorably that coaching was applicable to their work than did teachers at comparison and non-ESM schools (86%).

Table 5
Short-term Goals Status Ratings

Short-term Goals	2015-16	2016-17	2017-18
Governance			
1. Walkthrough or "look for" data are used to inform instruction	☆☆☆	★★☆	N/A**
2. Annual increase in teachers implementing targeted best practices with fidelity	N/A	☆☆☆	N/A**
Professional Development			
3. Staff report that training sessions increased their knowledge and were applicable to their work	★★☆	★★★	N/A*
Coaching			
4. Teachers report that coaching occurred regularly	★★★	★★★	★★★
5. Teachers report coaching was applicable to their work	★★☆	★★☆	★★★

Notes: * This question was not asked in 2017-18.
** A common "Look-For" tool has been adopted by the district and will be used to inform instruction; however, use of the tool was in the initial stages of implementation in 2017-18 and data were not collected centrally.

Goal Status: fully met ★★★ mostly met ★★☆ partially met ★☆☆ not met ☆☆☆

Has ESM met its intermediate and long-term goals?

Three of the 12 intermediate goals were fully met in 2017-18 (goals related to leadership support, a reduction in the percentage of beginning teachers, and schools meeting expected growth). Six goals were partially met—percentage of highly effective teachers, teacher absenteeism, student-teacher relationships, 6th grade student achievement, and reduction in achievement gaps. Three goals were not met.

School Leadership Support:

- The percentage of ESM teachers reporting that they feel supported by leadership increased seven percentage points from 2014-15 (prior to ESM) to 2017-18 (year 3).

Teacher Outcomes:

- The average days of leave taken by ESM teachers increased by half a day from 2014-15 to 2017-18 while it increased one day at comparison schools.
- There was a seven percentage point reduction in the proportion of beginning teachers from 2014-15 (prior to ESM) to 2017-18, compared to a reduction of four percentage points at comparison schools.
- One of the five North Carolina Educator Evaluation System (NCEES) standards, Standard I-Teachers Demonstrate Leadership, had a four-percentage point increase in teachers rated as *Accomplished* or *Distinguished* from 2014-15 and 2017-18 while the remaining four standards remained approximately the same.

Student Outcomes:

- The overall goal of >9% of students with chronic absenteeism and an annual 2 percentage point decrease was partially met. The ESM average chronic absence trend followed a similar pattern to the comparison and non-ESM schools' trends. In 2017-18, six out of the 12 ESM schools experienced a reduction in chronic student absenteeism from prior to ESM.
- The goal of 80% agreement with teacher-student relationship statements was reached on only four out of nine teacher-student relationship survey questions each year examined.
- The percentage of students meeting DIBELS benchmarks in grades K-5 remained stable at ESM schools; thus, the goal of a three percentage-point increase of students at benchmark was not met.
- The goal of 57% of students proficient (5 percentage point increase) on the EOG performance composite was not met.
- Eleven out of 12 (92%) ESM schools met or exceeded growth (as measured by EVAAS); thus, the goal of 83% was met.
- No schools exceeded growth; therefore, the goal of 25% of schools (three out of 12) exceeding expected growth was not met.

- The goal of a two percentage point reduction in achievement gaps annually was partially met. While there was a total of two percentage point reductions from 2014-15 (prior to ESM) to 2017-18, the annual two percentage point decrease was not reached.
- The goal of improved grade 6 outcomes for ESM students once they get to middle school was partially met. While the percentage of 6th grade students proficient on their reading EOG increased six percentage points from 2014-15 to 2017-18, math proficiency decreased one percentage point.

ESM did not show any statistically significant effects across student subgroups.

Table 6
Intermediate and Long-term Goals Status Ratings

Intermediate and Long-term Goals	2015-16	2016-17	2017-18
School Leadership Support			
1. Increase in teachers reporting they feel supported by school leadership compared to prior years	N/A	★★★	★★★
Teacher Outcomes			
2. Decrease in teacher absenteeism compared to prior years	☆☆☆	★☆☆	★☆☆
3. Reduction in the percentage of BTs compared to prior years	★★★	★★★	★★★
4. Increase in the percentage of highly effective teachers compared to prior years	N/A	★☆☆	★☆☆
Student Outcomes			
5. 9% of students with chronic absenteeism (2 percentage point decrease)	N/A	☆☆☆	★☆☆
6. 80% or greater agreement on all Teacher-Student Relationship survey items	N/A	★☆☆	★☆☆
7. 64% of students at benchmark (3 percentage point increase) on DIBELS composite	N/A	☆☆☆	☆☆☆
8. 57% of students proficient (5 percentage point increase) on EOG performance composite	N/A	☆☆☆	☆☆☆
9. 83% of schools (10 out of 12) meet or exceed expected growth (as measured by EVAAS data)	★★★	★★☆	★★★
10. 25% of schools (3 out of 12) exceed expected growth	★★★	★☆☆	☆☆☆
11. 2 percentage point reduction in achievement gaps annually	N/A	★☆☆	★☆☆
12. Improved grade 6 achievement for ESM students	N/A	N/A	★☆☆

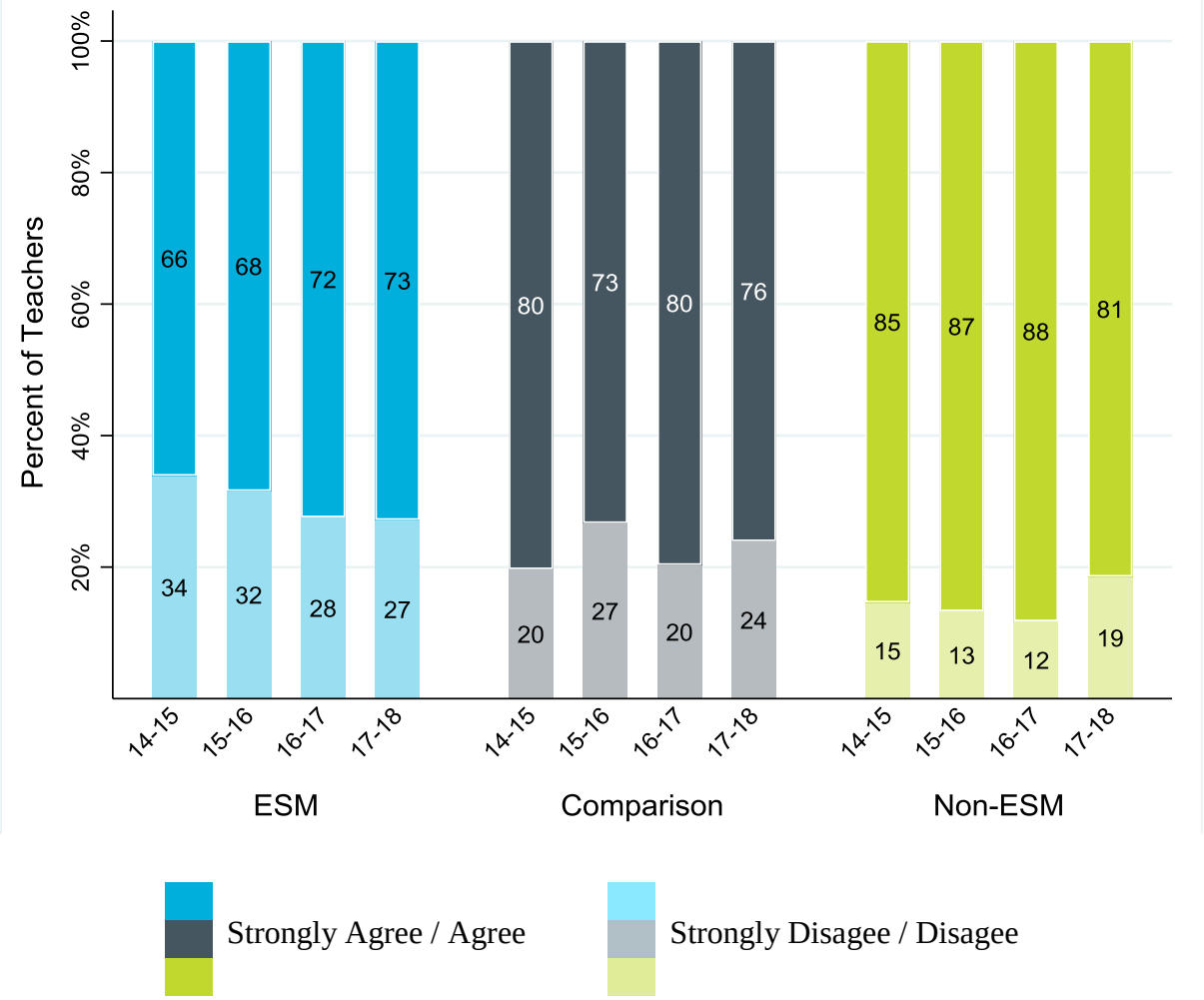
Goal Status: fully met ★★★ mostly met ★★☆ partially met ★☆☆ not met ☆☆☆

School Leadership Support

Has the percentage of teachers who report feeling supported by school leadership increased from 2014-15 to 2017-18 when compared to teachers in comparison schools?

The percentage of teachers reporting consistent support from school leadership increased steadily at ESM schools from 2014-15 to 2017-18 (66% to 73%), while at comparison schools the year-to-year difference fluctuated. The percentage point increase in teacher agreement increased seven percentage points at ESM schools versus a four percentage point decrease among teachers at comparison and non-ESM schools (this was a statistically significant difference). The percentage of teacher agreement remained higher at comparison schools and non-ESM schools than at ESM schools, however, the gap closed by 11 percentage points for both groups of schools.

Figure 2
Percentage of Teachers Reporting Consistent Support by Leadership at ESM, Comparison, and non-ESM Elementary Schools, 2014-15 to 2017-18

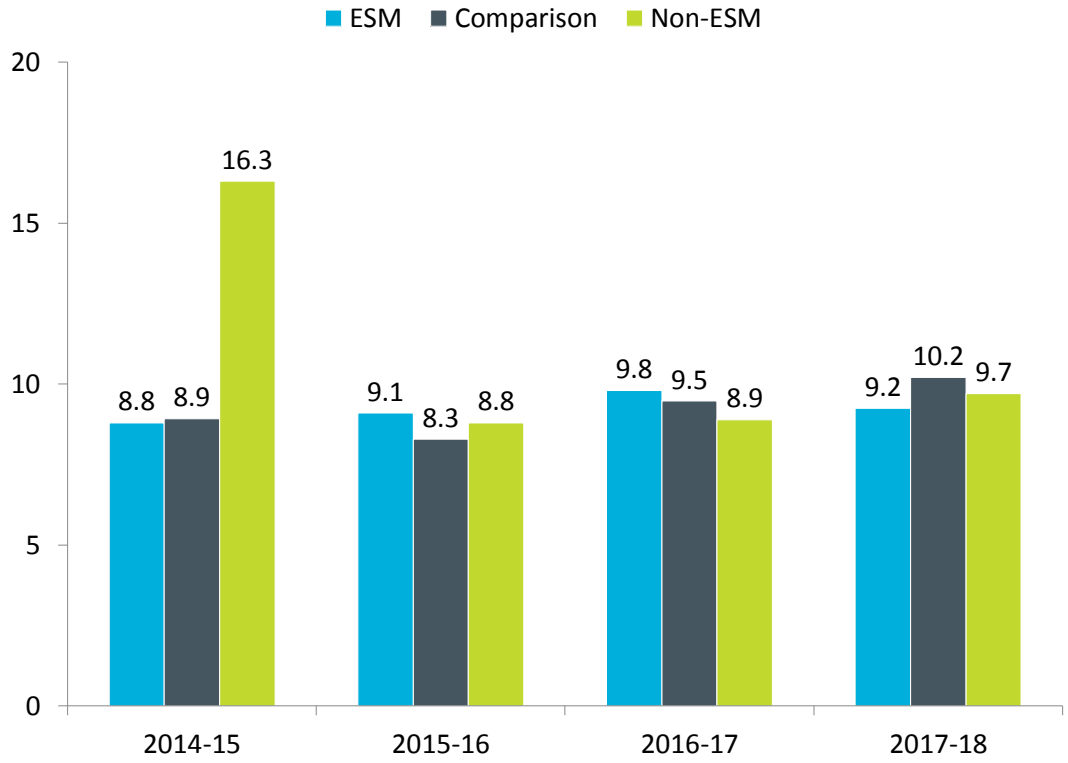


Teacher Absence Rate

Has the teacher absence rate decreased from 2014-15 (prior to ESM implementation) when compared to teachers at comparison schools?

The overall teacher absence rate increased for both the ESM schools and the comparison schools over the four-year period. However, the increase for ESM was only by half a day on average, in contrast to the increase for the comparison schools that was 1.3 days on average. In 2017-18, the average teacher absence rate was lower at the ESM schools than at the comparison schools (9.2 vs 10.2).

Figure 3
Teacher Absence Rate 2014-15 to 2017-18



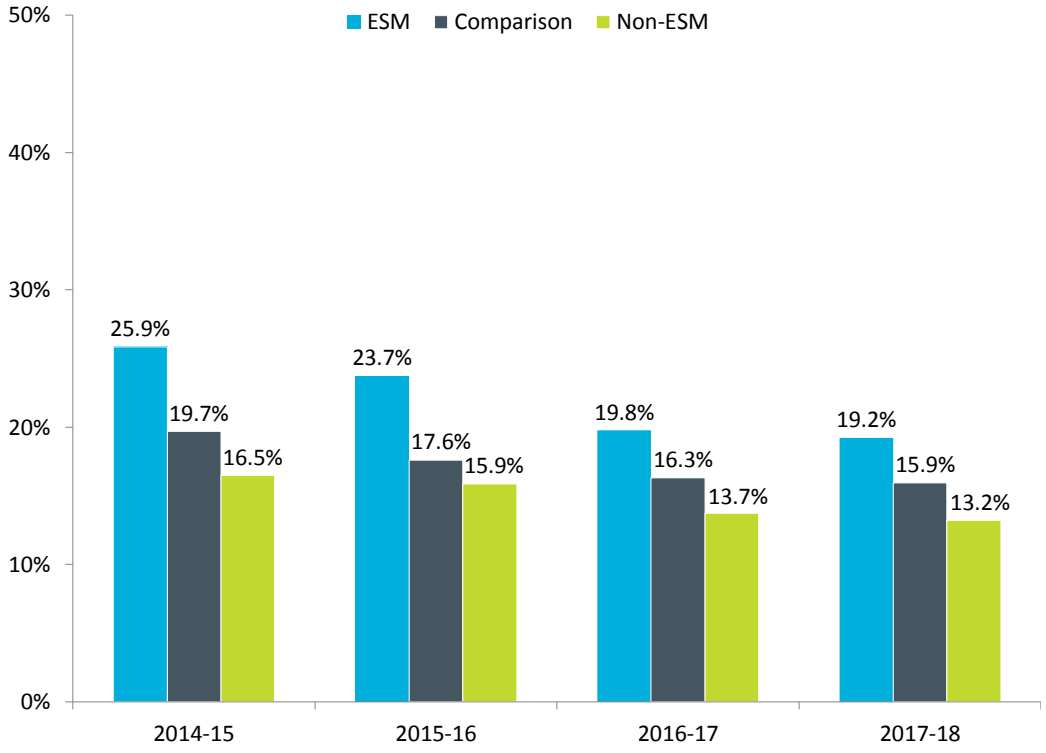
Note: Teacher attendance is the combination of sick leave, personal leave, donated leave, and bonus leave. Annual leave was not included.

Reduction of Beginning Teachers

Has the proportion of beginning teachers decreased in ESM schools compared to prior years and teachers at comparison schools?

The overall proportion of beginning teachers (teachers with three or fewer years of experience) at ESM schools and at the comparison schools decreased from 2014-15 (prior to ESM) to 2017-18. The proportion of BTs at ESM schools has remained higher than at the comparison schools over the four-year period, however the ESM schools had a faster rate of decrease (6.7 percentage points for ESM schools and 3.8 percentage points for the comparison schools).

Figure 4
Percentage of Beginning Teachers at ESM, Comparison, and Non-ESM Schools
2014-15 to 2017-18



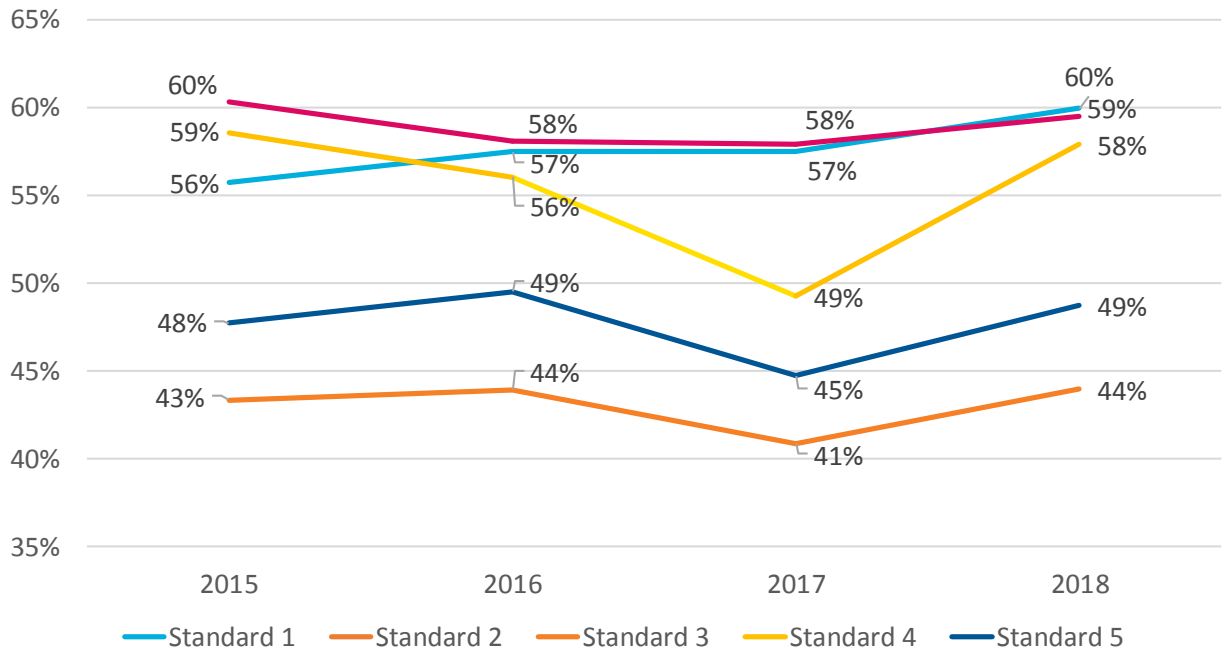
Highly Effective Teachers

Has there been an increase in the percentage of highly effective teachers compared to prior years (with 2014-15 being the baseline year)?

Only one of the five NCEES standards, Standard I (Teachers Demonstrate Leadership), had a four-percentage point increase in teachers rated as *Accomplished* or *Distinguished* from 2014-15 and 2017-18, while the remaining four standards remained approximately the same.

Figure 5

Percentage of ESM Teachers NCEES Rating by Standard, 2014-15 to 2017-18



Note: Percentages shown are for teachers rated as *Accomplished* or *Distinguished*.
Standard I: Teachers Demonstrate Leadership
Standard II: Teachers Establish a Respectful Environment for Diverse Population of Students
Standard III: Teachers Know the Content They Teach
Standard IV: Teachers Facilitate Learning for Their Students
Standard V: Teachers Reflect on Their Practice

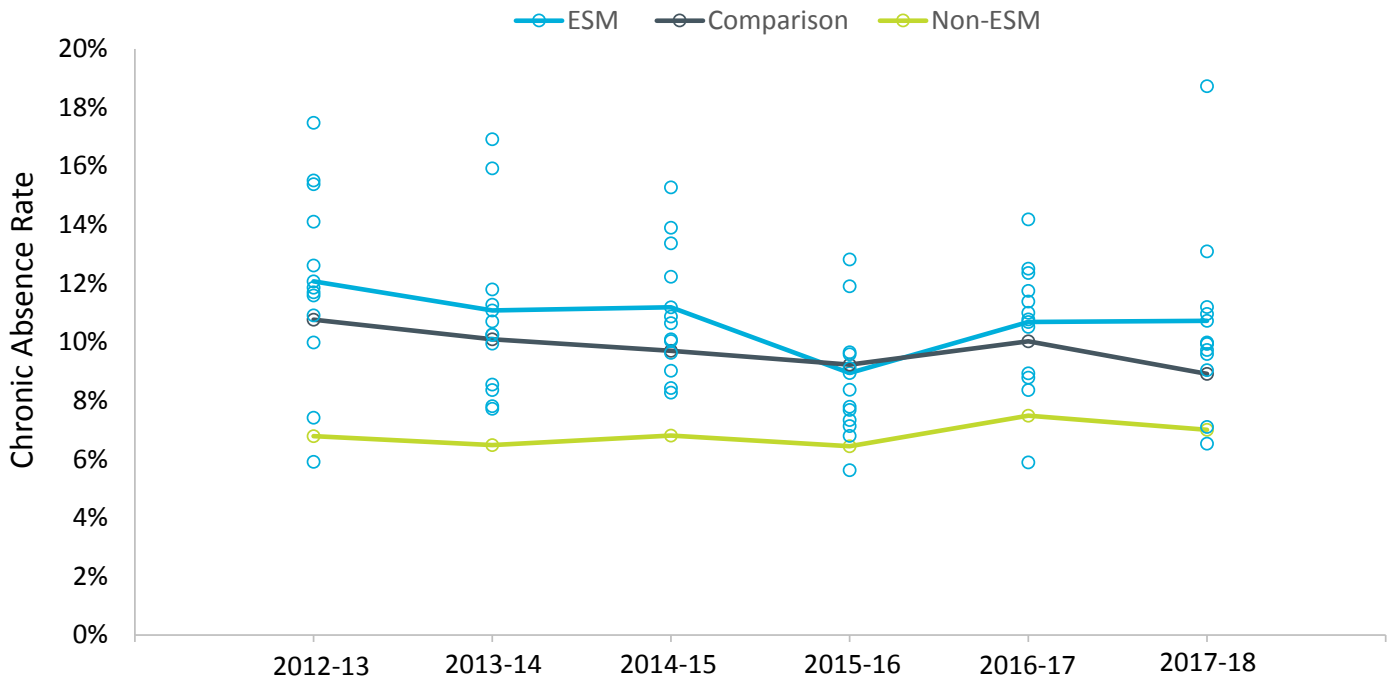
Student Absences

Has chronic student absenteeism decreased from 2014-15 (baseline prior to ESM implementation) when compared to teachers at comparison schools?

Among ESM schools across the observed years, chronic absenteeism ranged from a low of 5.6% (Fox Road Elementary, 2014-15) to a high of 18.7% (Walnut Creek Elementary, 2017-18). The overall goal of 9% of students with chronic absenteeism and an annual 2 percentage point decrease was partially met. In 2017-18, if the outlying high of 18.7% is removed, the average chronic absenteeism percentage drops from 10.7% to 9.9%, which approaches achievement of the overall goal of 9%. Moreover, in 2012-13 across ESM schools, chronic absenteeism was widespread with a range of 11.6 percentage points. By 2017-18, the spread decreased to a range of 6.6 percentage points (excluding the outlying school).

Figure 6

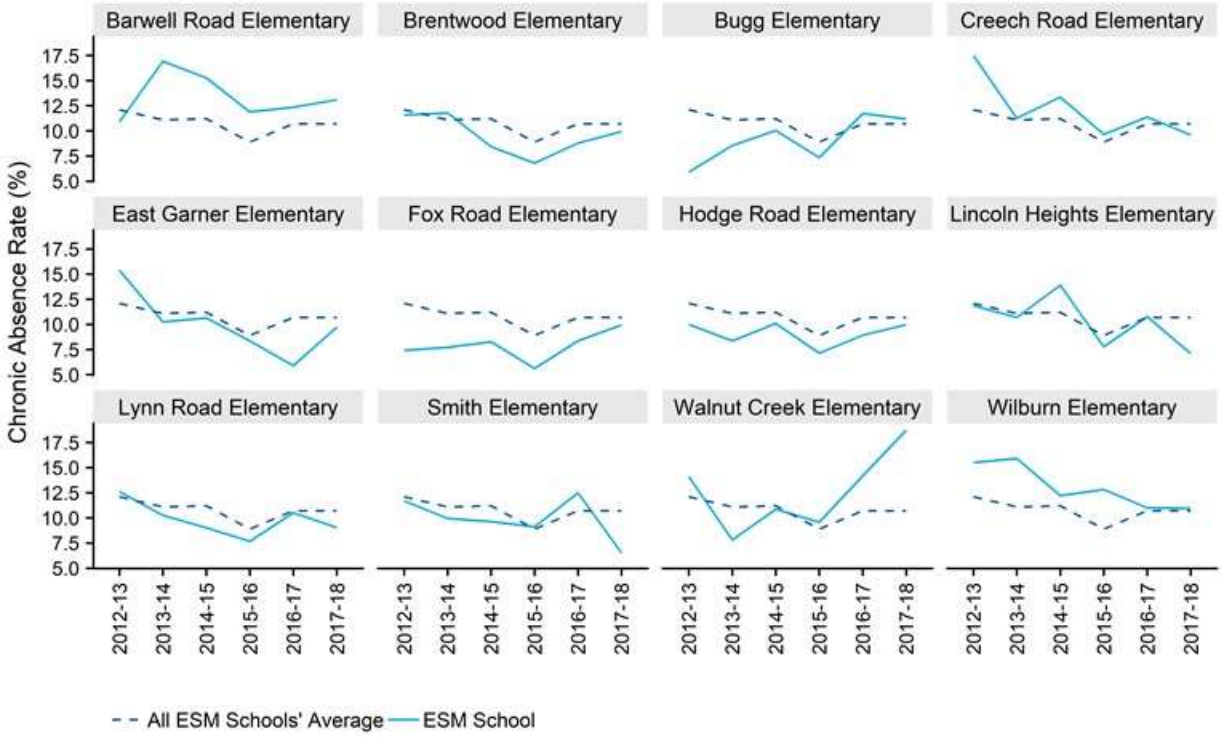
Percentage of Students with Chronic Absenteeism at ESM, Comparison, and Non-ESM Schools, 2012-13 to 2017-18



The average chronic absence rate for all ESM schools (dashed line) shows that on average, ESM schools reduced chronic absenteeism up to 2015-16, but there was an uptick in 2016-17 which held steady in 2017-18.

Figure 7

ESM Absence Rates by ESM School Compared to All ESM Schools' Average, 2012-13 to 2017-18



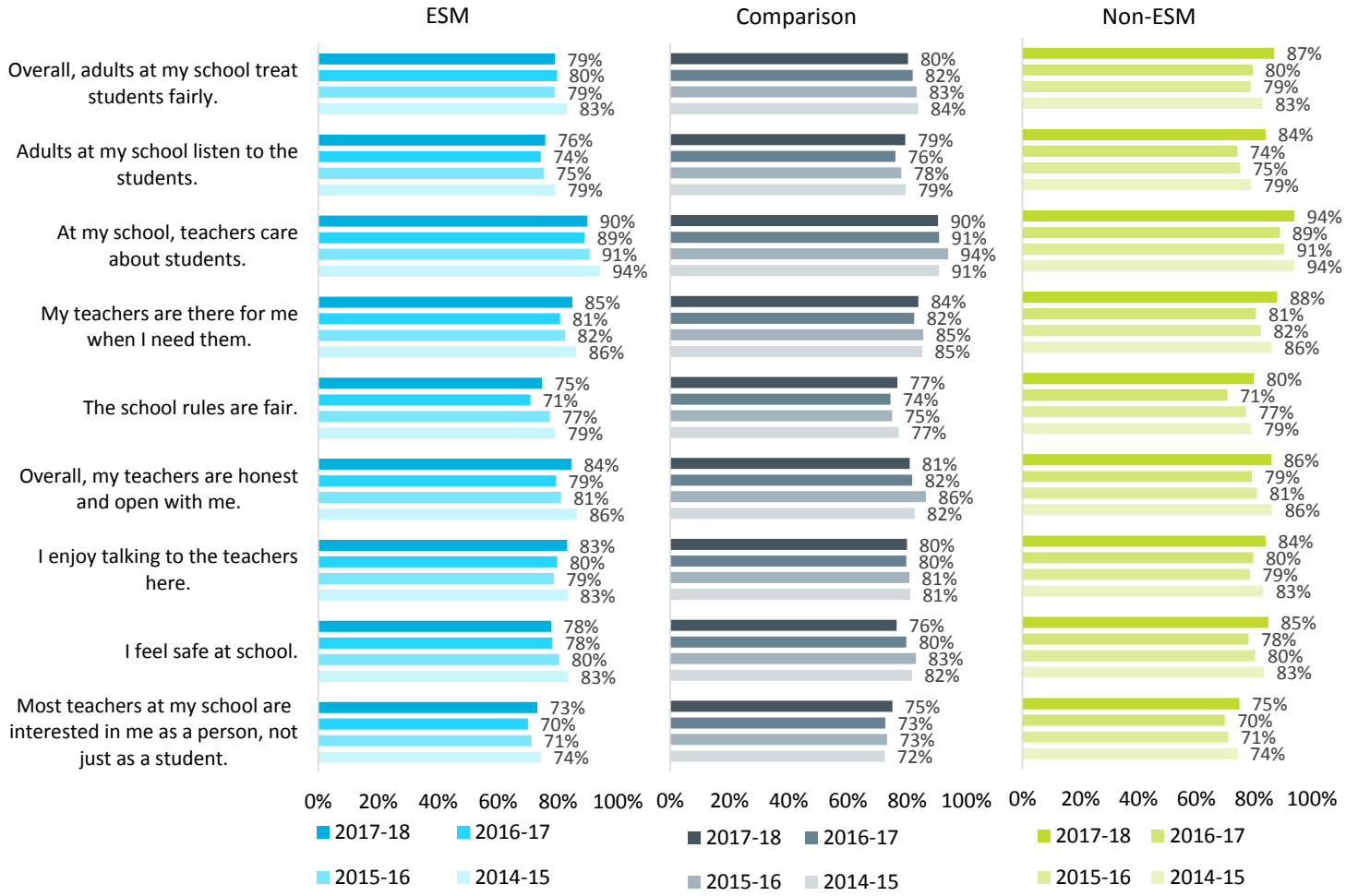
Student Engagement

Has student engagement increased from 2014-15 (the baseline year)?

In 2017-18, in response to the teacher-student relationships questions, students at ESM elementary schools either positively agreed comparably, or had higher rates of positive agreement than students at comparison schools on about half of the items considered. For ESM elementary schools, the goal of 80% agreement was reached on only four out of nine teacher-student relationships items; thus, the goal was partially met. While the percentage of students agreeing increased between 2016-17 and 2017-18 for seven out of nine items, ESM students showed a decrease in engagement from prior to ESM (2014-15) to 2017-18 on eight of the nine items (this pattern also took place in comparison schools).

Figure 8

Percentage of Student Agreement on Teacher-Student Relationship Items: ESM, Comparison, and Non-ESM Schools, 2014-15 to 2017-18



Note: There has been a decline in average student response rates within WCPSS elementary schools: 90% in 2015-16, 91.1% in 2016-17, and 83% in 2017-18. East Garner Elementary and Lynn Road Elementary had a 0% student response rate in 2017-18. Therefore, 2017-18 ESM school percentages do not include student data from these two schools. Green Elementary (a comparison school) had only one student response. Therefore, 2017-18 comparison school percentages do not include complete student data from this school.

Student Performance

Has student performance increased from 2014-15 (the baseline year) to 2017-18?

The goal of a three-percentage point increase of students meeting DIBELS benchmarks was not met. The percentage of students meeting DIBELS benchmarks remained stable at ESM schools while it decreased slightly (four percentage points) among comparison and non-ESM schools from 2014-15 (prior to ESM) to 2017-18 (see Figures 10 and 11). Similar results were found among students scoring "Well Below" based on DIBELS Benchmarks, with the percentage of ESM students "Well Below" remaining consistent, but increased four-percentage points for students at comparison schools, and three-percentage points for students at non-ESM schools (see Figure 9). Additionally, changes from prior to ESM to 2017-18 favored ESM schools over comparison and non-ESM schools for each subgroup considered; however, these differences were not significant.

The goal of 57% of students proficient (five percentage point increase) on EOG performance composite was not met (see Figures 12 and 13). In 2017-18, 11 out of 12 (92%) ESM schools met or exceeded growth (as measured by EVAAS); thus, the goal of 83% was met (see Table 7). However, no schools exceeded growth; therefore, the goal of 25% of schools (three out of 12) exceeding expected growth was not met. Additionally, while the goal of a two percentage point reduction in achievement gaps *annually* was partially met, there was a two percentage point reduction from 2014-15 (prior to ESM) to 2017-18. The goal to improve grade 6 outcomes for ESM students once they get to middle school was only partially met, with a nonsignificant increase in reading percent proficient and no change in math from baseline to 2017-18. From 2014-15 to 2017-18 there was a six-percentage points increase in reading proficiency among grade 6 students who had attended ESM schools. While math proficiency increased in 2015-16, it decreased in 2016-17 and 2017-18, resulting in a one percentage point reduction across years.

Figure 9
Percent of Students Scoring "Well Below" based on DIBELS Benchmarks for ESM, Comparison, and Non-ESM Schools from 2014-15 to 2017-18

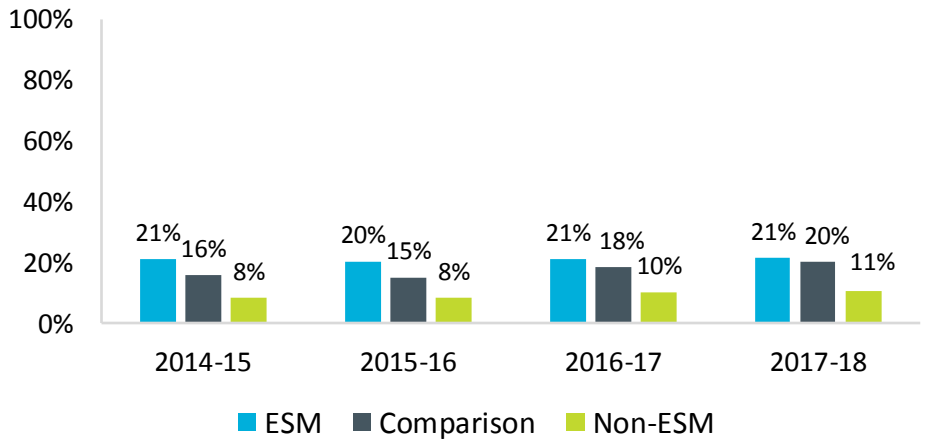
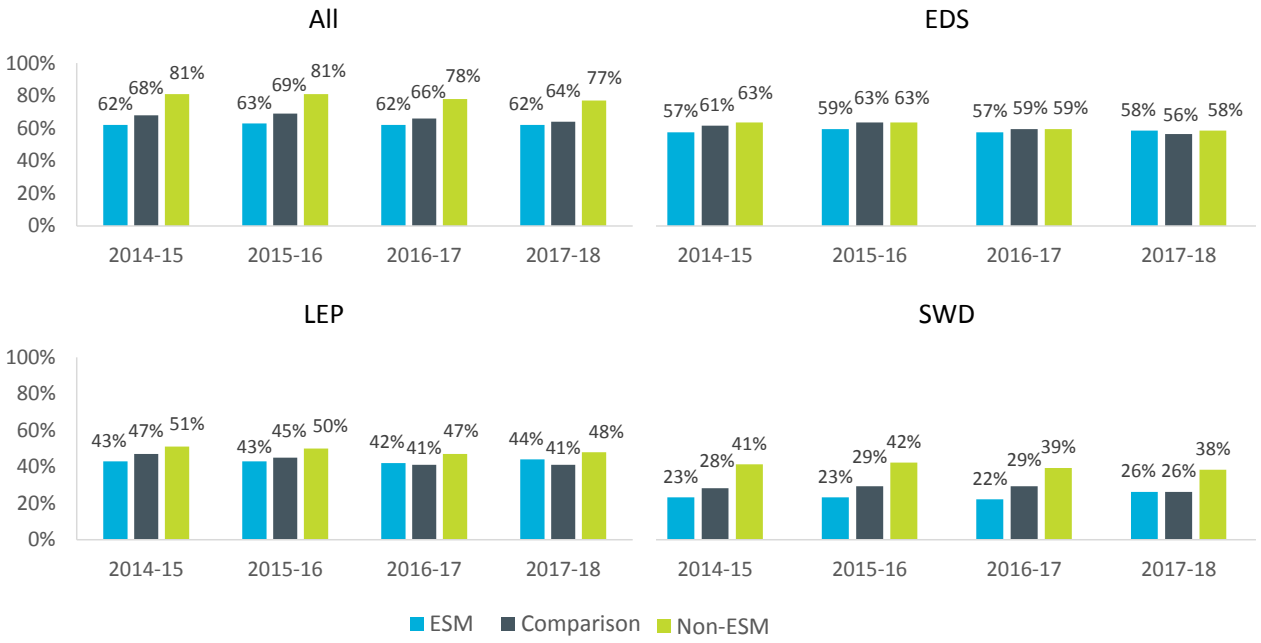


Figure 10

Percent Meeting DIBELS Benchmarks for ESM, Comparison, and Non-ESM Schools from 2014-15 to 2017-18 by Student Demographics



Note: EDS – Economically disadvantaged students; SWD – Students with disabilities; LEP – Limited English Proficient

Figure 11

Percent Meeting DIBELS Benchmarks for ESM, Comparison, and Non-ESM Schools from 2014-15 to 2017-18 by Student Race/Ethnicity

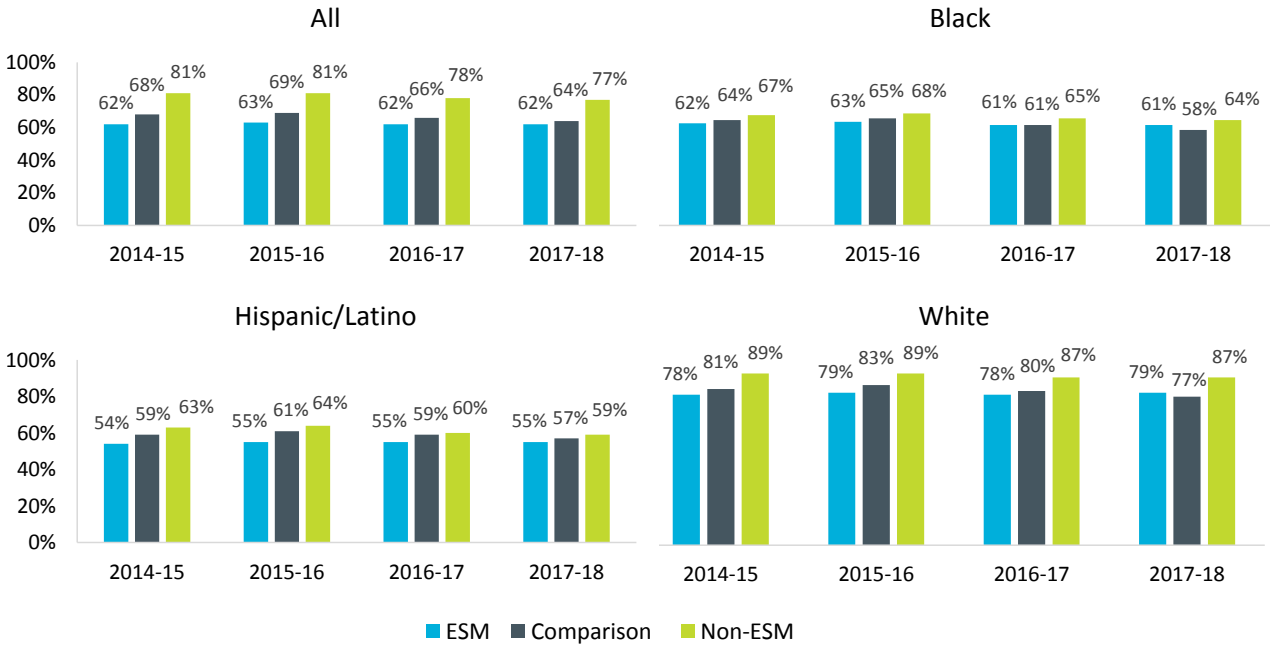
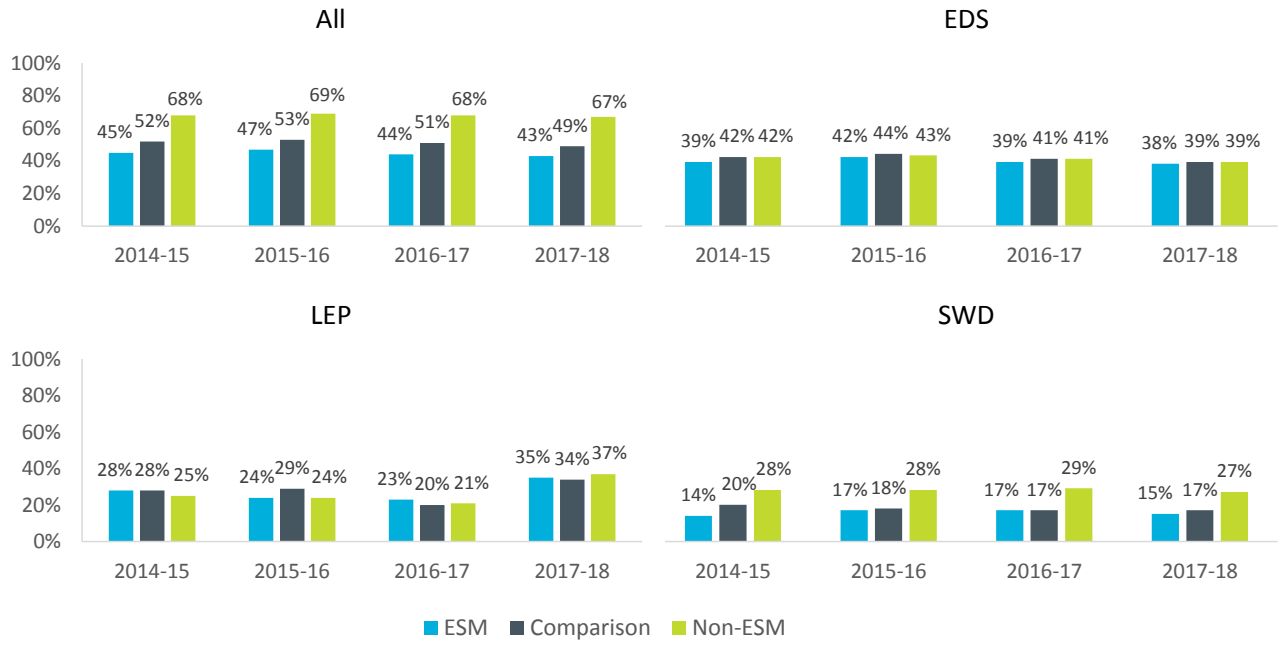


Figure 12

Percent of EOG Test Scores Proficiency (i.e., Levels 3, 4, & 5) for ESM, Comparison, and Non-ESM Schools from 2014-15 to 2017-18 by Student Demographics



Notes: 1. Increases in limited English proficient (LEP) students' performance may reflect an LEP classification change (LEP to EL).
2. EDS – Economically disadvantaged students; SWD – Students with disabilities

Figure 13

Percent of EOG Test Scores Proficiency (i.e., Levels 3, 4, & 5) for ESM, Comparison, and Non-ESM Schools from 2014-15 to 2017-18 by Student Race/Ethnicity

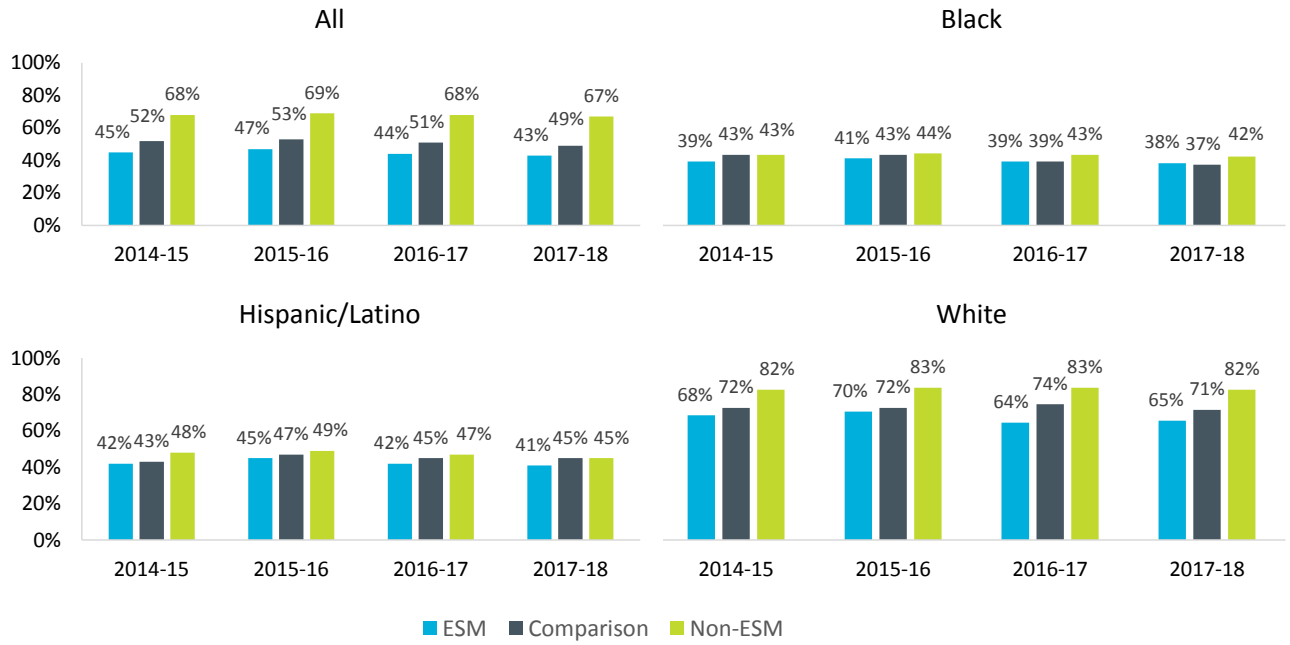


Table 7
EVAAS Status: ESM Schools

SCHOOL NAME	2014-15	2015-16	2016-17	2017-18	Years (out of 4) Met or Exceeded
Overall					
Barwell Road Elementary	Met	Exceeded	Met	Met	4
Brentwood Elementary	Not Met	Met	Met	Met	3
Bugg Elementary	Not Met	Not Met	Not Met	Met	1
Creech Road Elementary	Met	Exceeded	Not Met	Not Met	2
East Garner Elementary	Met	Met	Met	Met	4
Fox Road Elementary	Met	Exceeded	Met	Met	4
Hodge Road Elementary	Not Met	Exceeded	Exceeded	Met	3
Lincoln Heights Elementary	Not Met	Met	Met	Met	3
Lynn Road Elementary	Exceeded	Met	Met	Met	4
Smith Elementary	Met	Not Met	Met	Met	3
Walnut Creek Elementary	Met	Not Met	Not Met	Met	2
Wilburn Elementary	Met	Exceeded	Not Met	Met	3
Total (Met or Exceeded)	8 (67%)	9 (75%)	8 (67%)	11 (92%)	
Reading					
Barwell Road Elementary	Met	Met	Met	Not Met	3
Brentwood Elementary	Not Met	Met	Met	Met	3
Bugg Elementary	Not Met	Not Met	Not Met	Met	1
Creech Road Elementary	Met	Exceeded	Not Met	Not Met	2
East Garner Elementary	Met	Met	Not Met	Not Met	2
Fox Road Elementary	Met	Exceeded	Met	Exceeded	4
Hodge Road Elementary	Met	Met	Met	Met	4
Lincoln Heights Elementary	Not Met	Met	Met	Met	3
Lynn Road Elementary	Met	Met	Not Met	Met	3
Smith Elementary	Met	Not Met	Met	Met	3
Walnut Creek Elementary	Met	Met	Met	Met	4
Wilburn Elementary	Met	Met	Met	Met	4
Total (Met or Exceeded)	9 (75%)	10 (83%)	8 (67%)	9 (75%)	
Math					
Barwell Road Elementary	Met	Exceeded	Met	Met	4
Brentwood Elementary	Met	Met	Met	Met	4
Bugg Elementary	Met	Met	Met	Met	4
Creech Road Elementary	Exceeded	Met	Not Met	Not Met	2
East Garner Elementary	Met	Exceeded	Exceeded	Met	4
Fox Road Elementary	Met	Met	Met	Met	4
Hodge Road Elementary	Not Met	Exceeded	Exceeded	Met	3
Lincoln Heights Elementary	Met	Met	Exceeded	Met	4
Lynn Road Elementary	Met	Met	Exceeded	Met	4
Smith Elementary	Met	Not Met	Met	Met	3
Walnut Creek Elementary	Met	Met	Not Met	Met	3
Wilburn Elementary	Met	Exceeded	Not Met	Not Met	2
Total (Met or Exceeded)	11 (92%)	11 (92%)	9 (75%)	10 (83%)	

Figure 14

Percent of 6th Grade EOG Test Scores Proficiency (i.e., Levels 3, 4, & 5) for ESM Students from 2014-15 to 2017-18 by Subject

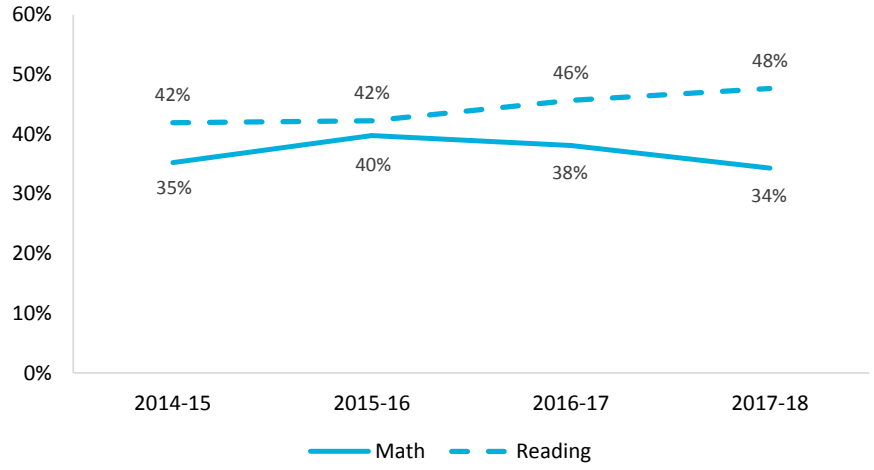
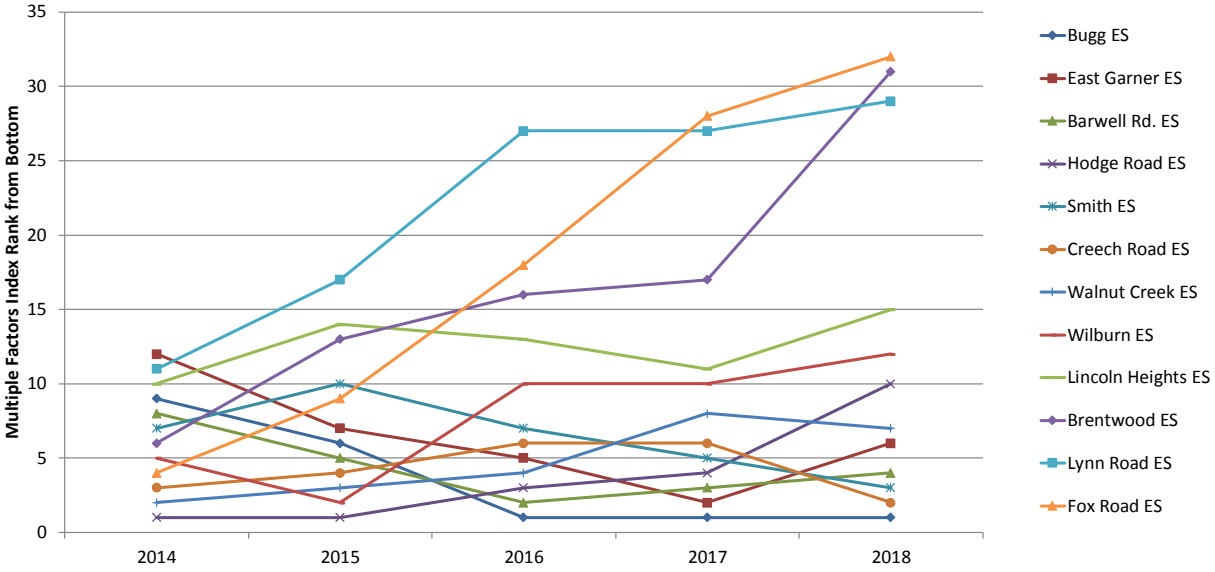


Figure 15

Multiple Factors Index Rank, 2014-15 to 2017-18



Graph Interpretation Note: In 2013-14, the 12 elementary schools with the lowest composite Multiple Factors Index (MFI) scores were designated as ESM schools. These schools are displayed in order from 1-12 at the date marked "2014" (i.e., the 2013-14 school year). The four subsequent years show how this initial ranking changed based on updated MFI calculations. For example, by the 2017-18 school year ("2018") four of the 12 ESM schools had MFI scores that placed them above the original bottom 12 slots.

Table 8
EVAAS Status: ESM Schools

School	Multiple Factors Index Rank from Bottom			
	2014	2015	2016	2017
Bugg ES	9	6	1	1
East Garner ES	12	7	5	2
Barwell Rd. ES	8	5	2	3
Hodge Road ES	1	1	3	4
Smith ES	7	10	7	5
Creech Road ES	3	4	6	6
Walnut Creek ES	2	3	4	8
Wilburn ES	5	2	10	10
Lincoln Heights ES	10	14	13	11
Brentwood ES	6	13	16	17
Lynn Road ES	11	17	27	27
Fox Road ES	4	9	18	28

Note: Schools are ranked from lowest to highest; thus, a number 1 indicates the school that ranked the lowest based on the multiple factors index and had the greatest need for support.

Discussion

Overall ESM implementation was strong (four out of six implementation goals were fully met in 2016-17 and two were mostly met). Short-term goals were also either mostly met or fully met with one exception: "teachers implementing targeted best practices with fidelity" (which could not be determined due to lack of centrally collected walkthrough or "look for" data). Results related to ESM intermediate and long-term goals were mixed. While three out of 12 goals were met, six were partially met, and three were not met. It should be noted that implementation science suggests it takes three to five years for full implementation of a significant change initiative like ESM (Fixsen, Naoom, Blasé, Friedman, & Wallace, 2005). Thus, it is not surprising that only a quarter of intermediate and long-term goals were fully met in year three of ESM implementation.

Three areas of strength were principal support to teachers, reduction of beginning teachers, and increases in the number of ESM schools meeting EVAAS growth. In order to realize gains in student proficiency and reduce achievement gaps it is necessary to strengthen support to teachers and improve teacher outcomes; thus, it is encouraging that ESM was able to reduce the percentage of beginning teachers and increase the percentage of teachers reporting they consistently felt supported by their principal. However, other ESM goals related to teacher attendance (partially met) and NCEES standards (partially met) still need to be fully realized. Additionally, goals related to teacher-student relationships (partially met) and student attendance (partially met) would need to be fully met in order to improve the chances that student achievement goals are met. The fact that the EVAAS goal to increase the percentage of schools meeting growth was met (11 of 12 ESM schools met growth) is an encouraging finding given growth is necessary if additional proficiency goals related to DIBELS composite (not met) and End-of-Grade (not met) are to be met. None of the ESM schools exceeded growth in 2017-18, which is problematic given accelerated growth is required for ESM schools to no longer be among the district's lowest performing schools. Furthermore, while there was a slight reduction in achievement gaps between student subgroups (two percentage points from baseline to 2017-18), the goal to reduce gaps by two percentage points annually was only partially met.

Recommendations

Based on this study's findings generated from analyses of a variety of data sources (e.g., focus groups, survey data, and student achievement outcomes), we have the following recommendations:

- **More consistent school to school data collection efforts.** Clarify expectations regarding the completion of student surveys. Centralize the collection of walkthrough or "look for" data.
- **Utilize an observational tool to inform instruction.** School staff should use a 'look for' tool in order to inform teacher planning and monitor the success of classroom implementation of professional learning and the application of learning shared via coaching support. Use of the 'Look-for' should provide school administrators and other school staff formative information on classroom practices going forward.
- **Unpack principal concerns regarding ESM Coaches' roles.** Based on principal feedback, the role of the two full-time ESM coaches should be more flexible and responsive to school needs. ESM support teams focus-group feedback indicated that beginning in 2017-18, each individual school's needs would guide the coach's role at that school.
- **Clarification regarding accessing support from coordinating teachers.** ESM principals requested improved communication for accessing support from coordinating teachers and clarification on the process for receiving that support.
- **Continue to align ESM goals with MTSS Framework.** Given that 2017-18 represents the third year of ESM implementation, and according to implementation science it takes three to five years to realize full implementation, ESM staff should revise (annually) and continue use of the ESM logic model as a tool for tracking progress toward reaching ESM goals. Furthermore, since the MTSS Framework is the broader umbrella under which the ESM initiative fits, staff should ensure ESM goals continue to align with the MTSS Framework.
- **Use successful ESM strategies and ESM school exemplars to inform the district's Collaborative System of School Support.** ESM's structured support and leadership/mentoring strategy have shown success in reducing the number of beginning teachers, increasing the percentage of teachers feeling consistently supported by leadership, and increasing school's meeting EVAAS growth.

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