COMMONWEALTH of VIRGINIA

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August 1, 2016

The Honorable Terence R. McAuliffe Governor of Virginia Patrick Henry Building, Third Floor 1111 East Broad Street Richmond, Virginia 23219

The Honorable S. Chris Jones Chairman, House Appropriations Committee Virginia General Assembly P. O. Box 5059 Suffolk, Virginia 23435-0059 The Honorable Thomas K. Norment, Jr. Co-Chairman, Senate Finance Committee Virginia General Assembly P.O. Box 6205 Williamsburg, Virginia 23188

The Honorable Emmett W. Hanger, Jr. Co-Chairman, Senate Finance Committee Virginia General Assembly P.O. Box 2 Mount Solon, Virginia 22843-0002

Dear Sirs:

I am pleased to submit the enclosed report that summarizes findings from schools participating in the 2015-2016 school year alternative breakfast service models pilot.

The fiscal year 2016 state budget provided \$537,297 to fund an elementary school alternative breakfast service models pilot program or to provide additional reimbursement for eligible meals available through traditional school breakfast programs. Alternative school breakfast service models provide meals to students through a distribution method different from traditional cafeteria service, removing various obstacles that can prevent students from accessing school breakfast. The most effective alternative breakfast models allow students to eat their meal after the official start of school day, commonly known as "breakfast after the bell."

Through a competitive application process, the Virginia Department of Education (VDOE) provided reimbursements to 226 schools participating in the alternative school breakfast service models pilot and 17 additional schools implementing traditional breakfast service models. Participating schools were required to evaluate the educational impact of the models implemented and report their findings to VDOE. The enclosed report summarizes those findings.

The Honorable Terence R. McAuliffe The Honorable S. Chris Jones The Honorable Thomas K. Norment, Jr. The Honorable Emmett W. Hanger, Jr. August 1, 2016 Page Two

If you have questions or require additional information, please do not hesitate to contact Kent C. Dickey, deputy superintendent for finance and operations, at (804) 225-2025 or kent.dickey@doe.virginia.gov.

Sincerely,

Steven R. Staples, Ed.D. Superintendent of Public Instruction

SRS/jpr Enclosure

c: The Honorable Dietra Trent





Report

Report on Alternative School Breakfast Service Models

Presented to: The Governor of Virginia House Appropriations Committee Senate Finance Committee

August 1, 2016

Virginia Department of Education P. O. Box 2120 Richmond, Virginia 23218-2120

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AUTHORITY FOR THE STUDY

The fiscal year 2016 state budget provided funds for a pilot to increase the number of school breakfast meals served to eligible students through an alternative breakfast service model. For this appropriation, the Virginia Department of Education (VDOE) was required to collect data from participating schools to evaluate the educational impact of the pilot and report the results to the Governor and the Chairmen of the House Appropriations and Senate Finance Committees.

EXECUTIVE SUMMARY

Alternative school breakfast service models provide meals to students through a distribution method different from traditional cafeteria service, removing various obstacles that can prevent students from accessing school breakfast. The most effective alternative breakfast models allow students to eat their meal after the official start of school day, commonly known as "breakfast after the bell."

In fiscal year 2016, \$537,297 in state funds were available through a competitive application process to support implementation of alternative breakfast service models or expand traditional breakfast service by providing a reimbursement of \$0.05/meal to participating schools. More than 550 schools applied for funds, and 244 schools across 52 divisions were selected to receive funding. Of those, 226 received reimbursements for participation in the one-year alternative breakfast service pilot, and 17 schools used the funding to expand traditional breakfast service.¹

The Virginia Department of Education requested data from participating schools to: (1) assess the impact of the program on student attendance and behavior; (2) capture principals' and teachers' perceptions of the program; and (3) document the costs of implementation. The program's impact on student achievement, measured through performance on Standards of Learning (SOL) tests, and data on school nutrition program revenues will be provided as an addendum to this report when data are available for analysis (anticipated September 2016).

There are three main findings from this evaluation:

- Schools receiving state funding provided additional breakfast opportunities for students that school administration, teachers, and staff supported. Participating schools provided an additional 1,266,555 meals to students during the pilot year, a 13.6 percent increase from the previous year. Schools implementing breakfast in the classroom significantly increased the number of meals served per student compared to schools implementing traditional breakfast service only. Nearly all principals and assistant principals and 67 percent of teachers who completed the feedback survey reported being supportive of the alternative school breakfast program.
- School-level outcome metrics showed promising but non-significant results on the impact of alternative school breakfast service models. Principals, teachers, and other school staff were unsure about the specific program impact on student behavior, attendance, health, and academic performance. Between the baseline year and the pilot year, schools implementing alternative school breakfast programs saw increases in attendance and decreases in tardiness and office

¹ One school declined participation in the alternative breakfast service models pilot after being selected.

discipline referrals. These differences, however, were not statistically significant. More than 75 percent of principals, teachers, and cafeteria/nutrition managers agreed that more students were eating breakfast and fewer students were hungry in the morning. However, more than 40 percent of school staff were unsure about the program's impact on student behavior, attendance, health, or academic performance.

• School staff reported few challenges during implementation of the alternative school breakfast program, and the implementation costs for most schools were minimal. Support from school administrators, parents, students and cafeteria staff were the least commonly identified barriers and disruptions in morning routines and limited janitorial staff were the most commonly identified barriers. More than half of schools reported no additional costs for program implementation. Among schools reporting costs, 40 percent reported costs for smallwares and supplies, 32 percent reported salary costs, 18 percent reported costs for capital equipment, and 11 percent reported benefits costs.

The VDOE recommends continued financial support for schools interested in implementing alternative school breakfast programs. The VDOE anticipates providing additional support to schools through technical assistance and sharing of best practices to build capacity for the program and address identified barriers to implementation.

PILOT IMPLEMENTATION

In July 2015, VDOE released Superintendent's Memo #172-15 announcing applications for an alternative school breakfast service pilot or expansion of traditional breakfast service model supported by \$537,297 in state funds. State reimbursement of five-cents (\$0.05) per reimbursable meal served was allotted to each approved school in a division.

In total, 554 schools from 65 divisions applied for the funds. VDOE gave priority to elementary schools with total student eligibility for free or reduced price meals greater than 45 percent and schools that planned to implement an alternative breakfast service model throughout the entire school. For the 2015-2016 school year, 226 schools across 52 divisions received funding for alternative breakfast.² Seventeen additional schools were selected to expand their traditional school breakfast programs.

Schools were allowed flexibility in the model of alternative breakfast service they implemented, as long as it was within the framework of "breakfast after the bell." Some examples of alternative service models are:

- *Breakfast in the Classroom* Students eat breakfast in the classroom. This can be after the first bell or when students arrive but before the official instructional day begins. Breakfast meals can be delivered to each classroom or picked up from a central location (i.e., cafeteria or kiosk) on the way to class.
- *Grab and Go Breakfast* Students pick up breakfast meals as they arrive at school and eat in the classroom. Meals are available in a variety of locations; such as, mobile service carts equipped

² One school declined participation in the alternative breakfast service models pilot after being selected.

with a computerized point of service or roster and placed at the school entrance or another high-traffic area or in the cafeteria. Food items are packaged as a unit to make this model convenient and appealing to students.

• *Second Chance Breakfast* - Students eat breakfast during a nutrition break in the morning, usually after first period, either in the cafeteria, from a mobile service cart, or in the classroom.

GUIDING QUESTIONS FOR STUDY

The budget appropriation set minimum requirements for reports from participating schools, including student attendance and tardy arrivals, office discipline referrals, student achievement measures, teachers' responses to the impact of the pilot program before and after implementation, and the financial impact on the division's school food program. In addition, VDOE required schools to report on suspension and school nurse visits, as well as expanding the reporting of program perceptions beyond teachers to principals, assistant principals and school nutrition/cafeteria managers.

As such, the evaluation addresses the following guiding questions:

- *How has additional reimbursement for school breakfast programs increased student breakfast participation?* For this analysis, VDOE compared meals served per student within participating schools across alternative breakfast models (e.g., breakfast in the classroom, grab and go, second chance breakfast, or any combination thereof) and between alternative breakfast models and traditional breakfast service for the implementation year and previous years, depending on the availability of data.
- What is the impact of alternative breakfast programs on student attendance, health, discipline, and academic achievement? To address this question, VDOE compared attendance, health and discipline data within schools implementing an alternative breakfast program for the implementation year and previous years, depending on availability of data. In addition, VDOE collected perceptions of the program's impact from principals, teachers, and school nutrition staff. When the data are available for analysis, VDOE will analyze school achievement data measured through scores on SOL tests and publish an addendum to this report (anticipated September 2016).
- What is the fiscal impact of alternative breakfast programs on participating schools? VDOE collected information from School Nutrition Program Directors on additional costs for salary, benefits, capital equipment, and smallwares and supplies expenditures associated with alternative breakfast program implementation. When the data are available for analysis, VDOE will analyze school nutrition revenues and publish an addendum to this report (anticipated September 2016).

DATA COLLECTION

Beginning in April 2016, VDOE began collecting data from participating schools for this evaluation. Data summarized in this report are from three primary sources:

• *Alternative School Breakfast Service Models Feedback Report.* This 11-item feedback survey collected anonymous data from principals, teachers, and school nutrition staff at participating schools on their level of satisfaction with the program, including perceived support for the program, perceived impact of the program, and challenges faced during implementation. School

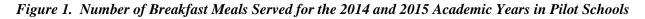
principals distributed the link to the online survey to appropriate staff in the school. During the six weeks the online survey was available, VDOE received 781 responses. Of those, 26 percent were school principals, 55 percent were teachers, 5 percent were school nutrition/cafeteria personnel, and 14 percent were other school personnel (not specified).

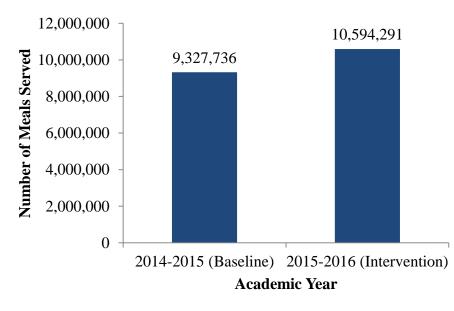
- Alternative School Breakfast Service Models School Report. Principals at participating schools were required to provide VDOE data from the 2014-2015 (baseline) and 2015-2016 (intervention) academic year on average daily attendance, average daily tardy counts, average daily office discipline referrals, total monthly suspensions, and total monthly school nurse visits. Of the 226 schools funded for alternative breakfast programs, 147 responded to the survey (65 percent response rate). However, less than 20 percent of responding schools provided two years of complete, quality data for analysis.
- Alternative School Breakfast Service Models School Nutrition Program Director's Report. Division-level School Nutrition Program Directors (SNPD) were required to provide VDOE data on revenue sources for alternative school breakfast programs and any additional costs incurred for program implementation in salary, benefits, capital equipment, or smallwares and supplies. Of the 52 divisions participating in the pilot, 46 SNPDs responded to the survey (88 percent response rate).

FINDINGS

Finding 1: Schools receiving state funding provided additional breakfast opportunities for students that school administration, teachers, and staff supported.

Schools participating in the alternative school breakfast pilot provided 10,594,291 breakfast meals to students during the 2015 academic year. This represents 1,266,555 additional meals served to students during the pilot year, a 13.6 percent increase from the previous year (see Figure 1).





Of 243 participating schools providing breakfast through alternative models or expanded traditional models, 194 schools (80 percent) reported an increase in meals served per student, while 49 schools (20 percent) reported a decrease in meals served per student.³

Factors that could have contributed to a decrease in meals served include a variation in serving days due to calendar fluctuations and weather-related school closings or variation in the start of pilot program implementation among participating schools.

Based on responses from school principals to the *Alternative School Breakfast Service Models School Report*, nearly 12 percent of schools implemented only traditional breakfast service. The majority of schools (34 percent) implemented both a traditional breakfast service and one or more alternative breakfast service models. Among schools that chose to implement only one alternative breakfast service model, 27 percent implemented breakfast in the classroom, where cafeteria staff deliver breakfast to classrooms, and 26 percent of schools implemented the "grab and go" model, where students pick up packaged breakfasts from a central location and carry them to their classrooms (see Table 1).

Schools implementing traditional breakfast only decreased breakfast meals served on average by 3.38 meals per student between the baseline and intervention year. In contrast, schools implementing any alternative breakfast service model saw an increase on average of 13.88 breakfast meals served per student. The difference in breakfast meals served per student for schools implementing breakfast in the classroom only was statistically significantly higher compared to meals served per student among schools implementing traditional breakfast only (see Table 1).

³ Meals served per student was calculated as the number of breakfast meals served in a school year divided by the number of students in school nutrition program membership as of October 31st of that year.

School Breakfast Service Model	Percentage of Schools Implementing	Average Change in Breakfast Meals Served Per Student
Schools Implementing Only One Model of Breakfast Service		
Schools implemented traditional breakfast <u>only</u> , available in the cafeteria prior to the official start of the school day	11.81%	-3.38
Schools implemented breakfast in the classroom <u>only</u> , where breakfast is delivered from the kitchen/cafeteria to classrooms in a cart, cooler, or wagon and then distributed to individual students	26.77%	19.61*
Schools implemented grab and go <u>only</u> , where students pick up packaged breakfasts from carts or kiosks or from the cafeteria and carry them to their classrooms	25.98%	10.09
Schools Implementing More than One Model of Breakfast Service		
Schools implemented traditional breakfast model and one or more alternative breakfast models	33.86%	11.80
Schools implemented more than one alternative breakfast model	1.57%	

Table 1. Distribution of Traditional and Alternative School Breakfast Service Models and
Change in Meals Served per Student in 2015-2016 School Year Pilot

Source: VDOE Alternative School Breakfast Service Models School Report, 2016

* Statistically significant difference on meals served per student between schools implementing traditional breakfast only and schools implementing breakfast in the classroom only, p < .01.

-- Sample of schools in this category is too small for statistical comparisons.

Overall, 69 percent of principals, assistant principals, teachers, and school nutrition/cafeteria managers who completed the survey were satisfied or very satisfied with the alternative school breakfast model. Among all survey respondents, more than 70 percent reported being supportive or very supportive of the program and also perceived high levels of support from school administration, teachers, custodial staff, school nutrition staff, parents, and students.

Statistically significant differences exist in program satisfaction and support between principals and teachers. Due to the anonymity of the feedback survey, differences in principal and teacher perceptions must be interpreted with caution. Principals and teachers who had strong opinions about the program may have been more likely to respond to the survey. Therefore, the results as reported may not be representative of all principals and teachers participating in the program.

Ninety percent of principals reported being satisfied or very satisfied with the program overall compared to 60 percent of teachers. Similarly, 99 percent of principals were supportive or very supportive of the program compared to 67 percent of teachers. Table 2 summarizes the differences in responses between principals, teachers, and all survey respondents for select survey items (all survey items are in Appendix A).

Courses Itom	Principals/ Assistant Principals (n = 204)	Teachers	All Respondents
Survey Item	(n = 204)	(n = 426)	(n = 781)
Satisfied with program overall	89.91%	59.67%*	69.41%
Satisfied with model available at school	85.64%	51.31%*	62.48%
Satisfied with program impacts	89.17%	59.94%*	68.50%
Likely to recommend program to other schools	89.08%	58.67%*	68.04%
Supportive of the program	99.16%	67.31%*	77.69%
Perceived support for program among school administration	100.00%	82.67%*	86.90%
Perceived support for program among teachers	86.89%	60.39%*	69.71%

Table 2. Program Satisfaction and Perceived Support among Principals, Teachers, and allRespondents in the 2015-2016 School Year Pilot

Source: VDOE Alternative School Breakfast Service Models Feedback Survey

*Statistically significant differences between principal and teacher responses, p < .05

To provide context to differences between responses from principals and teachers, VDOE examined optional, open-text comments by respondents provided at the end of the feedback survey. Among the 44 comments analyzed from principals or assistant principals, 30 (68 percent) contained positive themes including additional instructional time in the morning, reduced family stress, more students eating breakfast and a positive effect of the program on school and community relationships. Among the 117 comments received from teachers, 29 (25 percent) contained positive themes including more students eating breakfast, students being less hungry, and students engaging in morning work earlier. Common concerns about the program were consistent across principals and teachers, including cleanliness of the classrooms, the amount of waste produced, and quality and variety of breakfast items available to students. Select quotes by principals and teachers are provided in Appendix B.

Finding 2: School-level outcome metrics showed promising but non-significant results for the impact of alternative school breakfast service models. Principals, teachers, and other school staff were unsure about the specific program impact on student behavior, attendance, health, and academic performance.

Participating schools provided data to VDOE on attendance, tardiness, office discipline referrals, suspensions, and school nurse visits for this evaluation. However, the lack of consistent, quality data across years limited VDOE's ability to conduct a rigorous analysis of program impact. After limiting the analysis to schools that implemented an alternative breakfast program during the 2015-2016 school year and that provided at least two years of data (baseline and intervention year), less than 25 schools were available for analysis (17 percent of schools reporting). Results must be interpreted with caution given the small sample size (see Appendix C for more detailed description of the sample size for analysis).

Three of five metrics to assess the impact of alternative school breakfast programs showed positive trends. Between the baseline year and the first year of implementation, schools implementing alternative

school breakfast programs saw increases in attendance and decreases in tardiness and office discipline referrals. Schools reported no change in the number of suspensions and an increase in the number of school nurse visits. However, no differences in the metrics between baseline and implementation years were statistically significant. Table 3 summarizes the outcome analysis.

Metric (schools reporting)	Year 1 Average (Baseline)	Year 2 Average (Intervention)	Difference between Years	Statistical Significance
Average daily attendance rate $(n = 25)$	93.95%	94.24%	Average daily attendance rate increased by less than one percentage point.	NS
Average daily tardiness (n = 16)	37.05	34.40	Average daily tardiness decreased by 7.2 percent.	NS
Average daily office discipline referrals (n = 20)	4.76	4.64	Average daily office referrals decreased by 2.5 percent.	NS
Monthly suspensions $(n = 24)$	4.78	4.78	No change in number of suspensions per month.	NS
Monthly school nurse visits (n = 20)	333.88	338.38	Schools nurse visits increased by 1.3 percent.	NS

 Table 3. Difference between Baseline and Implementation Year on Outcomes for Schools

 Implementing Alternative School Breakfast Service Models

Source: VDOE Alternative School Breakfast Service Models School Report, 2016 NS = not significant

Following implementation of the alternative school breakfast service model, more than 75 percent of principals, teachers, and cafeteria/nutrition managers agreed or strongly agreed that more students were eating breakfast and fewer students were hungry in the morning. However, more than 40 percent were unsure about the program's impact on student attentiveness, behavior, or attendance, the overall school environment, and whether the program was helping the school achieve its wellness goals. More than 50 percent of survey respondents were also unsure about the program's impact on student health or academic performance. Teachers' perceptions of the program's impact were statistically significantly lower than principals' perceptions, particularly on agreement that students are eating healthier breakfasts and student behavior has improved. Table 4 summarizes the differences in responses between principals and teachers for selected survey items (results from all survey items are available in Appendix D).

	Principals/ Assistant		
Survey Item	Principals (n = 204)	Teachers (n = 426)	All Respondents (n = 781)
Agree more students are eating breakfast	90.83%	40.51%*	78.14%
Agree fewer students are hungry in the morning	90.83%	73.80%*	78.22%
Agree students are eating healthier breakfasts	70.00%	42.90%*	52.95%
Agree student behavior has improved	37.50%	16.83%*	24.62%
Agree student academic performance has improved	44.17%	26.77%*	34.67%
Agree student attendance has improved	35.00%	27.51%*	31.55%
Agree stigma around eating school breakfast is reduced	81.36%	55.08%*	64.29%

Table 4. Perceived Program Impact among Principals, Teachers, and all Respondents

Source: VDOE Alternative School Breakfast Service Models Feedback Survey, 2016

*Statistically significant differences between principal and teacher responses, p < .05

Finding 3: School staff reported few challenges during implementation of the alternative school breakfast program, and the implementation costs for most schools were minimal.

More than 70 percent of survey respondents identified lack of support from school administration, students, parents, and cafeteria staff as *not* being a barrier to implementation. Disruptions in morning routines was the most frequently identified challenge among 33 percent of respondents, followed by limited janitorial staff and waste and trash disposal. Principals and teachers tended to agree on their perceptions of challenges to implementation with two exceptions: teachers were significantly more likely than principals to rate disruptions in morning routines as a barrier and principals were significantly more likely than teachers to rate lack of support from teachers as a barrier. Table 5 lists all respondents' perceptions of the five least and most commonly identified challenges. Results for all survey items are available in Appendix E.

Challenge	Percentage Indicating "Not a Barrier"
Lack of support from administrators	78.86%
Lack of support from students	76.18%
Lack of support from parents	72.82%
Students are not hungry	72.39%
Lack of support from cafeteria staff	71.32%

Table 5. Challenges Ranked by Level of Barrier to Implementation

Challenge	Percentage Indicating "Moderate or Extreme Barrier"
Disruptions in morning routines	32.75%
Limited janitorial staff	27.93%
Waste and trash disposal	25.79%
Interruptions in instructional time	23.48%
Students prefer other food	21.61%

Source: VDOE Alternative School Breakfast Service Models Feedback Survey, 2016

Division-level school nutrition program directors provided information on additional sources of revenue and costs of the alternative school breakfast program for all participating schools in their division. In addition to state funds available during the 2015-2016 school year, most divisions reported two primary sources of revenue for the alternative school breakfast program: reimbursement from the federal government (88 percent of divisions) and revenue from student meals (69 percent of divisions). Nearly 20 percent of schools also reported support from foundation grants.

Overall, 53 percent of schools reported no additional costs for program implementation. By category, 68 percent of schools reported no additional salary costs, 89 percent of schools reported no additional benefits costs, 82 percent of schools reported no additional capital equipment costs, and 60 percent of schools reported no additional costs for smallwares or supplies. Forty-seven percent of schools reported at least one cost type. For schools reporting any costs, the average total cost to implement was \$4,066 per school. Average costs per category for schools that reported costs are in Table 6.

Type of Costs	Average Costs*	Range	Percentage of Schools Reporting Costs
Salary	\$3,276	\$900 - \$17,970	32%
Benefits	\$1,497	\$115 - \$8,000	11%
Capital Equipment	\$5,314	\$300 - \$26,798	18%
Smallwares and supplies	\$1,081	\$50 - \$6,000	40%
Any costs	\$4,066	\$50 - \$30,000	47%

Table 6. Average Costs by Type for Schools Reporting Additional Costs to Implement AlternativeBreakfast Programs in 2015 Pilot

Source: VDOE Alternative School Breakfast Service Models Nutrition Directors Report, 2016 *Average costs include only those schools reporting costs.

SUMMARY

In summary, alternative school breakfast programs provide additional meals for students, are generally supported by school staff, and can be implemented with minimal additional resources for most schools. Although the initial educational impact of the program is unclear, student benefits may become more pronounced with a longer duration of implementation and additional data from schools. The VDOE recommends continued financial support for schools interested in implementing alternative school breakfast programs. The VDOE anticipates providing additional support to schools through technical assistance and sharing of best practices to build capacity for the program and address identified barriers to implementation.

Appendix A

Survey Item	Principals/ Assistant Principals (n = 204)	Teachers (n = 426)	All Respondents (n = 781)
Satisfied with program overall	89.91%	59.67%*	69.41%
Satisfied with model available at school	85.64%	51.31%*	62.48%
Satisfied with program impact	89.17%	59.94%*	68.50%
Likely to recommend program to other schools	89.08%	58.67%*	68.04%
Supportive of the program	99.16%	67.31%*	77.69%
Perceived support for program among school administration	100.00%	82.67%*	86.90%
Perceived support for program among teachers	86.89%	60.39%*	69.71%
Perceived support for program among cafeteria staff	90.24%	72.15%*	78.50%
Perceived support for program among custodial staff	78.69%	61.82%*	68.15%
Perceived support for program among parents	85.95%	63.18%*	70.96%
Perceived support for program among students	97.52%	73.84%*	81.35%

Program Satisfaction and Perceived Support among Principals, Teachers, and all Respondents

Source: Alternative School Breakfast Service Models Feedback Survey

*Statistically significant differences between principal and teacher responses, p < .05

Appendix B

Open Text Comments from Principals and Teachers

Comments Received from Principals or Assistant Principals (n = 44)

Percentage of comments containing praise for the program

68%

"This has been an amazing addition to our school day. More children are eating breakfast and I have noticed increased productivity prior to lunch. Parents are also very appreciative."

"The program has increased the amount of time spent on instruction when compared to the traditional method of serving students in the cafeteria."

"It has taken a great deal of stress off of families with respect to their budgets. Just think how much they save by having their child eat breakfast at school. It also takes away the stigmatism with respect to free/reduced breakfast since every child receives breakfast. I really like the program and I hope we are able to continue it next year."

"I am very satisfied with the breakfast in the classroom program. It provides additional instructional time to teachers but minimizing travel from the cafeteria mornings."

"This model of allowing students who arrive late on some mornings to have opportunity to have breakfast has had an overall positive effect on our school and community relationships. A student that has the opportunity to eat after arriving at school removes the issues of not being hungry and going to class ready to learn."

Percentage of comments containing concerns about the program	27%
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"At times some of the breakfast choices don't seem to be a healthier version for students."

"Need a variety of foods each week. Students became tired of regular menu."

"We started off with breakfast in the classroom, but the delivery, clean-up, and tracking was a major headache. After moving to grab-and-go breakfast, teachers were much more comfortable."

Percentage of comments containing neutral descriptive program information 5%

Comments Received from Teachers (n = 117)

Percentage of comments containing praise for the program	25%
"Students look forward to seeing what is for breakfast each morning and they are willing	to try new
things because they see their classmates eating it. There are less students requesting to go	o to the nurse
because they aren't hungry. Teachers are able to teach proper etiquette while eating."	

"It is wonderful that so many children are now able to eat if they want or need to. Overall, it is a great program."

"It is so much better having breakfast in the classrooms. When the students went to the cafeteria I had 10 students late due to breakfast every morning. Love that they can bring it into the classroom and get started on morning work!"

Percentage of comments containing concerns about the program	68%
"Having teacher serve breakfast in classrooms results in more mice and bugs. Janitorial	staff are not
cleaning rooms properly, and teachers are spending instructional time cleaning desk and	spills. Many
students are not able to finish breakfast in designated time frame resulting in instructional	l time wasted.
Having breakfast in the classroom prevents a teacher from being able to have morning we	ork on desk, and
station activities in place."	

"I wish there were healthier choices for students. I feel that many of the choices are high in sugar."

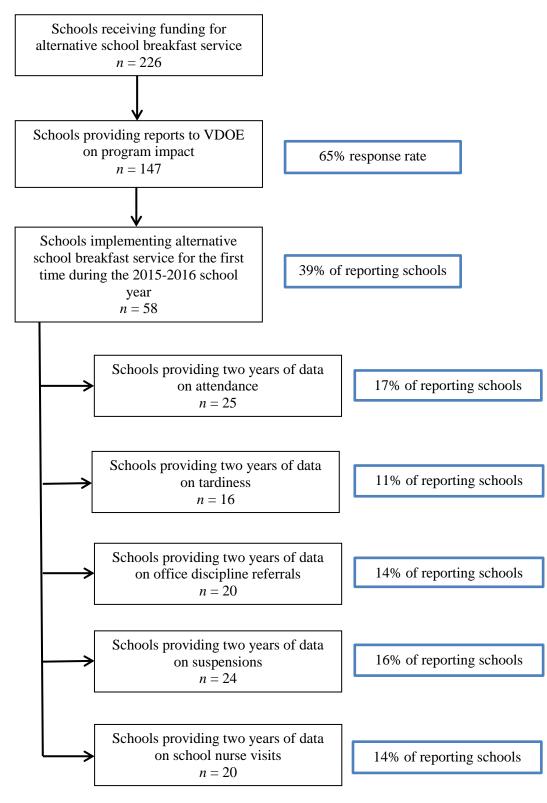
"Sometimes a majority of my students don't like the entree. Asking students about their preferences and providing choices of entrees might help."

"There is quite a lot of food that is tossed into the trash...some students only eat part, but are required to get all items at line? This seems like a waste of money and funds."

Percentage of comments containing neutral descriptive program information	4%

Appendix C

Sample Size Available for Analysis



Appendix D

Survey Item	Principals/ Assistant Principals (n = 204)	Teachers (n = 426)	All Respondents (n = 781)
Agree more students are eating breakfast	90.83%	40.51%*	78.14%
Agree fewer students are hungry in the morning	90.83%	73.80%*	78.22%
Agree students are eating healthier breakfasts	70.00%	42.90%*	52.95%
Agree student behavior has improved	37.50%	16.83%*	24.62%
Agree student academic performance has improved	44.17%	26.77%*	34.67%
Agree student attendance has improved	35.00%	27.51%*	31.55%
Agree stigma around eating breakfast is reduced	81.36%	55.08%*	64.29%

Perceived Program Impact among Principals, Teachers, and all Respondents

Source: VDOE Alternative School Breakfast Service Models Feedback Survey, 2016 *Statistically significant differences between principal and teacher responses, p < .05

Appendix E

	Percentage of Responses by Category						
Challenge	Not a Barrier	Somewhat of a Barrier	Moderate Barrier	Extreme Barrier	Unsure/Don't Know		
Disruptions in morning routines	39.33%	23.68%	24.07%	8.61%	4.31%		
Limited janitorial staff	43.55%	20.51%	19.34%	8.59%	8.01%		
Limited cafeteria staff	56.46%	17.69%	12.52%	4.17%	9.15%		
Limited staff for supervision	54.51%	19.80%	12.75%	6.27%	6.67%		
Scheduling conflicts	63.33%	14.12%	13.14%	2.94%	6.47%		
Interruptions in instructional time	46.58%	24.27%	15.07%	8.41%	5.68%		
Lack of space	63.51%	16.17%	10.26%	4.54%	5.52%		
Up-front program costs	45.63%	5.95%	4.37%	1.59%	42.46%		
Lack of support from teachers	52.27%	21.10%	10.85%	3.75%	12.03%		
Lack of support from administrators	78.86%	2.74%	4.31%	1.37%	12.72%		
Lack of support from cafeteria staff	71.32%	8.84%	4.52%	1.77%	13.56%		
Lack of support from custodial staff	63.99%	14.29%	6.26%	2.15%	13.31%		
Lack of support from parents	72.82%	5.95%	3.17%	1.39%	16.67%		
Lack of support from students	76.18%	7.48%	4.33%	1.77%	10.24%		
Insufficient training on program implementation	66.40%	8.89%	4.35%	2.96%	17.39%		
Waste and trash disposal	42.72%	25.00%	13.78%	12.01%	6.50%		
Students are not hungry	72.39%	10.65%	5.52%	1.78%	9.66%		
Students prefer other food	46.56%	23.77%	15.13%	6.48%	8.06%		

Challenges Ranked by Respondents as Barriers to Implementation

Source: VDOE Alternative School Breakfast Service Models Feedback Survey, 2016