

Successes and Challenges Among Schools Receiving Support from Partners for Breakfast in the Classroom

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Overview of Breakfast in the Classroom

Over 50 million students attend public elementary and secondary school in the United States, and one in five U.S. children live in households that struggle to put food on the table. Children who miss meals or feel hungry are at risk for a variety of challenges in and out of the classroom, including poor academic performance, behavioral and emotional difficulties, and absenteeism.^{1,2}

Since the 1970s, the federal government has funded the School Breakfast Program (SBP), providing breakfast free of charge to students living in households with an income at or below 130 percent of the federal poverty line.³ Studies of outcomes in children participating in the SBP have found significant improvements in classroom behavior and academic performance.⁴ Serving breakfast in the classroom is a strategy that has been shown to increase school breakfast participation and has also been linked to improved academic performance.⁵

Partners for Breakfast in the Classroom (PBIC)—a program of the NEA Foundation, Food Research & Action Center, the National Association of Elementary School Principals Foundation, and the School Nutrition Foundation—promotes Breakfast in the Classroom (BIC) by providing funding for the equipment and technical assistance required to serve breakfast in classrooms

¹ Shankar, P., Chung, R., & Frank, D. A. (2017). Association of food Insecurity with children's behavioral, emotional, and academic outcomes: A systematic review. *Journal of Developmental & Behavioral Pediatrics*, 38(2), 135-150.

² Murphy, J. M., Pagano, M. E., Nachmani, J., Sperling, P., Kane, S., & Kleinman, R. E. (1998). The relationship of school breakfast to psychosocial and academic functioning: Cross-sectional and longitudinal observations in an inner-city school sample. *Archives of Pediatrics & Adolescent Medicine*, 152(9), 899-907.

³ Food and Nutrition Service, United States Department of Agriculture. (2013). *The school breakfast program*. Washington, DC.

⁴ Adolphus, K., Lawton, C. L., & Dye, L. (2013). The effects of breakfast on behaviour and academic performance in children and adolescents. *Frontiers in Human Neuroscience*, 7:425, 1-28.

⁵ Anzman-Frasca, S., Djang, H. C., Halmo, M. M., Dolan, P. R., & Economos, C. D. (2015). Estimating impacts of a breakfast in the classroom program on school outcomes. *JAMA pediatrics*, 169(1), 71-77.

during school hours. This report describes some successes and challenges experienced by schools that partnered with PBIC during the 2017–2018 and 2018–2019 school years, and offers recommendations to enhance BIC.

Key Findings

- 1. Breakfast in the Classroom meets the needs of the *whole child*.** Parents and school staff affirmed the importance of ensuring all students get to eat breakfast. They also mentioned other benefits of implementing BIC. These include a more nurturing start to the school day, increased social engagement among students and between students and teachers, more supportive classroom environments, opportunities for students to demonstrate responsibility and independence, and reduced stigma around eating school breakfast. Schools that use mobile food carts also noted that food service staff were better integrated into the school community as a result of “getting out from behind the lunch counter” to distribute breakfast each morning.
- 2. One size does not fit all.** Schools took various approaches to implementing BIC, even within the same school district. Staff at participating schools explained that schools’ needs differ. Common considerations included the age of the students, building design, existing equipment, staffing levels, and local school culture.
- 3. Balancing nutrition and portability can be challenging.** Schools participating in BIC described hard choices they had to make to ensure menu items met USDA requirements and were easy to transport and consume in classrooms. Many informants expressed a preference for the “hot breakfast” previously served in the cafeteria and lamented the perceived sugar content of some pre-packed items. They also noted that students seemed to like several of the healthy, portable options, such as fruit, yogurt, and string cheese.
- 4. Communication is essential and can reduce frustrations and inefficiencies.** Poor communication sometimes occurred across various stakeholders, including school administration, food service staff, classroom teachers, custodial staff, and parents. At times, a lack of communication resulted in tensions across the different groups, such as when classroom teachers and food service staff had different expectations regarding the logistics of accounting for federally reimbursable meals. At other times, poor communication caused inefficiencies that resulted in unnecessary food waste.

5. **There's a learning curve, but it's worth it.** Many school communities had reservations about potential challenges prior to implementation. While many of those challenges did in fact arise, schools tended to report that BIC got easier with time, and that the benefits far outweigh the challenges.

Data Collection

Child Trends used four sources of information to better understand the experiences of schools and school districts that have been funded by the PBIC. In the spring of 2018,⁶ Child Trends administered a **survey** that was completed by 368 individuals working in school districts in Louisiana, Mississippi, Missouri, Ohio, and Texas. The survey covered topics ranging from respondents' attitudes prior to starting BIC to the barriers and successes they experienced. Child Trends also conducted **site visits** in the spring and fall of 2018 to Logan-Hocking School District in Ohio, Livingston Parish Public Schools in Louisiana, and Austin Independent School District (Austin ISD) in Texas, visiting six schools altogether—four elementary, one junior high, and one high school. During these site visits, Child Trends researchers facilitated a total of 12 focus groups—six with parents and six with school staff—and completed interviews with five principals and three food service managers. Ultimately, Child Trends spoke to a total of 94 individuals about their experiences and observed breakfast in 14 classrooms during the three site visits. In addition, to understand the role of National Education Association (NEA) affiliates with respect to BIC, Child Trends researchers conducted **individual and group discussions** in the fall of 2018 with five state affiliates (Mississippi, Nebraska, Ohio, Texas, and Utah) and three local affiliates (Austin, TX; Central Missouri, Logan-Hocking, OH). Finally, Child Trends conducted a **web scan** of school and school district websites and social media accounts in Louisiana, Missouri, Ohio, and Texas to understand the ways in which information about BIC is shared online.

Lessons Learned

Across the survey, site visits, and NEA affiliate discussions, Child Trends found that a clear majority of school staff and parents were happy to have BIC at their school and would recommend that other schools consider it. Despite schools' initial concerns, they ultimately embraced BIC, viewing it as an important way to ensure all students start the day free from hunger in a nurturing

⁶ A modified version of the survey was also administered in Austin ISD in fall 2018. See Appendix A for more information.

environment that promotes learning. Stakeholders described numerous benefits for students, their families, and even the school as a whole—such as better integration of food service staff into the school community. Stakeholders also identified barriers to implementing BIC for the first time, including determining in advance exactly what equipment they would need. However, they emphasized that most logistical challenges were either resolved or became minor issues. Notably, site visits revealed that some logistical challenges could be resolved more quickly or avoided altogether with communication across stakeholders.

Breakfast in the Classroom meets the needs of the *whole child*.

“This [classroom] is our family. And so I like the fact personally that they get to start their day with their family, and they get to sit down at breakfast. . . . and no one has to be silent. It’s important to eat. But they can talk and visit, and that’s how they start their day. And I just think that’s a positive way to start your day.”

—Teacher

“I think the kids look at us as more of like. . . . Not just the lunch ladies anymore. They’ll tell me if they had a bad night or whatever, there’s more one-on-one. We have a better relationship with them [the students], which when they come in the cafeteria I feel like they’re more respectful now than they were before.”

—Food service staff

Across all interviews and focus groups, participants reported benefits of BIC, which ranged from students’ improved physical health and social health, to staffing increases. Some reported benefits are presented below.

- **Fewer hungry students.** Staff and parents explained that students were more likely to eat breakfast when it is served in the classroom, due to several different factors. According to most staff and parent focus groups, eating breakfast in the classroom seemed to reduce the stigma around school breakfast. In fact, one parent noted she was happy her child, who could get breakfast at home, was eating breakfast at school because her child’s participation might make students who would not get breakfast at home feel more comfortable eating school breakfast. Another common concern that eating breakfast in the classroom seemed to alleviate was the stress that students often felt when eating breakfast in the cafeteria. Parents and staff remarked that students experienced stress

about eating breakfast quickly in order to get to class on time; as a result, they sometimes skipped breakfast in the cafeteria altogether because they did not have enough time to eat after waiting in line. Additionally, teachers at a few schools noted that they seemed to have fewer students asking to visit the nurse, which they attributed to students' not starting their school day on an empty stomach.

- **Better social connections.** Parents and teachers described several social benefits of eating breakfast in the classroom. Eating with classmates helped alleviate the anxiety that eating in the cafeteria can provoke, since students do not have to worry about finding someone to sit with. Teachers also described breakfast time as a wonderful opportunity to learn more about their students in a casual setting. Several teachers shared stories about students who would save some of their breakfast to share with another student who might not be getting enough to eat at home. An unanticipated benefit of the mobile breakfast carts was to help food service staff feel more integrated into the school community, as the quotation at the beginning of this section reflects. In addition, principals noted that having students eating in the classroom with peers outside of their social circle resulted in an observed increase in community building among the students.
- **Teachable moments and life skills.** Several staff members noted that serving breakfast in the classroom offered students new opportunities to gain independence. For example, younger students who needed help opening containers early in the year would learn how to open them. Additionally, several teachers assigned students jobs related to breakfast in the classroom, such as distributing food, picking up trash, helping to clean up spills, and transporting supplies between the classroom and the cafeteria. Some teachers also mentioned that they emphasized the use of good table manners during breakfast, offering students opportunities to practice good social skills. Parents also noted some teachable moments; for example, one parent said she has had conversations about good food choices with her daughter after seeing some of the leftover breakfast items her daughter brought home.
- **Food service benefits.** Both principals and food service managers mentioned that BIC allowed them to hire more food service staff, due to the increased funding that accompanied higher participation rates. Some food service managers also reported that when breakfast was served in the cafeteria, they spent time serving and cleaning up from

breakfast, whereas BIC reduced the time involved in line prep and cleanup and thus provided them with additional time to prepare lunch.

One size does not fit all.

“At the beginning, it was trial and error until we found our pace because what goes on [at one school] may be different at [another school]. So not every school does the same. You just have to find your path, whatever works for you.”

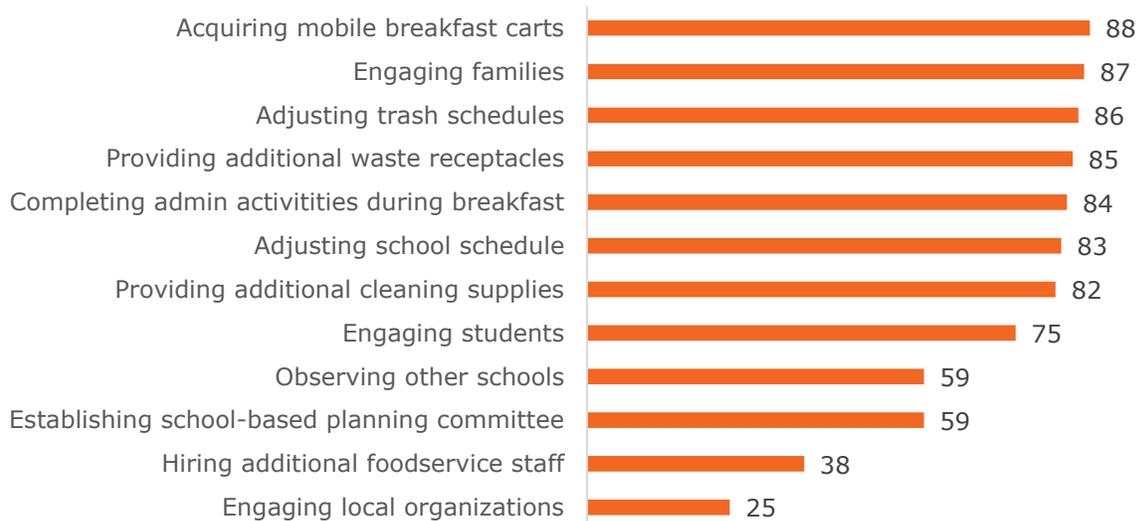
—Food service manager

“It doesn't have to be the same for every grade level because kindergarteners and fourth graders, it's just going to look totally different because of what they can do. Kindergarteners can't open their milk by themselves or the packaging and all that.”

—Principal

Survey data revealed that schools used several common approaches and procedures to implement BIC. These included changing school or classroom schedules to accommodate breakfast in the classroom, engaging students and families, and acquiring new supplies (see Figure 1). Schools were less likely to report engaging in a schoolwide planning process or to incorporate partners outside the school in order to implement BIC.

Figure 1. Percent of Survey Respondents Reporting Successful Use of BIC Strategies



In most cases, the feedback gathered from site visits reflected the findings in the survey and offered a more nuanced understanding of those responses. However, this was not true with respect to feedback about the BIC planning process. While many survey respondents indicated that their school had engaged family members (87 percent) and students (75 percent), or had established a school-based planning committee (59 percent), only two principals—of all the individuals interviewed during the site visits—described a planning process that involved multiple stakeholder groups. Other schools did engage in planning; however, in most schools, the number of individuals engaged in the planning process tended to be small. Most classroom teachers and parents noted they had been informed of the plan rather than being actively involved in its creation.

Common approaches and strategies used by schools implementing BIC, based on survey responses and interviews, are presented below.

- **Distribution.** Among schools, a variety of strategies were used to serve breakfast. In some schools, food service staff dropped off insulated bags of breakfast items to classrooms and then later picked up the bags. In other schools, students in the before-care program helped to deliver the insulated bags to classrooms, and students in the classrooms were assigned the job of returning the bags to the cafeteria after breakfast. Some schools stationed carts in strategic locations so food service staff could distribute bags containing a USDA-reimbursable meal that students took to their first class.
- **Food waste.** Schools dealt with leftover or extra food in different ways, and in some cases there were differences by classroom. Some teachers created a “share table,” where students could place items they did not want for other students to take. Other teachers encouraged students to place nonperishable leftovers in their backpacks, so they could eat them at another time—either later in the school day or at home. In some schools, teachers sent uneaten items back to the cafeteria, where they were sometimes restocked and used later, or discarded if they were perishable.
- **Time use.** The amount of time allotted for breakfast varied across schools, and especially by grade levels. Younger students tended to require the most time to eat, and they often also needed assistance opening containers or cleaning up spills. Strategies for what to do during breakfast time also varied. In some classrooms (mostly in higher grades), Child Trends researchers observed teachers beginning instruction while students ate breakfast.

In other classrooms, teachers allowed students to socialize while eating and had academic or enrichment activities for them to begin once they were done.

- **Trash and clean up.** Clean up varied by classroom. In some classrooms, students cleaned up their own area, while in others (especially in lower grades) students had classroom jobs such as cleaning the table with a disinfectant wipe. In most cases, there was also a procedure for removing the breakfast waste from the classroom so that it did not remain in the classroom all day. Some schools had trash receptacles in the hallways for students to use. In other schools, classrooms had trash bags that students removed to the hallway or some other central repository. Several schools reported that custodial staff remove the waste from classrooms soon after breakfast ends. Overall, teachers in most schools had concerns about food waste and spills or messes, but they emphasized that these concerns were minor compared to the benefit.

Balancing nutrition and portability can be challenging.

“You can always improve something, but it's better to have that than nothing for the children who need it.”

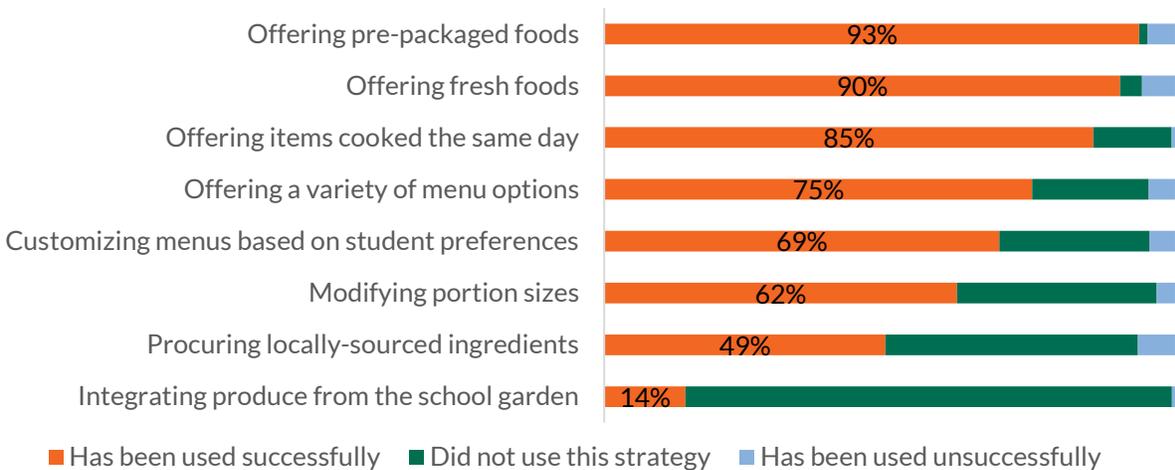
—Parent

“And then, it's like whatever is easiest for them to be able to pack. I know right now, we're doing packs that are pre-packaged. It has all your components in it to do a breakfast, and then we're adding the milk. We're also adding fresh fruit a few days a week as well, even though there's a fruit juice in, just to give them a variety. We tried putting in several components, and that became a little bit of a time issue for the different cooks, so we went back to the packs to finish out the year.”

—Food service manager

Survey results reveal that schools and school districts have succeeded to varying degrees in providing menu options that meet USDA nutritional guidelines while also being easy to distribute for consumption in classrooms and appealing to students. As shown in Figure 2, most of the strategies respondents were asked about were either employed successfully or not used at all. A handful of respondents reported that their school had unsuccessfully tried a menu strategy, including offering fresh foods, offering a variety of options, offering pre-packaged foods, and customizing menus based on student preference, and procuring locally sourced foods.

Figure 2. Percent of Survey Respondents Reporting Successful Use of Menu Strategies⁷



Site visits offered a more nuanced understanding of how schools implementing BIC work to achieve a balance of nutrition, convenience, and appeal. For example, Child Trends researchers observed that some schools primarily offered packaged foods (i.e., cereals, cereal bars, or pastries such as Pop-Tarts), some primarily offered freshly prepared foods (i.e., breakfast sandwiches or “breakfast pizza”), and some offered both. Several parents and school staff lamented the switch from hot breakfast with items such as eggs and pancakes, but they also acknowledged the necessity of having foods that are easier to serve on the go. School staff noted that students seemed to like several of the new items that were perceived as more healthful, including yogurt parfaits, fresh fruit, and string cheese. However, food service staff in some schools indicated that the logistics of including perishable items with pre-packed items was sometimes too time intensive.

Child Trends also asked school staff, including principals, about the concern that students may be eating breakfast twice (once at home and once at school). Across schools, the typical response was that nutrition education for students and parents is the best way to address this concern. School staff were very reluctant to restrict access to breakfast based on who they thought had, or had not, eaten breakfast at home. Ultimately, most focus group and interview participants did not think “double breakfast” was a big concern, and several teachers mentioned instances of students

⁷ The number of respondents for each item ranged from 59 (procuring locally sourced foods) to 138 (offering pre-packaged foods).

who turned down breakfast because they said they had already eaten at home. Teachers also noted that some students saved their school breakfast to eat as a snack later in the day.

Communication is essential and can reduce frustrations and inefficiencies.

"I don't think that there was a really great communication on what breakfast in the classroom is gonna look like this school year."

—Teacher

"I try to talk to the principals on a regular basis and find out if they have any issues. . . . I try to stay ahead of the game. Sometimes I don't quite. . . . I find out things after the fact, and I was like, "Well, if you would have told me, we could have made a change," but I do try to stay in touch."

—Food service manager

A common issue across schools and school districts was the challenge of providing various stakeholders with clear and consistent messages, especially with respect to their own roles in implementing BIC.

- **Accounting for reimbursable meals.** Every district—and sometimes schools within a district—had their own way to account for federally reimbursable meals.⁸ Strategies included teachers using an electronic or a paper roster to track breakfast; marking breakfasts taken on the same form used to take students' lunch orders; and having food service staff tracking meals based on what was returned to the cafeteria. Food service staff often received training regarding what constitutes a federally reimbursable meal, but there was confusion among other school staff about how to count meals. As a result, students sometimes took only part of a meal, and the rest of the meal was returned to the cafeteria. Frequently, teachers indicated that they thought they were helping to reduce waste by allowing students to take only the items they wanted, unaware of the cost implications of allowing students to take a partial meal. Although food service staff were aware of these cost implications, they found it challenging to make sure classroom teachers were as vigilant about ensuring that student breakfasts would meet the federal requirements. This lack of awareness among classroom teachers sometimes resulted in tensions between teachers and food service staff.

⁸ See <https://www.fns.usda.gov/nslp/national-school-lunch-program-nslp> for a definition.

- **Food waste.** Another source of miscommunication in some schools involved what to do with the food students did not eat. Parents, school staff, and food service staff were all concerned about throwing food away. In most classrooms, teachers had what they referred to as “share tables.” They encouraged students to place unused, non-perishable food items on these tables, for other students to snack on throughout the day or take home. In some focus group discussions, teachers reported that the “share table” was a school-sanctioned strategy for reducing food waste. In other cases, teachers were unsure this practice was allowable but had instituted it anyway. In one school, teachers remarked that they had been instructed to return all unopened food items to the cafeteria. When a food service staff member who was present in the focus group explained that all food sent back was thrown away, whether it was perishable or not, teachers expressed surprise and concern about wasting so much food. In an interview conducted with the district food service manager later in the site visit, Child Trends researchers learned that the food service staff at that school had likely misunderstood the protocols and had been unnecessarily discarding hundreds of pre-packed breakfast items each week.

There’s a learning curve, but it’s worth it.

“The surprise is most people start out negative, even the workers . . . like, “Oh my gosh, how much work is that?” My workers were, like . . . everybody is scared. . . . You’re scared of the change, but then once you get into . . . like, my staff loves it, they say it’s not hard. You get everybody on board, everybody does their thing, and you just get it out there to the kids.”

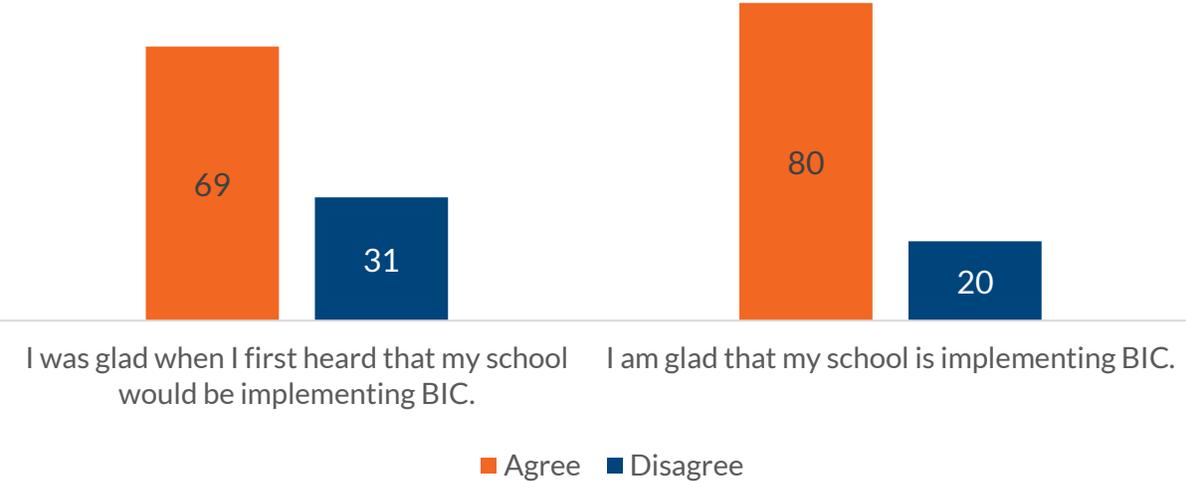
—Food service manager

“The surprise for me was that it actually can be run very efficiently and it’s not as time consuming as I initially thought. Because at the onset—prior to the initiative happening at this campus—I was dead set against it on many levels.”

—Teacher

Survey data show that respondents’ perceptions of BIC improved over time, with a larger percentage reporting they were glad their school is implementing BIC, compared to the percentage who were initially glad when they heard that their school would be implementing the program (see Figure 3).

Figure 3. Percent of Respondents Satisfied with BIC before/after Implementation



Among other survey results regarding perceptions of BIC, nearly one of every four respondents felt they did not receive adequate day-to-day supports (22 percent) or adequate training (27 percent) to implement BIC.⁹ More specifically, the top five concerns about BIC among survey respondents included classroom cleanliness, food waste, student satisfaction, meal quality, and trash/waste removal.

The data gathered from the interviews and focus groups conducted during site visits aligned with survey results and generally reflected the same five concerns. An additional concern, about the logistics of accounting for federally reimbursable meals in schools where classroom teachers were expected to keep a count, was also identified. However, as the observations at the beginning of this section reflect, most concerns were either addressed eventually or viewed as a small inconvenience compared to the benefits of BIC. Overall, schools interested in starting BIC should expect to encounter some issues, but the challenges are likely be smaller than anticipated and worth the effort.

⁹ Survey responses from teachers in Austin ISD differed from the overall survey responses, with a large majority (86 percent) indicating they had adequate training to implement BIC. Because Austin ISD asked Child Trends to adapt the survey for inclusion in their overall 2018-2019 fall teacher survey, it is difficult to interpret what this difference could mean. See Appendix A for more information about the Austin ISD survey.

Study Limitations

While many of the findings in this report are consistent across the multiple sources of data, there are limitations to the conclusions that can be drawn. Schools and districts that participated in site visits were not selected at random, and they may not be representative of all schools in a district, or all districts in a state. In addition, school staff and parents who participated in focus groups were drawn from a convenience sample. With respect to parents, it is possible that their perspectives did not represent the diversity of the whole school community. There are also limitations to the survey data. For example, Child Trends distributed the survey link to school district personnel, who distributed it broadly. As a result, for most school districts, Child Trends did not have an exact count of the number of potential respondents, making it impossible to calculate response rates or assess how representative the sample was of all school staff in the district. NEA affiliate interviews were also conducted with a convenience sample. Despite the limitations of convenience samples, however, the fact that many of the findings were consistent across districts and schools— as well as reflected in survey data, focus groups and interviews—strengthens the conclusions that can be drawn.

Recommendations

“Well, you have to get your team involved. I took my leadership team, members from classified, certified—all staff went to see the process happen somewhere else. So, making sure they understand what you're going for, and what your vision is, and why you wanna make it happen. And bringing them into that process, a team of core people, so that they can go back and communicate it to their individual teams. And then that slowly brings everyone on board, instead of just implementing and saying, “You're doing it.” Without really explaining and giving them a good grasp about the program.

—Principal

“So, I think really making sure that you can reach out and get information from schools that are already implementing, so it's not like you have to drum everything up from scratch. So, I think that that's really important. And then just making sure that, logistically, you're flexible, and say, “We're gonna try it and whatever doesn't work, we'll tweak it. Nothing is set in stone. We can continue to make this happen.” But I think, ultimately, pushing the big message about, we know breakfast is important for all kids, this is a way we can service everybody and have an impact. So let's figure out a way to get everybody on board.”

—Principal

- 1. Connect schools with relevant resources.** BIC is being implemented in districts and schools across the country. It is a good idea to engage state level NEA affiliates to review local and federal data to identify schools within a community—or districts within a state—that would most benefit from BIC, and to share those data with NEA members early in the process to clearly show where there are needs among their students that could be met by BIC. Schools starting BIC may not necessarily want to imitate exactly what another district or school has done, but there is also no need to reinvent the wheel. School teams should be encouraged to visit other schools to see what is working for them. Also, encourage schools to take advantage of resources that are already available, such as those developed by the PBIC.
- 2. Help school leaders to set realistic expectations for school staff.** Make sure school staff—including administrators, teachers, food service staff, and others—realize there will be some early lessons learned that might lead to changes in the way the program is run. Emphasize the importance of keeping an open mind, communicating about barriers early and often, and recalling the mission of BIC—to make sure students do not start the school day on an empty stomach in order to promote their academic success and overall well-being. Encourage districts and schools to identify and elevate internal “champions” for BIC, to help set the tone. When feasible, encourage schools to use grant funding to dedicate at least part of one staff person’s time to leading BIC within each district, or school. This will avoid role confusion and prevent people from being overwhelmed with too many responsibilities.
- 3. Support schools in clearly communicating their plan while allowing for flexibility.**¹⁰ BIC implementation involves numerous considerations, ranging from the capacity of the district or school’s food service program to the individual preferences of teachers, students, and parents. Having a clear and well-thought-out plan can do much to reduce anxiety and uncertainty. Allowing schools (and teachers) to adapt the plan to meet their own needs can promote the flexibility needed to promote success. Also, support districts and schools in communicating with the broader community to increase buy-in. For example, provide the resources to develop brief, informative posts about the benefits of BIC that can be shared through school and

¹⁰ See Appendix B for more about how state NEA affiliates and school districts are promoting BIC.

district social media accounts. Also, encourage state and local NEA affiliates to reach out to schools and districts so they can serve as communicators, liaisons, and connectors.

- 4. Share lessons learned.** Schools and school districts are full of creative and passionate individuals who care about the well-being of students. Create opportunities for peer learning to share successful strategies and to brainstorm solutions to common barriers; at the very least, these opportunities should bring together school administrators, classroom teachers, and food service staff. Students and family members can also share helpful insights for helping the program run more smoothly. When school leaders create a climate of creativity rather than strict compliance, members of the school community can be encouraged to identify tailored solutions.

Acknowledgements

This report reflects the efforts of many. First and foremost, Child Trends thanks the administrators, school staff, food service staff, parents, and students who welcomed us and shared their insights. Without their dedication to children, and willingness to share their experiences and views, this project would not have been possible. We thank the NEA Foundation for entrusting us with this important work and supporting us at all stages of the project. We also recognize the efforts of the Child Trends team. In addition to the listed authors, Isai Garcia-Baza contributed invaluable assistance with our two Spanish-language focus group discussions and conducting the web search, and Lauren Supplee provided helpful comments on early drafts of this report. Finally, we thank the team at MMS Education for sharing the insights they gained through a video project they led to document the experiences in the schools that participated in the site visits.

Appendix A: Methods

Study sample

Figure A1: States in Survey Sample

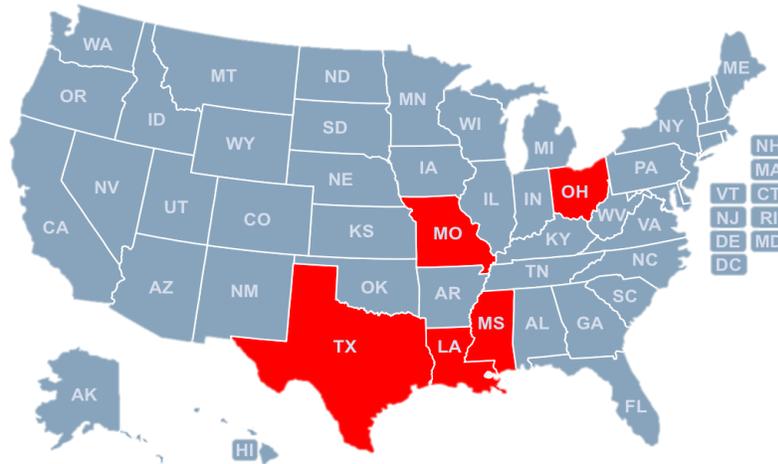


Figure A2: Study Sample School District Characteristics

State	District	Enrollment	% Non-white	Urbanicity ¹¹
LA ¹²	Livingston Parish*	25,000	20%	Mostly rural
LA	St Helena Parish	1,100	92%	Rural
MO ¹³	Jennings	2,500	100%	Rural
MS ¹⁴	Moss Point	1,800	81%	Mostly rural
MS	Houston	1,700	52%	Mostly rural
OH ¹⁵	Logan-Hocking*	3,700	5%	Rural
OH	Indian Creek	2,100	10%	Mostly rural
OH	Scioto	1,200	3%	Mostly rural
TX ¹⁶	Austin ISD*	81,000	71%	Urban

*Denotes school districts that participated in site visit

¹¹ The Census Bureau classifies counties based on the percentage of the population that lives in rural areas. Counties where 100% of the population lives in rural areas are considered "rural," 50 - 99% rural are considered "mostly rural," and less than 50% rural are considered "urban." <https://www.census.gov/geo/reference/urban-rural.html>

¹² Most recent Louisiana enrollment data found here: <https://www.louisianabelieves.com/resources/library/student-attributes>

¹³ Most recent Missouri enrollment data found here: <https://apps.dese.mo.gov/MCDS/home.aspx>

¹⁴ Most recent Mississippi enrollment data found here: <https://newreports.mdek12.org/>

¹⁵ Most recent Ohio enrollment data found here: <http://education.ohio.gov/Topics/Data/Frequently-Requested-Data/Enrollment-Data>

¹⁶ <https://rptsvr1.tea.texas.gov/adhocrpt/adste.html>

Figure A3: Survey Sample

State	School District	School administrator	Classroom teacher	Food service staff	Food service director	Paraeducator	Custodial staff	School specialist (i.e., counselor, etc.)	Other
Louisiana (n = 139; 37.8% total sample)									
	Livingston Parish (n = 104)	6 (6%)	83 (80%)	1 (1%)	0	9 (9%)	1 (1%)	4 (4%)	0
	St Helena Parish (n = 36)	2 (6%)	14 (41%)	18 (53%)	0	0	0	0	0
Missouri (n = 5; 1.4% total sample)									
	Jennings (n = 5)	1 (20%)	0	3 (60%)	1 (20%)	0	0	0	0
Mississippi (n=156; 42.4 % total sample)									
	Moss Point (n = 80)	6 (8%)	65 (81%)	0	0	2 (3%)	0	7 (8.8%)	0
	Houston (n = 75)	5 (7%)	53 (71%)	3 (4%)	2 (3%)	3 (4%)	0	9 (12%)	0
Ohio (n = 64; 17.4% total sample)									
	Logan-Hocking (n = 34)	1 (3%)	25 (74%)	1 (3%)	0	3 (9%)	0	3 (9%)	1 (3%)
	Indian Creek (n = 29)	4 (14%)	16 (55%)	0	1 (3%)	4 (14%)	1 (3%)	3 (10%)	0
	Scioto (n = 1)	0	0	0	0	0	0	1 (100%)	0
Texas (n = 221)*									
	Austin ISD	14 (6%)	207 (94%)	0	0	0	0	0	0
*Teachers in Austin ISD received an adapted version of the survey in fall 2018. Results are largely similar to overall survey results described in the report but are not directly comparable. The results from the Austin ISD teacher survey are presented in full in Appendix B.									

Figure A4: Interview and Focus Group Sample

Sample Type	Number
Interviews	16
Principals	5
Food service managers*	3
NEA state affiliate (MO, NE, OH, TX, UT)	5
NEA local affiliate (MO, OH, TX)	3
Focus Groups	12
Parent (English)	4
Parent (Spanish)	2
School staff	6
Observations	14
Elementary	9
Junior high	2
High school	3

Quantitative Methods

Data collection

Surveys were designed in partnership with the NEA and Child Trends to capture school staff members’ experiences with and perceptions of BIC, from implementation to current thoughts. Key constructs of interest were identified and constructed by the Child Trends team. Child Trends built the survey and administered it online using Survey Gizmo, working with NEA to promote high response rates. These efforts included email invitations through both Child Trends and NEA platforms, promotion by staff on the ground, and reminder emails. The surveys were administered from February 2018 to May 2018. For Austin ISD, the survey was administered by Austin ISD administrators in October and November 2018.

Child Trends worked with Austin ISD to adapt the survey for inclusion in their fall 2018-2019 School Year district survey. Because the school district chose to include the BIC items in their district-wide survey—rather than as a stand-alone survey—they requested that Child Trends reduce the number of items (for a total of 9 items versus 24 items for the full survey). Items that were maintained focused on respondents’ role with respect to with implementation of BIC, strategies used for planning (e.g., engaging parents, establishing a committee), BIC challenges, changes made to support BIC, strategies to engage BIC stakeholders, use of BIC resources, as well as their personal perceptions of BIC. Items that were omitted focused on specific menu planning strategies for BIC, as well as specifics of BIC implementation related to logistics and staffing

strategies. The survey for administrators focused on schoolwide implementation, while the survey for classroom teachers focused largely on their personal experiences with BIC.

Data analysis

Surveys were downloaded and analyzed using Stata 14 software. Surveys from individuals who responded to fewer than half the survey items were deleted. In cases where there were two or more responses associated with a survey ID, we kept either the first or the most complete entry. Statistics presented in the results section include all valid responses. As a result, the total number of responses may vary across items. The responses to the Austin ISD teacher and principal surveys were analyzed following the same procedures used for the general sample survey, although items were not made into scales for analyses, due to smaller samples and fewer items across proposed constructs. Child Trends was not able to directly compare teacher and principal responses to one other, nor compare them to the general survey, as there was little overlap in items across the surveys.

Overall, the findings from the Austin ISD survey data are similar to the general survey findings, with the following exceptions: Austin ISD teachers had more experience implementing BIC (45 percent report two or more years of implementation experience versus 2 percent in the general sample), and Austin ISD teachers reported more student involvement in BIC implementation (65 percent agree/strongly agree versus 40 percent in the general sample). In addition, more Austin ISD teachers reported satisfaction with BIC training (86 percent strongly agree/agree versus 27 percent general sample), adequate time to implement BIC (73 percent agree/strongly agree versus 35 percent general sample), and satisfaction with technical assistance (79 percent agree/strongly agree versus 29 percent general sample).

Qualitative Methods

Data collection

Qualitative data were collected through open-ended survey items, site visit interviews, focus groups, interviews with NEA affiliates, and a scan of selected school and school district online mentions of BIC.

Open-ended survey items. As described in the section on quantitative methods, surveys were completed by 368 individuals. These surveys included the following open-ended questions:

- Please describe your overall experience with BIC. Include your opinions on its best attributes and areas of improvement.
- What's the one thing that your school could do to change BIC that would improve its implementation at your school?
- What's the one thing that the NEA Foundation could do to better support BIC implementation at your school?
- Is there anything else you would like to share about your experience with BIC at your school?

Site visit interviews and focus groups. Interviews, focus groups, and observations were conducted in Livingston Parish Schools, Louisiana; Logan-Hocking Public Schools, Ohio; and Austin Independent School District, Texas. Participating schools represented a mix of urban/suburban and rural communities, as well as a range of levels (i.e., elementary, middle, and high). The same two interviewers conducted the interviews, focus groups, and observations across all sites—with the exception of two parent focus groups that were conducted in Spanish, during which a native Spanish-speaking researcher joined. Child Trends staff coordinated with a point of contact identified by NEA Foundation at each school to coordinate site visits; this coordination included scheduling interviews with the principal and food service manager at each school, as well as focus group discussions with school staff and parents. Each school conducted outreach to recruit parents and school staff for focus groups. Semi-structured interviews with principals and food service staff lasted approximately 40 minutes on average. A total of six semi-structured focus group discussions were conducted, with four to nine parents ($n = 40$), and they lasted 40 minutes on average. A total of six semi-structured focus group discussions were also conducted with six to nine school staff members ($n = 46$), lasting approximately 50 minutes on average. All interviews and focus groups were conducted in-person, except for one principal interview conducted over the phone. Observations were conducted at six schools within the three districts. Fourteen classrooms in total were observed throughout the study, with each observation lasting approximately 25 minutes.

Affiliate interviews. To reach the maximum number of affiliate leaders among the states and localities of primary interest to NEA Foundation, recruitment was conducted via direct email from Annelise Cohon at the Foundation. She contacted 14 state and local affiliate leaders from Idaho, Louisiana, Mississippi, Missouri, Nebraska, North Carolina, Ohio, Oklahoma, Texas, and Utah. A total of eight telephone interviews were scheduled and conducted by the same Child Trends

researcher. Five of the participants were state-level affiliate leaders, and three were local leaders. Figure A3 above summarizes the number of state and local affiliates as well as the states they represent. Based on participant availability, there was one two-person group interview, one three-person group interview, and three individual interviews. Each interview lasted 30 minutes, regardless of the number of participants.

Online scan. Child Trends performed an online search of each state affiliate, local affiliate, and school district's website and social media accounts. Child Trends also conducted Google News searches for each locality. The following localities were included:

- Logan-Hocking, Ohio
- Livingston Parish, Louisiana
- Austin, Texas
- Jennings, Missouri

Data analysis

Qualitative analyses of the site visit interviews and focus groups were conducted using NVivo, a software for coding and analyzing qualitative data. Child Trends took two different approaches to analyzing the data: content analysis and constant comparative approach. The content analysis was conducted by establishing codes (or themes) based on the topics used in the semi-structured interviews and focus groups, followed by coding of the transcripts. After the transcripts were coded, descriptive statistics were run to explore particular topics and the frequency of those topics across the districts, schools, parents and staff members. In addition to the content analysis, a constant comparative approach was conducted by running a word frequency search within NVivo to determine whether any themes emerging from the data had not already been identified. After running these searches, Child Trends created matrices to explore relationships that might exist across themes.

NEA affiliate interviews were analyzed separately, using both a content analysis and constant comparative approach; NVivo was not used due to the smaller number of interview transcripts to be analyzed. The same researcher who conducted all of the NEA affiliate interviews analyzed the data. Child Trends chose to analyze the NEA affiliate interviews apart from the site visit interviews in order to assess concordance/discordance of themes without introducing bias into the analysis. The online web search data were also analyzed using both a content analysis and

constant comparative approach; once again, NVivo was not used due to the smaller number of locations websites and social media accounts to be analyzed.

Appendix B: Promotion of BIC Online

An important aspect of increasing uptake for programs such as Breakfast in the Classroom is to raise awareness among key stakeholder groups. School district officials who understand the benefits of BIC and are aware of opportunities to access funding and other supports may be more likely to implement the program. Similarly, school staff who are familiar with successful implementation in neighboring schools and school districts might be more inclined to support the program at their school. Greater awareness of BIC may also influence parents. Notably, during site visit focus groups with parents in several schools, Child Trends researchers learned that many parents were not aware that their child's school was participating in BIC. To better understand how online communication platforms are used to promote BIC, Child Trends conducted a scan of online mentions of Breakfast in the Classroom in four communities. Searches were conducted of NEA state and local affiliate and school district websites and social media accounts, as well as a Google News search for each locality. Below we summarize the results of those searches.

Websites

Few state NEA affiliate websites mention BIC. There was little evidence that state NEA affiliates promoted BIC through their websites, and those that did mention BIC seemed to target school districts to promote their participation. Searches of the Texas Education Association and Missouri NEA websites revealed no postings related to BIC. A search of the Louisiana Association of Educators (LAE) yielded one relevant news release from October 10, 2016, which prominently stated that BIC is funded by the NEA foundation as well as other named organizations. The news release instructs school districts to visit the BIC website to view eligibility criteria. The Ohio Education Association website had the most mentions of BIC, with more than 20 postings including press releases, blog posts, and a magazine article in *Ohio Schools*.

School district websites commonly mention BIC when posting breakfast menus. Local school district websites were much more likely to include mentions of BIC, although only one district website explicitly references Partners for Breakfast in the Classroom. Three out of the four districts that Child Trends searched included information about BIC prominently when posting school breakfast menus. Austin ISD included a five-minute video that cites research on the benefits of breakfast and seems to target teachers with messages about how they can effectively and efficiently implement BIC.

Social media

Many state NEA affiliates share BIC-related videos and promote local districts participation in BIC on social media. The use of social media accounts to promote BIC was slightly more common among NEA state affiliates compared to their use of official websites, although the social was restricted primarily to Facebook. NEA affiliates in three of the four states posted information about BIC—including original videos, mentions promoting local district participation in BIC, and “shares” of announcements from the official Partners for Breakfast in the Classroom Facebook page, with links to webinars on how to apply for grants. Only one state posted information on Twitter.

School district use of social media tends to promote BIC success stories at local schools. Local school districts also use social media to promote BIC, although the frequency of posts varied across districts and did not always match the frequency of posts from corresponding state affiliates. For example, while the Ohio Education Association made several mentions of BIC, Logan Hocking School district made no mentions on Twitter and only two on Facebook. In contrast, Livingston Parish Public Schools made more mentions of BIC on social media than did the Louisiana Association of Educators. Livingston Parish also has a separate Facebook account for food services that was active in posting about BIC, including links to local news stories about BIC. Austin ISD also posted links to local news reports about BIC, as well as several twitter posts coinciding with National Breakfast Week and the beginning of the academic year. Central School District in Missouri made the fewest social media mentions of BIC, and these mentions were primarily related to an announcement of the receipt of a PBIC grant. It is important to note that the variability in postings on social media may reflect different patterns of social media use generally across school districts.

News coverage

Local news outlets are reporting about BIC. News stories were identified for each of the four localities that were targeted in the search using Google News search function. Most stories were from local television news stations and many of them specifically mentioned PBIC as a funding partner.

Conclusion

Based on this sample of localities, it appears that NEA affiliates and school districts are using online communication platforms to promote BIC, although the intensity of purpose varies significantly. In general, websites were most commonly used to share information about BIC, such as links to funding opportunities or mentions of BIC when posting school breakfast menus. Social media platforms were most commonly used to promote BIC, often with posts highlighting success stories from districts and local schools. NEA and school district social media included links to local news stories, “shares” of BIC-related posts from the PBIC Facebook page, and promotional videos—including videos that they produced. Social media postings met with mixed success in terms of attracting a large viewership—based on an analysis of likes, shares, or views of videos. Videos and links to local news stories seemed to receive the most attention. Overall, online platforms hold potential for increasing awareness of BIC, especially when posts include engaging, relevant content, such as locally produced videos and local news stories or links to resources—especially funding opportunities.