# Addressing Food Insecurity Experienced by Elementary School Students Through a Weekend Backpack Program

by

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Food insecurity is a problem for millions of people in the United States. In 2020, 10.5 percent of US households were food insecure, and for people of color, the numbers were even greater. With the United States' history of discrimination against Black and Brown people in areas such as housing, employment, and education, racism is clearly a root cause of the problem. The theory of improvement for this dissertation in practice hypothesizes that increased access to free and nutritious foods will improve the physical, social, and academic outcomes of our students. To address this problem of practice, I implemented a supplemental weekend program that provided backpacks filled with nonperishable food items to students impacted by food insecurity. The inquiry questions that guided this improvement project were: 1) How do parents view the backpack program's impact on their child(ren) and family?, 2) What are the teachers' perceptions of the impact of the weekend backpack program on their students?, and 3) How does the overall school environment help or hinder students to eat healthy? Measures include phone surveys/interviews with 7 parents of students participating in the backpack program, 2 focus groups with 8-12 faculty/staff that work with students receiving backpacks, and field notes to document the school food environment. Quantitative (survey) data analysis includes descriptive statistics and qualitative coding of open-ended questions. Focus group recordings were transcribed and coded with qualitative content analysis and organized into categories and themes. An analysis of field notes includes a qualitative description of observations and findings. Results of qualitative analysis

of focus group transcripts revealed 3 overarching themes surrounding teachers' perceptions of the impact of the weekend backpack program on the lives of their students: (1) Household struggles illuminated and exacerbated by a pandemic; (2) School meeting the needs of its students; and (3) Increasing food access for students and families. Main findings reflected challenges to accessing public services and, school resources helping to mitigate the issue of food insecurity for students and families. The implementation of this program highlight the importance of the program and the role schools can play in the communities they serve.

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# 1.0 Naming & Framing the Problem of Practice

# 1.1 Broader Problem Area

Since our country's inception, people of color have endured mistreatment and trauma, with minimal regard for their health and well-being. According to the Centers for Disease Control (CDC, 2021), a rising collection of evidence reveals that America's history of racism has had a profound and detrimental impact on people of color. The consequences are widespread and deeply ingrained in our society, affecting where people live, learn, work, pray, and play. These systemic injustices contribute to inequities in access to a variety of social and economic resources, such as housing, education, wealth, and employment.

Healthy People 2030 defines the Social Determinants of Health (SDOH) as being "... the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks" (Office of Disease Prevention and Health Promotion [ODPHP], n.d.). These SDOH include race, poverty, and gender, which also influence health outcomes (morbidity, mortality, and health risks) (Noonan, Velasco-Mondragon, & Wagner, 2016). Economic stability, one of the five domains of the SDOH, lists food insecurity as a critical issue within that domain.

Food insecurity, defined by the United States Department of Agriculture (USDA) as a household-level economic and social condition of limited or uncertain access to adequate food, makes achieving a consistently balanced diet difficult. According to the USDA Economic

Research Report (Coleman-Jensen et al., 2021), 10.5 percent (13.8 million) of U.S. households were food insecure at some time during 2020. The report also revealed that food insecurity varied significantly by household type, indicating that 14.8% of households living with children were food insecure. The prevalence of food insecurity was also higher in Black households (22%) and Hispanic households (17%) than those in white households (8%). Given the disproportionate impact of food insecurity on children and families of color, schools are likely a key place for addressing these inequities.

For many students, school is the only place where they have an opportunity to be provided at least two meals a day. Providing universal meals in public schools is one way to address the pernicious effects of structural racism that still exists in the United States. Student participation rates considerably improve when eligible schools accept provisions for universal free meals, increasing program reach among children most at risk of food insecurity (Turner, Guthrie, & Ralston, 2019). Currently, the Community Eligibility Provision (CEP), the federal non-pricing meal service option for schools and districts in low-income areas, established under the Healthy, Hunger Free Kids Act (HHFKA) of 2010, is an excellent way to provide universal meals in schools to some of the country's most vulnerable.

Universal free meals allow schools to offer meals to students at no cost, and it has been lauded as being highly effective in improving student outcomes. According to recent findings, schools that give universal free lunches to all students have a favorable influence on student nutrition, conduct, and academic achievement (Hecht et al., 2020). The Community Eligibility Provision, which was created under the HHFKA in 2010, was designed to increase low-income children's access to nutritious food, reduce the stigma associated with eating school meals,

and relieve schools of administrative work by removing the need to process meal applications and track students' meal expenditures (Hecht et al., 2020). Gordanier et al. (2020) investigated the effect of universal free lunch through the CEP in South Carolina elementary and middle schools and discovered a decline in absences and an increase in Math scores among students participating in the Community Eligibility Provision. In a study conducted by Bartfeld et al. (2020) in Wisconsin elementary schools, a decline in low attendance rates were also discovered after two years of Community Eligibility Provision implementation. The findings suggest that the Community Eligibility Provision may have benefits beyond improving food access and nutrition, as it could be one way to address disproportionately low attendance rates among economically-disadvantaged students (Bartfeld et al., 2020).

A dynamic, ecological systems perspective of youth development provides a useful framework for understanding the impact of food insecurity on child learning and growth and for also elucidating potential intervention leverage points. The developmental-ecological systems framework posits that children develop as an integrated whole within the multi-layered contexts in which they are embedded (Bronfenbrenner & Evans, 2000). This means that factors internal (e.g., biophysical, cognitive, emotional, self-regulatory) and external (e.g., family, school, community, socio-political) to the child operate as a bidirectional system with each factor influencing and being influenced by the other factors (Magnusson & Cairns, 1996; Sameroff, 2020). Typically, children's development is influenced by the proximal contexts they experience in their daily lives such as their family, school, and neighborhood (Bronfenbrenner, 1977; Cairns & Cairns, 1994; Sameroff, 2020). However, more distal factors such as supports afforded to family

members and socio-political factors can strongly impact the contexts in which children develop and grow (Bronfenbrenner, 1996; Spencer et al., 2019).

From this perspective, children's ability to function in school is related to biophysical processes that contribute to self-regulation, attention, and cognitive processing (Farmer et al., 2020). The lack of proper nutrition and a sense of feeling unsafe in the environment because one's needs are not being met can interfere with these biophysical and cognitive processes and thus, constrain a child's learning and school adjustment (Sameroff, 2020; Spencer et al., 2019). These difficulties may be manifested in a lack of instructional focus and problem behaviors that are often misinterpreted as discipline issues that should be punished (Milner, 2018). As educational leaders and as a society, we must understand these difficulties reflect inequities in the environment and a lack of infrastructure supports that are centered on the circumstances and needs of youth from minoritized backgrounds (Artiles, 2011; Powell et al., 2019; Spencer et al., 2019). We can foster the school adjustment of children from under-represented groups when we tailor supports to their individual needs and when we also provide supports at the family and community levels that join together as a system to enhance their adaptation in the school setting (Farmer et al., 2022).

# 1.2 Organizational System

Abbott Elementary School (Pseudonym), a K-12 nonprofit public charter school of choice, educates a diverse community of students from Providence, Rhode Island. Abbott Elementary School (AES) has the Title 1 designation given to local educational agencies that serve

a high percentage of students from low-income families. This designation allows the school to receive financial assistance through grants from the federal government.

AES currently serves over 800 students (K-12) from throughout the city – most of whom are second and third-generation Hispanic and Latino Americans of low-socioeconomic status (SES). As a result, many of our students find it economically challenging to purchase school meals. According to 2019-2020 data from the National Center for Educational Statistics (NCES, 2020), 62% of AES students were eligible for free school lunch, and 15% were eligible for reduced-price lunch. To receive free and reduced-price meals, families must first meet the federal income eligibility guidelines. Income guidelines are revised annually and are effective July 1 - June 30. These guidelines are based upon the federal income poverty guidelines and household size. Children receive free meals if household income is below 130 percent of the federal poverty level and receive reduced-priced meals if household income is between 130 and 185 percent of the federal poverty level.

I am a founding teacher at AES and have served as the elementary (K-5) physical education teacher since 2002, teaching six classes a day at our lower school with over 360 students. To better position myself to address this problem of practice, I have taken on additional leadership roles within the school. In addition, I have taken on the role of Health and Wellness Committee Chair and school board trustee. My board trustee position ended in June 2021, but I remain a member of the Health and Wellness Committee. As Health and Wellness Chair, I set the agenda and address topics relating to our student's physical and emotional health. Such issues range from addressing food insecurity to developing a health and wellness policy. The wellness policy was created a year before taking the health and wellness chair position. Unfortunately, our wellness policy,

written with good intentions, has essentially been rendered useless. It was essentially a document created due to a Rhode Island Department of Education (RIDE) request. For years, I would ask AES to form a health and wellness committee, but those calls were never answered. Instead, RIDE enforced what was written in the HHFKA (PL 111-296 - healthy, Hunger-Free Kids Act of 2010), which pressured the school administration to create a committee.

As an elementary physical education teacher, I have a duty and obligation to inform my students, families, and school administrators of the health issues that plague American students in the 21st century. Our health curriculum and current school meals offerings are promising tools designed to address these health concerns but are not enough. For example, during the 2019-20 school year, I asked AES to participate in the CEP but was told we could not do it due to the financial hardship it could create on a district of our size and resources. The organization's size and minimal resources have not stopped some teachers from coming up with innovative ways to tackle the problem. Our 4th grade teaching team, with the support of the AES administration, created a service-learning project for their students to raise money for and bring awareness to the problem of food insecurity. This "Empty Bowls" project, which was developed in collaboration with the lower school art teacher and has been happening for at least a decade, uses student-crafted bowls which are later sold for \$10 each. The proceeds from the event go to the Rhode Island Food Bank, but do not directly impact the students in need at our school. Projects like "Empty Bowls" are great, but the organization needs to find other ways to address this problem of food insecurity that only seems to be getting worse for many of our students.

The current coronavirus pandemic has highlighted precisely how dependent students and families are on the meals our school offers daily. In March 2020, when the pandemic forced

schools to transition to distance learning, "grab-n-go" meals were offered by the city of Providence to all children 18 and under. When the meals program began, it consisted of a free breakfast and lunch per student per day. Free supper meals were quickly added to the menu one week later. The following school year (2020-21), AES started its own grab-n-go meals program for students regardless of in-school or distance learner status. Every Thursday (designated pickup day), students enrolled at AES were allowed to pick up 1 box of food at the lower school, with each box containing enough food for the week. The USDA, through the extension of special waivers which began at the start of the pandemic, allows our school to continue offering school meals at no cost to all students, regardless of income, for the 2021-2022 school year. This year we have also added a weekend backpack program that provides nutritious foods over the weekend or during academic breaks for some of our schools most needy students.

#### 1.3 Stakeholders

#### 1.3.1 Students

Students are the most important members of our school community. What we do every day is for the benefit and betterment of the student body. According to 2019-2020 data from the NCES, the AES had 362 students enrolled. Forty-eight percent of those students were male, and 52% were female. Sixty-one percent of the student body is Hispanic, followed by 19% Black, 8% White, 7% identified with two or more races, 2% Asian, 1% Native Hawaiian/Pacific Islander, and less than one percent American Indian/Alaska Native. Some students have shared the financial difficulties

their parents face every day. From struggling to keep the lights on to needing assistance buying food, many of our students are feeling the impact of their families having limited financial resources. Some of our most vulnerable students that have received food assistance from the school have been thankful and appreciative of the help.

# 1.3.2 Parents/Families

AES parents and families are the first teachers and role models that build the physical and emotional foundations for their child/children. Our families are influential and have opportunities to provide leadership within the school community through volunteerism. We currently have parents on the school board and parents serving on subcommittees of the board. Families are seen as valued partners within the organization. Food insecurity affects many of these families, and some have shared their need for food assistance with their child's teacher.

#### 1.3.3 Teachers

AES pupil/teacher ratio, according to the latest statistics from the NCES, is 12.03, which is slightly lower than the state's ratio of 13.3. NCES also lists the school as having 30.10 full-time equivalent (FTE) classroom teachers. At AES, the teacher demographics are very similar to what exists within most public-school settings across the nation, with most of its teachers being White. This is highlighted in a 2020 report from the United States Department of Education showing that during the 2017-2018 school year, 79 percent of public-school teachers were White

and non-Hispanic (United States Department of Education, 2020). At AES, teachers establish and enforce rules for behavior and procedures for maintaining order among the students for whom they are responsible. Teachers play a vital role in students' lives and help educate and shape habits and behaviors in and out of the classroom. They also have the ability to identify behaviors that fall outside the norm of developmentally appropriate student behavior. Due to the amount of time spent with students, teachers can notice changes in the cognitive and physical development of students and can investigate possible causes. Our teachers also build relationships with families and oftentimes gain access to important familial information that most adults in the building do not have access to. Teaching partners, also known as paraprofessionals or teacher aides, are in a unique position because they are the adults with the students during breakfast and lunch. During these times, teaching partners are able to see what students are eating, how much or how little they are eating, what they bring for breakfast/lunch, who can and cannot afford to pay for meals, and who is asking for extra food.

# 1.3.4 Operations Manager

Prior to joining the AES community, our current operations manager worked for years as a food service director working with public schools in Providence Rhode Island. He is ServSafe certified, a Rhode Island certified food safety manager, and is involved with all food programs at the school. His expertise in food services, experience with Latinx students and families, and knowledge of the backpack program, have made his presence invaluable. He creates and orders the menu of items for the backpacks program. This person also serves on the Health and Wellness

Committee and has encouraged committee members to support the idea of implementing the backpack program at our school. His support of and experience with this program has made the organizations' willingness to go forward with the program much easier.

# 1.3.5 Health and Wellness Committee

The Health and Wellness Committee is a subcommittee of the school board. The team is made up of various members of the school and Providence communities. Members of the committee include the school board president, operations manager, high school nurse, lower school parent (health insurance employee), lower school physical education teacher, and middle school multilingual learners teacher. This year's collection of members offers a great opportunity to create some positive changes as it relates to health and wellness, but more specifically, when it comes to feeding the school's most vulnerable. The committee's decision to make school food (i.e., quality, availability, nutrition) a priority this year was welcomed news and a reason to be hopeful.

# 1.4 Statement of Problem of Practice

The problem of practice I seek to address is the troubling level of food insecurity experienced by our students at AES. Food insecurity is a public health concern that affects more than 10 million children in the United States (Hines et al., 2021). Negative health outcomes are

associated with food insecure school-aged children as well. Research has found that this age group is at a greater risk for academic, cognitive, and behavioral problems when living with food insecurity (Gundersen & Ziliak, 2015). AES is seeing many of the negative health outcomes associated with food insecurity in its students. The school must be committed not only to educational equity but to the health equity of the students and the community it serves. The notion of health equity underpins a commitment to minimize and eventually eradicate inequities in health and its determinants, including social factors (Braveman, 2014). Abbott's willingness to work with community organizations such as the Rhode Island Food Bank to provide additional food/meals to students through a piloted weekend backpack program is one example of its commitment to improving the lives of its students. As the Health and Wellness co-chair I have been able to set the agenda to discuss the problem of food insecurity that exists amongst many of our students.

# 1.5 Review of Supporting Knowledge

The purpose of this literature review is to discover how food insecurity impacts the lives of school-aged children, and whether school-based interventions can assist in mitigating the problem. Therefore, the literature will review the following:

# 1.5.1 Purpose of Review

- 1) Impact of food insecurity on the health and (academic) well-being of school-aged children.
- 2) Promising approaches for improving students' access to nutritious foods, especially in underserved communities.

# 1.5.2 School Meals and Nutrition Legislation

Our education system is one sector that has been instrumental in providing nutritious meals to children. Through child meal programs such as the National School Lunch Program (NSLP), issues of malnutrition and food insecurity are addressed from a social-ecological theory approach (Hopkins, L. C., & Gunther, C., 2015). On June 4, 1946, President Harry S. Truman signed the National School Lunch Act into law. Since the inception of the landmark legislation, schools across the country have provided meals to millions of children. The Government formalized similar systems in the decades that followed the landmark act. The Child Nutrition Act (CNA) was signed into law in 1966, in which a School Breakfast Program (SBP) pilot was developed (Hopkins, L. C., & Gunther, C., 2015). The first revisions to the NSLP and SBP meals nutrition standards were made in 1994 following the introduction of the USDA School Meals Initiative for Healthy Children, which mandated nutritional adjustments to school meals based on the new dietary guidelines. The proposed changes switched meals from a traditional meal pattern to an enhanced meal pattern based on detailed nutrition guidance (Hopkins, L. C., & Gunther, C., 2015).

The most recent overhaul of our NSLP and SBP was done through the HHFKA of 2010. This legislation created significant changes to the nutritional standards of school meals. Some of the changes included fat-free (unflavored or flavored); fruits and vegetables are two separate food components; increases in the amount and variety of fruits, vegetables, and whole grains; trans-fat limited to zero grams per serving and limit on saturated fat to less than 10% of calories (Marcason, 2012).

# 1.5.3 What is the impact of food insecurity on the health and well-being of school-aged children?

# 1.5.3.1 Behavioral and Emotional Impact

Over the past 30 years, studies have been conducted to determine the effects of food insecurity on the well-being of children and adolescents. One key line of research pointing to the impact of food insecurity on the behavioral, emotional, and academic outcomes of children is a systematic review of journal articles conducted between 1985 and 2016 (Shankar et al., 2017). The review included twenty-three articles examining the associations between food insufficiency and adverse childhood developmental behavioral outcomes. Alaimo et al. (2001) analyzed data from the Third National Health and Nutrition Examination Survey (NHANES III) and found that food insufficient school-aged children had a higher rate of negative outcomes than their food sufficient counterparts. The data suggest that food insufficient children were more likely to have been retained (repeated a grade), seen by a mental health professional, and struggled to get along with other children. Food insufficient children were almost 1.5 times more likely to have been retained

and almost 2 times more likely to have seen a psychologist. Slopen et al. (2017) found that internalizing and externalizing behaviors were more likely to occur among children coming from food-insecure households than those from never food-insecure households. The food insecure children were 1.5 times more likely to show internalizing behaviors and 2 times more likely to show externalizing behavior, hostility, and aggression). Slopen et al. (2017) also found that children transitioning from food secure to food insecure were 1.8 times more likely to show externalizing behaviors at follow-up.

# 1.5.3.2 Academic Impact

Two studies from the Shankar et al. (2017) review evaluated the impact of food insecurity on academics. Winicki et al. (2003) examined the correlation between food insecurity, academic achievement, and health among kindergarten students in the United States by using data from the Early Childhood Longitudinal Study (ECLS) — which is sponsored by the United States Department of Education. The ECLS included an 18-item food security module to measure household food security. The ECLS administered fall and spring child assessments and two-parent questionnaires which also happened during the fall and spring of the kindergarten year. Responses to the questionnaire helped determine where families fell along the food security scale, and assessment scores (math scores) were used in determining academic achievement. The study found a negative association between math scores and food insecurity. According to this study, food insecurity also influenced learning. This study also showed that the gain in math score was negative from the fall to the spring.

A similar study conducted by Jyoti et al. (2005) also used data from the ECLS and found a correlation between food insecurity and academic performance amongst school-aged children. More specifically, Jyoti et al. found that food insecurity is a predictor of impaired academic performance in math and reading for boys and girls — with some aspects of the study finding different results among the genders. The authors examined the changes in food insecurity over time and learned that children, especially girls, from homes that became food insecure, displayed a poorer reading performance than children from persistently food secure households or households that became food secure.

# 1.5.3.3 Cognitive Impact

Hoyland et al. (2009) conducted a systematic review on the effects of breakfast on cognitive performance on children by reviewing 45 studies in papers published between 1950 and 2008. Included in the review were studies comparing breakfast with no breakfast and studies of different breakfast types. The evidence indicates there is a greater benefit to breakfast consumption than skipping breakfast. More specifically, evidence suggests that academic performance can be positively affected by interventions such as the school breakfast program. Mahoney et al. (2005) conducted two experiments comparing the effects of two breakfast foods (oatmeal and ready-to-eat cereal) and no breakfast on child cognition. These cereals were similar in energy but differed in things such as effects on digestion and metabolism, and score on the glycemic index. Results with 9-11 year-olds mimicked earlier findings showing breakfast intake positively impact cognitive performance. Enhanced spatial

access to meals provided by the SBP and NSLP (Turner & Calvert, 2019). The Summer Food Service Program (SFSP), first piloted in 1968, then authorized in 1975, was meant to fill the gap that exists during the summer months when schools are out. The SFSP offers meals to children 18 and under from low-income communities. The signing of the HHFKA in 2010 paved the way for more organizations to operate as SFSP sites increasing the program's reach (USDA, 2019). Currently, in addition to schools, local government agencies, summer camps, churches, and libraries can sponsor the summer program (Turner & Calvert, 2019). Generally, sponsor organizations can operate SFSP sites in attendance catchment areas of schools where 50% or more of the student body is eligible for free or reduced-price lunch or in Census block groups where 50% or more of the children are eligible for free or reduced-price lunch (Miller, 2016). Sponsor organizations can offer summer meals (breakfast, lunch, snack dinner) for free, and are reimbursed by the department of agriculture. For meals to be reimbursable by USDA, summer sponsors must follow USDA meal pattern requirements that specify the required food components and minimum serving sizes (Turner & Calvert, 2019). Since the expansion of SFSP, organizations such as libraries have had a profound effect on the program's ability to feed children. In 2017, public libraries accounted for at least 3.6 % of all locations in the United States where children and youth could get free lunches through the USDA's Summer Meal Program (Lenstra & D'Arpa, 2019). Many of the hurdles associated with meal program participation are effectively broken down by the library culture, making libraries perfect for tackling food insecurity in a setting where individuals of diverse backgrounds and socioeconomic circumstances can dine together (Bruce et al., 2017).

# 1.5.3.4 Getting to Equity Framework

Addressing health inequities calls for the use of an equity lens, which allows one to notice injustices at work while rejecting biases and preconceptions that blame people for events beyond their control (Kumanyika, 2019). The Getting to Equity (GTE) Framework, a framework initially designed to aid in obesity prevention, has four categories which each represents an intervention approach that can be adapted to address other public health issues such as food insecurity. Those categories are: (1) increase healthy options (e.g., distribution of school meals) (2) reduce deterrents, (3) improve social and economic resources, and (4) build on community capacity. The "increase healthy options" category refers to things such as implementing standards for food provision in school and child care settings. Next is the "reduce deterrents" category, which focuses on decreasing messaging related to unhealthy foods or behaviors. The "improve social and economic resources" category is about bringing solutions that help in mitigating poverty (e.g., SNAP, Women, Infant and Children, Child and Adult Care Food Program). The final category, "build on community capacity", is especially important for its emphasis on involving community members directly in the process of reflecting on, designing, implementing, and evaluating outcomes of interventions with a health or resources focus (Kumanyika, 2017).

# 2.0 Theory of Improvement and Implementation Plan

# 2.1 Theory of Improvement

The problem I seek to address is the troubling level of food insecurity experienced by our students at AES. My driver diagram (Appendix A) depicts my theory of improvement, including the primary and secondary drivers and change ideas, that I hypothesize will help me to achieve my overall aim to improve food insecurity at AES. Through the four change ideas that are proposed, I am confident those interventions will lead to greater access to nutritious school meals and foods, and address the problem of food insecurity experienced by our students.

# 2.1.1 Aim statement

By 2025, there will be an increase in free and nutritious school meals in order to improve healthy eating and food security in students attending AES.

# 2.1.2 Primary drivers

I have identified three primary drivers to help accomplish my aim (see Appendix A). The first primary driver is student participation in school meals. Currently, school meals are free to all students, regardless of income. The U.S. Department of Agriculture, which began reimbursing schools for free meals at the start of the COVID-19 pandemic, has extended those free meal

offerings for students into the 2021-22 school year. This extension allows schools to continue to offer free meals to students for an additional year; however, there is not an opportunity to continue this in the future.

The second primary driver is funding. Without the appropriate funds, universal school meals are not possible. Due to the current federal reimbursement rates, schools participating in the SBP and NSLP can offer meals at no cost. Next year (SY 2022-23), reimbursement is expected to go back to the pre-pandemic rate. During a typical school year, a school with a 40% ISP (identified student percentage), for example, would have that percentage multiplied by 1.6 (federal government calculation) meaning the federal government would only reimburse the school for 64% (40% x 1.6) of its meals at the federal free rate. In this scenario, schools would be left to absorb the cost of thirty-six percent of meals not reimbursed at the federal free rate. For schools to be fully reimbursed for 100% of their meals, the school would need an ISP of 62.5% or greater (Cohen et al., 2021). AES, considered one of the smallest school districts in the state of Rhode Island, cannot afford to implement the CEP as it is currently structured. A legislative adjustment that eliminates the use of ISP and instead reimburses schools for all meals delivered under a nationwide universal free school meal design would solve worries about school financial losses (Cohen et al., 2021).

The final primary driver is community mobilization. Community mobilization is the process of bringing together as many stakeholders as possible to increase people's knowledge of and demand for a specific program, assist in the delivery of resources and services, and strengthen community engagement for long-term sustainability and self-sufficiency (World Health Organization, 2010). The weekend backpack program has increased access to free and nutritious

foods/meals for students but has also increased community awareness and interest in the problem of food insecurity. The problem of food insecurity at AES is receiving the attention, prioritization, and funding needed to achieve my aim by 2025.

# 2.1.3 Secondary drivers

To support my primary drivers, I have identified a total of six secondary drivers (two secondary drivers for each primary driver). The promotion of our school meals program, in addition to increased focused education around the importance of nutrition, will help support the primary driver of school meal participation. Donations, along with federal grants, such as the Community Eligibility Provision, will help to ensure that our students will gain access to the healthy and nutritious meals they require and deserve. And finally, awareness and attunement of social and economic resources and, community partnerships will contribute to community mobilization to get the community together to demand changes in the ways we offer meals to our students.

# 2.1.4 Change ideas

# Change idea (1)

Hanging student posters throughout the school that promotes healthy eating can encourage students to eat healthy while building excitement around their work on display. This change idea

impacts the secondary driver of promotion of school meals which impacts the primary driver of participation in the school meals program.

# Change idea (2)

During our Monday Morning Meeting (weekly school assembly), individual students or classes can present nutrition facts about fruits or vegetables. This change idea impacts the secondary driver of education which impacts the primary driver of participation in the school meals program.

# Change idea (3)

For years, our school has relied on donations to fund specific enrichment programs but never has there been an opportunity to donate to a particular cause. Creating a lunch fund can assist in that endeavor. Donations can be made through the school webpage with the ability to designate donations to the lunch fund option. Donors can be parents, teachers, board members, or those from outside the school community. These funds will allow students that cannot afford to pay for school lunch or breakfast to eat without the worry of being billed. This change idea impacts the secondary driver of donations which impacts the primary driver of funding.

# Change idea (4)

Working with our local food bank to provide foods that support a weekend backpack program. This program will be another opportunity for needy families to access fresh fruits and vegetables, grains, and protein items. It can provide easier access to food assistance. This change idea impacts the secondary driver of implementing the weekend backpack program which impacts the primary driver of supplemental meals.

# 2.2 Systems Measures

When it comes to reducing the prevalence of childhood obesity, schools may be one of the best environments for that to happen. School leaders and policymakers have the capability to develop policies, provide nutritious meals to many students, and create environments that support healthy habits and change behavioral outcomes (Mansfield & Savaiano, 2017). With this in mind, my aim attempts to increase free and nutritious school meals to improve healthy eating in children. There will be minor changes throughout this process to increase access to free meals (leading measure), but the goal, to provide free breakfast and lunch meals to students (lagging measure), will potentially occur after the 2021-22 school year (SY). To measure the impact of the increase in access, I intend to better understand how the increase in food access has improved their lives and the lives of their families. As for driver measures, I will keep close watch of the secondary drivers and how they are affecting the primary drivers. Specifically, I would look at the promotion of school meals, nutrition lessons, and the implementation of the school food pantry to see how those changes impact the school ecosystem as it relates to health habits and behaviors. Lastly are the potential balance measures. AES is recognized as its own district, making us one of the smallest districts in the state. Also, because we are a charter school, the funds that we receive from the city and state are far less than what traditional Rhode Island public schools receive. This fact puts the school in a precarious situation when it comes to programming. For example, implementing the CEP is a lot easier for traditional public schools because they serve more students, which equates to more dollars. Like I mentioned earlier, they receive more funds from the city and state. If we were to implement the CEP, it could create a financial hardship that could reverberate throughout the institution. With that being said, I believe there are ways for the school to implement the CEP, or something similar, without it hurting the institution financially.

# 2.3 Inquiry Questions

The inquiry questions for my intervention will help me better understand what AES families and teachers think about the weekend backpack program and whether the school environment encourages healthy eating amongst its students. The data that is collected will determine how successful the intervention was and what changes need to happen to maintain and sustain the program's success in the future. The research methodology will be qualitative (focus groups and field notes) and quantitative (parent surveys). The guiding inquiry questions are:

- 1) What are the teachers' perceptions of the impact of the weekend backpack program on the lives of their students?
- 2) How do parents view the backpack program's impact on their child(ren) and family?
- 3) How does the overall school environment help or hinder students to eat healthy?

# 2.4 Intervention Description

The weekend backpack program is a supplemental food program designed to assist students impacted by food insecurity. The backpack program began as a three-month pilot program

(November 5, 2021 – February 18, 2022) funded solely with school resources, but was extended through the 2021-2022 school year. The current improvement project is an evaluation of the piloted backpack program.

The lower school social workers and classroom teachers were asked to provide names of students they believed could benefit from participating in the program. Once students' names were received, a permission slip was sent home with the description and timeframe of the program. Nine families enrolled in the program during the pilot phase. Staff volunteers were recruited via email to help with the unpacking of food boxes, along with the packing and distribution of backpacks. Every Friday (or before an academic break) staff volunteers were responsible for discreetly delivering backpacks supplied with nutritious, non-perishable, and easy to prepare food items a few minutes before school dismissal. When students returned to school, they returned the backpacks to my office. If backpacks were not returned that week, and we did not have any additional backpacks available, students did not receive a backpack the following Friday.

Food items were meant to fill the gap in meals that exists when students are away from school and unable to receive school meals. Food items are intended to feed students receiving the backpacks, in addition to other children in the household under the age of 18. Donated backpacks were provided by the lower school social worker(s) for use in the program and the school's operations manager selected and ordered the food which was delivered on Mondays. The operations manager has over 20 years of food service experience, with 6 of those years working with the Providence Public School District through Sodexo (food service provider). He knows the school menu and orders foods for the backpack program that are like what students receive during

the day at school. Backpacks include shelf stable milk, 1 pound box of cereal, fruit cups, canned tuna, canned chicken, canned vegetables, 2 pound bags of rice, and boxed macaroni and cheese.

The three-month pilot period is a requirement of the Rhode Island Food Bank, and it is intended to prove the program's financial sustainability and to ensure there is adequate staffing to follow the program's service plan (Rhode Island Food Bank, 2022). Once the Rhode Island Food Bank requirements are met, AES becomes a member. Membership allows the school to receive food for the backpack program at no cost. Membership to the food bank will only strengthen the school's relationship with the organization and promote program sustainability. The two organizations have worked together for over a decade through the Abbott Elementary Schools "Empty Bowls" community service initiative.

# 2.5 Positionality

A researcher's personhood, including their membership status in relation to those participating in the research, is an essential and ever-present aspect of the investigation, whether the researcher is an insider, sharing the characteristic, role, or experience under study with the participants, or an outsider to the commonality shared by participants (Dwyer & Buckle, 2009). As I begin gathering data using methodological tools such as surveys, focus groups, and field notes, I will do so with the understanding that my role as a researcher is quite an important one. I enter this role as a physical educator of color having two decades of experience teaching children impacted by this problem of food insecurity. There is a special connection between many of my students

and families because we come from similar backgrounds and neighborhoods. I often run into them outside of school because we exercise, shop, and worship at the same places. As an insider, I am not only helping my students, but I am helping my community.

# 2.6 Methods and Measures

# 2.6.1 Participants

Participants were AES teachers, teaching assistants, social workers, an administrator, and parents/guardians of students enrolled in the weekend backpack program. The teachers, teaching assistants, social workers, and administrator were recruited via email or in-person to participate in the focus groups. Of the 12 that were contacted, 11 (92%) agreed to participate. Their connection to the program was that they either taught students enrolled in the backpack program, were a backpack program volunteer (packed backpacks), or ordered food for the program. Parents/guardians of students enrolled in the program were asked via phone, in-person, or through their student to participate in a phone survey. Seven of 9 responded to the request to participate.

# 2.6.2 Parent Phone Surveys

With surveys, I collected the voices of the community, the parents, in hopes of strengthening a program that many students and families currently rely upon. Seven parents/guardians of enrolled students were asked to participate in a 10-15 minute phone survey

to gather information surrounding their views of the backpack program. The survey (Appendix B) adapted from previous sources (2015 results was parent survey feedingourcommunitiespartners.org) and included six demographic questions, twelve survey questions pertaining to their perceptions of the backpack program, and 2 open-ended questions for their feedback on the program. Some of the questions were: "The backpack program is easy to participate in", "The backpack program helps my family", and "It is easy to provide enough food for everyone in the household." Response options included: Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree. The school's bilingual admissions and family engagement coordinator assisted with translation for Spanish-speaking parents by translating the documents and conducting phone interviews/surveys with Spanish-speaking families.

# 2.6.3 Teacher Focus Groups

Focus groups are a type of group interview that generates data by allowing participants to communicate with one another (Kitzinger, 1995). They have various advantages that make them particularly suitable for doing research that reflects a cultural group's social realities (Hughes & DuMont, 1993). Focus groups were used to gather school staff (e.g. teachers, social workers, teaching assistants, etc.) perceptions towards the implementation of the weekend backpack program and their perceptions of how the program impacted the students/families. I conducted two focus groups (11 participants) via Zoom videoconferencing. There were approximately 2 hours of FG audio (two FGs at 1 hour each). The focus group guide (Appendix C) that I created was adapted from the USDA Community Food Security Assessment Toolkit. Some of the questions that were

asked were: "Do you think that many families at Abbott Elementary have a problem with food security?" and "What is the extent of the problem?"

#### 2.6.4 Field Notes

Field notes are primarily used to create detailed, rich descriptions of the study environment, encounters, interviews, focus groups, and documents vital contextual data (Phillippi & Lauderdale, 2017). These jottings documented information from the school environment (classrooms, teacher language, school cafeteria, etc.) to discover more about what was encouraging or discouraging healthy eating among students.

## 2.6.5 Analysis Plan

The analysis plan was guided by the Logic Model (see Appendix E). Building from the logic model, I systematically addressed the research questions to address the overarching goal of the study to explore what families and teachers thought about the weekend backpack program and whether the school environment encouraged healthy eating amongst its students. Audio from the focus group meetings was transcribed verbatim and verified against the original audio file for accuracy. Preliminary analysis of focus group data began with the first focus group where I determined whether additional probes were needed for any particular question in the second focus group. I used the analytic framework to pull key concepts to identify the factors that were of central importance to answering the inquiry question: "What are the teachers' perceptions of the weekend

backpack program on the lives of their students?" This framework was used to better understand how participants viewed the problem of food insecurity and the weekend backpack program. Parent phone survey responses were recorded in Qualtrics, then I exported response data from Qualtrics to an XLSX format which can be used in Excel. Text responses (e.g., Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree) were converted to numbers. A numerical database that corresponds to the responses was created, and descriptive statistics were used to organize and summarize the data. An analysis of field notes includes a qualitative description of what I observed and found related to the school nutrition environment and the factors that help or hinder healthy eating.

#### 3.0 PDSA Results

## 3.1 Participant Demographics

The focus groups were comprised of AES teachers, teaching assistants, social workers, and one school administrator. Focus group one had 4 participants: one teaching assistant, one classroom teacher, and two social workers. Focus group two had 7 participants: one special education teacher, three classroom teachers, two teaching assistants, and one school administrator (operations manager). Years employed at the school varied greatly among participants. Two participants were in their first year at the school, and one was in their 18th year. The average years of employment at AES for focus group one was 7.5 years, and 5.4 years for focus group two. Each group had one male participant, while the remaining participants identified as female.

There were 7 parent participants: 86% identified as Hispanic/Latino/Latinx, and 14% identified as Black or African American. A little over two-fifths (43%) worked part-time, 29% worked full-time, and another 29% reported being the homemaker/childcare at home. Fifty-seven percent of parents had 3 or fewer people living in the household, while 43% of parents had more than 5 people in the household. Regarding those under the age of 18 living in the household, 61% of parents reported that 2 or more people in the household were under the age of 18. In terms of food assistance, a majority of respondents (61%) reported that they receive food assistance in addition to the backpacks.

# **3.2 Parent Survey Results**

**Table 1** includes the responses from the 7 parents whose children participated in the backpack program and who completed the phone survey. Survey items were organized by parents' perceptions of the program's impact on child outcomes, their household level of food insecurity, and their overall feedback on the program.

Table 1. Results of Parent survey (n=7) (%, n)

Question	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't know
<b>Child Outcomes</b>		I	I	L		
Program has enhanced my child's/children's energy level	0%, n=0	14.29%, n=1	0%, n=0	42.86%, n=3	28.57%, n=2	14.29%, n=1
Program has improved my child's/children's academic performance	0%, n=0	0%, n=0	14.29%, n=1	42.86%, n=3	28.57%, n=2	14.29%, n=1
Program has helped my child's/children's concentration	0%, n=0	14.29%, n=1	0%, n=0	42.86%, n=3	28.57%, n=2	14.29%, n=1
The program has improved my child's/children's mood	0%, n=0	0%, n=0	14.29%, n=1	28.57%, n=2	42.86% n=3	14.29%, n=1
Food Insecurity						
It is hard to feed everyone in household	0%, n=0	57.14%, n=4	28.57%, n=2	0%, n=0	14.29% n=1	0%, n=0

Hard to provide	0%, n=0	14.29%,	57.14%,	0%, n=0	28.57%,	0%, n=0
enough food for	0,0,11	n=1	n=4	070,11	n=2	070,11
everyone						
Without the	0%, n=0	71.43%,	14.29%,	14.29%,	0%, n=0	0%, n=0
program, I or	,	n=5	n=1	n=1		,
another adult						
might have to skip						
a meal						
The meals are the	0%, n=0	14.29%,	14.29%,	71.43%,	0%, n=0	0%, n=0
main source of		n=1	n=1	n=5		
breakfast and						
lunch for my						
child/children on						
weekends	1					
<b>Program Feedbac</b>	K					
D	00/ 0	00/ 0	00/ 0	71 420/	20.570/	00/ = 0
Program is easy	0%, n=0	0%, n=0	0%, n=0	71.43%,	28.57%,	0%, n=0
to participate in				n=5	n=2	
Program helps	0%, n=0	0%, n=0	0%, n=0	14.29%,	85.71%,	0%, n=0
my family	070, 11=0	070, 11=0	0 /0, 11-0	n=1	n=6	070, 11-0
my jamity				11-1	11-0	
Program helped	0%, n=0	0%, n=0	14.29%,	42.86%	42.86%	0%, n=0
me worry less	070, 11=0	070, 11=0	n=1	n=3	n=3	070, 11–0
about feeding my			11-1	11-3	11-3	
child/children						
I would	0%, n=0	0%, n=0	0%, n=0	42.86%	57.14%	0%, n=0
recommend this	0,0,11	070,11	070,11	n=3	n=4	070,11
program to other						
families						
I would like to	0%, n=0	0%, n=0	0%, n=0	42.86%	57.14%	0%, n=0
participate in				n=3	n=4	
program next						
school year						
I would	0%, n=0	0%, n=0	0%, n=0	28.57%,	71.43%,	0%, n=0
encourage the				n=2	n=5	
community to						
support the						
program						

#### 3.2.1 Child Outcomes

The majority of parents (72%) agreed or strongly agreed that their child's energy level was enhanced by participating in the program, 14% strongly disagreed or disagreed, 14% said they don't know, and 0% were neutral. Regarding the parent's perception of whether their child's academic performance improved by participating in the program, 72% agreed or strongly agreed, 14% were neutral, and 14% said they don't know. In terms of the parent's perception of whether their child's concentration improved by participating in the program, 72% agreed or strongly agreed, 14% strongly disagreed or disagreed, 14% said they don't know and 0% were neutral. Regarding the parent's perception of whether their child's mood improved by participating in the program, 72% agreed or strongly agreed, 14% were neutral, and 14% said they don't know.

## 3.2.2 Food Insecurity

Over half of parents (57%) strongly disagreed or disagreed with the statement, "It is hard to feed everyone in the household," 29% were neutral, and 14% strongly agreed. In terms of the parent's perception of whether it is hard to provide enough food for everyone, 57% were neutral, 29% agreed or strongly agreed, and 14% disagreed. Regarding whether a parent or another adult in the household might have to skip a meal without the assistance of the program, 71% strongly disagreed or disagreed, 14% were neutral, and 14% strongly agreed. Most parents (71%) either agreed or strongly agreed that backpack meals were the main source of breakfast and lunch for their child/children on the weekends, 14% disagreed, and 14% were neutral.

## 3.2.3 Program Feedback

The majority (86%) of parents reported that the program helped them worry less about feeding their child/children, and 14% were neutral. All parents (100%) agreed or strongly agreed that it is easy to participate in the program, the program helped their family, the parents would recommend this program to other families, they would like to participate in the program next year, and they would encourage the community to support the program.

## 3.2.4 Open-ended survey items

There were 5 open-ended survey questions that allowed parents to share their thoughts about the program. For the first open-ended survey question "Are there any other ways you believe the backpack program has been beneficial to your child/children?", four of the five (80%) participants that responded indicated that they had a positive experience with the program. For example, one participant said "If kids don't eat then they don't perform well emotionally. What she didn't like she didn't pay too much attention to it but the ones she liked she would grab and put them away right away. It helped emotionally because she was satisfied when she ate." The second question "What went well for you with the backpack program?" again elicited positive responses. Five of the six (83%) participants noted positive experiences. For example, "Not having to worry as much about breakfast and lunch on the weekends" was what one parent thought went well with the program. When asked "What didn't go well for you with the backpack program?", two of the four (50%) participants said everything went well, while the other two mentioned food restrictions

and/or not liking some of the foods. When asked "What would you change for next time to make the backpack program better?", only one participant responded by saying "everything was perfectly fine." On the final question "Is there anything else you'd like to share about your family or the backpack program?", all four participants that responded shared their appreciation for the program. For example, "They [children] are happy and they like the program."

## 3.3 School Food Environment

Within the school food environment, I conducted observations and collected field notes from the school cafeteria, school staff, and written school policies. I first observed the school cafeteria being used more as a storage facility than an attractive place for students to eat healthy meals. In addition to storage boxes of school supplies being strewn around the cafeteria, there was a volume scale poster reminding students of the expected volume level of their voices in the cafeteria, signage for cafeteria expectations, and a sign encouraging physical activity. Signs pertaining to healthy eating were not displayed. Another observation was the number of unhealthy foods brought into the school by adults. This behavior runs counter to the standards that are addressed in the school's health and wellness policy. Part of the policy states that the school will offer foods containing good nutritional content including fruits, vegetables, low-fat dairy foods, and low-fat grain products in all settings including a la carte, snacks, vending machines, fundraising activities, parties, celebrations, and school-sponsored events. Though the health and wellness policy is written for students, adults must be mindful of the mixed messaging that occurs

when they bring junk foods and sugary beverages into the building. The family handbook is another place where school food is addressed. It explicitly states that the school prefers parents to send in healthy snacks with limited sugar when celebrating a student's birthday in school. What I observed were cupcakes consistently being sent in by parents for student birthday celebrations. The last observation was the discontinued USDA fresh fruit and vegetable program that the school was participating in pre-Covid. Through its annual application process, elementary schools participating in the National School Lunch are selected for the program. The goals of the program were to create healthier school environments by providing healthier food choices; expand the variety of fruits and vegetables children experience; increase children's fruit and vegetable consumption; make a difference in children's diets to impact their present and future health. The school's participation in the program has seemingly ended.

Overwhelmingly, the school food environment was neutral at best and negative at worst. It was not supporting students' healthy eating explicitly and may have modeled poor eating habits.

## 3.4 Focus Group Results

Results of qualitative analysis of focus group transcripts revealed 3 overarching themes surrounding teachers' perceptions of the impact of the weekend backpack program on the lives of their students: (1) Household struggles illuminated and exacerbated by a pandemic; (2) School meeting the needs of its students; and (3) Increasing food access for students and families. Core categories and category descriptions related to the themes are detailed below in Table 2.

**Table 2. Themes and Category Descriptions** 

Themes	Core Categories	Category Descriptions		
Theme 1: Cultural Struggles Illuminated and Exacerbated by a Pandemic	Challenges with Access, COVID-19 Pandemic, and Family and Home Factors	<ul> <li>Struggle to access public services</li> <li>Hardships created and/or exacerbated by COVID-19</li> <li>Cultural differences and prioritization of household needs</li> </ul>		
Theme 2: Schools meeting the needs of its students	School Resources, Student Needs, Teacher Awareness, and Child Hunger Mitigation	<ul> <li>Schools as a resource to help students and families</li> <li>The consequences of child hunger in a school setting</li> <li>Taking action against student hunger</li> </ul>		
Theme 3: Increasing food access for students and families	Nutritional interventions, Unhealthy eating, and Backpack Program	<ul> <li>Educating students of healthier breakfast and lunch options</li> <li>Programmatic benefits, challenges and recommendations</li> </ul>		

# 3.4.1 Theme 1: Household Struggles Illuminated and Exacerbated by a Pandemic

The core categories within this theme were Challenges with Access; COVID; and Family and Home factors. Collectively, these categories highlight the barriers and struggles that exist for many of our students and families, how those struggles were worsened during the COVID-19

pandemic, cultural barriers to accessing public services, and the impact of limited household resources on the prioritization of needs.

## Challenges with Access

This category was about teachers' perceptions that there is a struggle to access public services within the city of Providence. Immigration status was mentioned as a contributing factor leading to families' inability to access services. For example, one teacher said, "I think immigrant status could possibly be a factor. Um, so for example, if you do have like a limited income and you possibly can't afford the food, maybe you might be like hesitant to reach out for public assistance because of the fact that you have, you know, immigration issues. So that could be a factor." The group also mentioned limited food options at food banks and soup kitchens as a food access impediment, with one teacher adding, "I also think it's difficult for families that have dietary restrictions, um, foods that are given at food banks or, um, soup kitchens tend to be, you know, only one option, whereas, uh, families with allergies or things like that it can definitely be tougher for them to have access to food that they can actually eat."

## COVID-19 Pandemic

The start of the Covid pandemic was a difficult time for everyone, but Black and Brown communities were hit particularly hard. During the focus groups, the pandemic was mentioned as something that created hardships for families and/or made existing hardships worse. Many of our families took advantage of the free grab-and-go meals (breakfast and lunches) that were being offered by the school. For example, one teacher said, "We know that during the lockdown period of COVID, there were a lot of families coming here to get the free breakfasts and lunches." And for other families, traveling to the school to pick up the grab-and-go meals was an additional

challenge. One teacher said that teachers would deliver food to families. "I know that they [families] struggled during COVID, and they were getting food, um, delivered actually by one of our teachers would pick it up from the school and bring it to their house."

# Family and Home Factors

Limited income was mentioned throughout the two focus group discussions. One participant mentioned that some families may have a vehicle to pick up food, but limited resources to purchase food. They said, "I also think budgets. I don't think that there's a lot of money from, to go and buy a lot of that food, even if they could access it by car. Um, so I think that, you know, there are some people that live in well more than paycheck to paycheck and they're very limited in terms of what they can feed the kids. So, I mean, I know that I know at least one student, um, eats a lot of pasta because it's cheap." Some focus group participants believed that limited income created a hierarchy of spending within the household. One person said, "I think it's, um, it's common where I live, so I'm sure it's common in Providence also that people are cutting corners and um, you know, cheaper food or not enough food is probably one corner that's often cut because you have to have power and you have to have water, and you have to have a vehicle or you if you have a vehicle you have to pay for the insurance and the fuel. So I mean, it definitely helps getting help for sure. Like that's money that can be spent on the other necessities if it's not spent on food."

## 3.4.2 Theme 2: School meeting the needs of its students

The core categories within this theme were school resources, student needs, and teacher awareness. Collectively, these categories highlight the important resources schools provide to

students and families, the potential manifestations of child hunger within a school setting, and what teachers and school administrators can do to better meet the needs of their students.

#### School Resources

At our school, our students and families get consistency, stability, and love from our faculty and staff. This is demonstrated in several ways which were shared during the focus group sessions. Central to the school's mission is social responsibility and the belief that we help others within our school community. An example of this is our social worker reaching out to a family in need. She explained,

So just being able to, um, like reach out to that family and be like, hey, we gotta help you. You need help. If there's no shame in it, we're gonna help you. We're gonna provide all these resources. So I think that's like, if there was a way to, I know that we do it in a way where like, here's the application, it makes it look like everyone is getting it, but they don't know that not everybody is getting it.

Our teachers' willingness to help families was expressed through the focus groups with another teacher adding,

I think just for us, um, kind of knowing that families were in need, um, and kind of thinking about other resources and how else can we help them and be understanding and um, I think that was just helpful. Especially reaching out to the family that we had, um, kind of connecting at a certain level and showing that we care and that we're understanding and that we're here to support in any other way.

#### Student needs

Participants discussed what can happen when students generally do not receive the help they need pertaining to hunger. Some focus group participants found inappropriate behavior in school as a byproduct of students in need of food. One teacher says,

Yeah, I have seen it. I'd also say that behavior is definitely impacted. We've noticed that you know, when students aren't getting the proper food and the proper nutrition, their behavior tends to increase, whether it be not concentrating, not being able to stay in class, fidgeting, whatever the case may be. Food definitely plays a role in that.

Some participants stated that the lack of appealing food options further complicates the issue of food insecurity that some of our students face. If students do not like what is being offered, they will not eat it. One of the school's two social workers said,

I also noticed that, um, a lot of, so our kids get one option, one choice, and if they don't like it, they don't eat. And, um, oftentimes like the families know that they can send in some food if they wanted to, but they can't really afford it. So if they [students] don't like it, they don't eat it.

#### Teacher Awareness

The focus group discussions not only helped to gather important data from participants but also helped with making participants aware of the severity of the problem of food insecurity amongst our students. One teacher says her awareness will get her to make sure students are eating their food at school and will ask students questions about whether they need more food:

...The backpack program has brought awareness of making sure that the child is in a healthy state and in a position to learn, part of that making sure that they eat their

breakfast, eat their lunch, um, have their snack and being aware of the backpack program has impacted me in a way to ask questions towards the student to help them prepare themselves, such as, oh, there's extra apples available. Do you wanna put one in your backpack or, um, giving alternative ways to make sure that they have access to the food such as with reminders or, um, and just seeing in their lunch, making sure that if they have enough food or if they need more.

Another teacher added that she will also take action by providing extra snacks to students that need them:

If there's apples or something in the teacher's lounge or pears, and I know the student likes them. I'll, I'll throw a few extra in the backpack. So I'm more aware that, you know, I'm gonna give you a healthier choice and now you can take healthier choice to your home. And there's a whole bunch of 'em. They're like, oh, okay, thank you. Um, in hopes that they're gonna not eat chips when they, when they're hungry, but at least bringing that food, those extra apples home or the pears or the oranges or whatever, I, I feel good that I'm not wasting it. And I know that it, hopefully it's gonna replace, you know, their chips.

## 3.4.3 Theme 3: Increasing food access for students and families

The core categories within this theme were nutrition education and the backpack program. Collectively, these categories highlight the need to educate students about healthy eating and the backpack program benefits, challenges, and recommendations.

Unhealthy Eating

Students that are not eligible for free and reduced-priced meals have the option to purchase a meal at full price or bring a meal in from home. Some of our participants discussed the unhealthy foods they have seen being brought in by students for lunch. One teacher said, "I had a student that would always just bring chips to lunch. That was the only thing in their backpack. I mean, in their lunch bag. Another participant recalled seeing one of their students bringing in unhealthy foods as well. She said, "And now I do see her bringing in some food, but it's not healthy food. It's all like snacks, chips, and candy, and like basically unhealthy snacks."

## Backpack Program

The backpack program is designed to fill the gap in students' nutritional needs that exist during the weekends and school breaks for students suffering from food insecurity by providing them with healthy foods. According to participants working directly with students enrolled in the program, the program helped students and their families. One participant believed the program helped members of one family from going hungry. They said,

Um, so I think being able to partake in the backpack program this year was really helpful, especially for, uh, they have quite a large family as well, a lot of mouths to feed. And I think that helped provide, um, some for them so they didn't have to go hungry.

In addition to the backpack program providing meals to students and families, it was a source of pride for students. Participants have acknowledged the pride that emanated from one student when carrying his bag. One teacher said, "I mean, his personality is also very routine based, but very proud to be carrying that backpack to the parent in the car."

#### 4.0 Discussion

My overall aim for my theory of improvement (Appendix A) was that by 2025, there will be an increase in free and nutritious school meals to improve healthy eating in students attending AES. The implemented change idea was the weekend backpack program that was meant to assist students impacted by food insecurity. This program previously existed at the school through the school food vendor, but the change in vendors in 2018 discontinued the program. The process of re-establishing the program began during the 2021-22 school year with a piloted version of the program. The results of the data collected from phone surveys, focus groups, and observations revealed important insights for the inquiry. Several themes were identified through the focus groups related to Food Access Challenges, Child Hunger Mitigation, and Nutritional Interventions. The following section will discuss the main findings, strengths and weaknesses of the program, and the next steps and implications for practice and research.

## **4.1.1** Main Findings 1: Household Struggles

The focus group participants identified the Covid-19 pandemic, accessing public services, and family and home factors as challenges experienced by families at AES. One of the critical points made from this theme was challenges with accessing public services and how this may have contributed to worsening the effects of food insecurity felt by families participating in the backpack program during the Covid-19 pandemic. At the start of the Covid-19 pandemic, health

disparities that had existed for decades within communities of color were on display as the country grappled with a health crisis it seemed ill-prepared to handle and a food system seemingly exploited by its unpreparedness. Black and Brown communities were hit especially hard because many of those living in these communities were already facing food access problems well before the COVID-19 pandemic arrived in the US. In cities across the US, full-service grocery stores were and still are noticeably absent from low-income, marginalized neighborhoods, where Black and Brown residents make up the majority of the low-wage "essential" workers (O'Hara & Toussaint, 2021). The COVID-19 pandemic caused significant disruptions in food purchasing habits and worsened already-existing issues with food deserts and transit accessibility (Kar et al., 2021). Access, availability, utilization, and stability – the four pillars of food security, were affected during the pandemic. Accessibility, for example, was put in jeopardy by the COVID-19 pandemic's effects on infrastructure and food prices, including access to public transportation, modifications to the way food assistance was distributed, and product shortages (Niles et al., 2020).

Participants also highlighted immigration status as a potential barrier to accessing public services and food security. Potochnick et al. (2021) explored the links among immigration status, food insecurity, and negative health outcomes for Latinx immigrants during the Covid-19 pandemic. In line with the perceptions of teachers from the focus groups in this study, those authors identified three main ways local immigration enforcement can affect household food insecurity:

(1) Increased economic disadvantage through deportation (2) Deportations raising anxiety and mistrust among immigrants, which may discourage them from utilizing social programs that guard against food insecurity (3) Fears of deportation, police harassment and separating from family decrease mobility of unauthorized immigrants and increase social isolation. Juxtaposed with the

comments from parents who spoke about the benefits of the back-pack program, it is not a stretch to see how the implementation of this program can bridge the gap for families who may experience what the teachers perceived about immigration status and access to public services.

Unpacking the theme further, school staff also mentioned limited food options at food banks and soup kitchens as a food access impediment, with one teacher adding,

I also think it's difficult for families that have dietary restrictions, um, foods that are given at food banks or, um, soup kitchens tend to be, you know, only one option, whereas, uh, families with allergies or things like that it can definitely be tougher for them to have access to food that they can actually eat.

In addressing how food banks can improve the quality of foods provided to consumers, Alkaabneh et al. (2021) responded by devising a framework for efficient, effective, and fair resource allocation by food banks. Like the teacher participants in this study, the authors argue that given the "growing evidence linking food insecurity and poor nutrition to an increased risk of chronic health problems, such as diabetes and malnutrition, food bank personnel and policymakers must proactively seek new policies and practices that combat food insecurity and ensure that food bank systems function equitably and efficiently" (p.1).

## **4.1.2 Main Findings 2: School Resources**

School resources have long been a topic of contentious debate when discussing schools in communities of color versus schools in predominantly White neighborhoods. Since the days of Jim Crow, schools within communities of color across America found themselves being asked to

do more with less. The implementation of the backpack program at AES is just one example of a school having to do just that. AES has had to come up with innovative ways to get its students' nutritional needs met. The category of improving social and economic resources is one of the four categories of the Getting to Equity Framework that speaks directly to this finding of school resources and was integrated for this specific program (Kumanyika, 2017). This category includes examples of anti-hunger programs such as WIC, SNAP, and the Child and Adult Care Food Program because they increase consumers' purchasing power or alleviate poverty by directly supplying food (Kumanyika, 2017). The weekend backpack program, a program designed to alleviate hunger, is another example of a program supporting children and families by directly supplying them with food. Finding and utilizing government and nonprofit initiatives that address hunger and food insecurity, as well as social and economic initiatives like those meant to combat poverty and address inequalities in education, employment, housing, and legal protections, are all part of improving social and economic resources. What this intervention has shown is that schools can no longer be the places that only offer hope for economic prosperity but hope for healthy and happy lives for students and their families. When it comes to feeding kids, there are still gaps in what schools are able to provide. Millions of children go hungry when schools are not in session since most governmental efforts, both before and after the pandemic, have been concentrated on weekday meals (Poole et al., 2021). Through this piloted backpack program, we were able to learn more about how parents viewed the program's impact on their child(ren) and family. Through parent surveys, we learned that 100% of participants agreed that the program helped their families. Most participants also agreed that the program had a positive impact on their child's mood, concentration, energy level, and academic performance. These findings were expected, and some

were consistent with previous research results. According to Slopen (2017), internalizing and externalizing behaviors were more likely to be exhibited in children experiencing food insecurity, so it was no surprise to learn that most parents noticed an improvement in their child's mood from participating in the program. Similarly, Jyoti et al (2005) found that academic performance amongst school-aged children was impaired by children experiencing food insecurity. Most families participating in the backpack program saw a noticeable difference in their student's academic performance.

The implementation of this program and the positive feedback received from parents and teachers highlight the importance of the program and the role schools can play in the communities they serve. Merriam-Webster dictionary defines community as "a unified body of individuals such as the people with common interests living in a particular area (Merriam-Webster, Community definition & meaning). AES serves those living within the city of Providence, many of whom share the common interest of seeing their families happy and healthy. For far too long "urban" schools have been part of the problem rather than part of the solution. This program has proven to be a potential solution to the universal problem of child hunger. It has shown us what is possible with a little passion, effort, ingenuity, empathy, and community support.

## **4.1.3 Improvement Measures**

#### **Driver Measures**

Through the implementation of the weekend backpack program at AES, many of our faculty and staff were made aware of the problem of food insecurity, and now better understand

the magnitude of which it impacts the lives of students and families at our school. In addition to this newfound awareness, there seems to have been a paradigm shift in the way teachers are understanding, inquiring, and addressing the problems that some of their students and families may be experiencing. Some teachers have informed me that they are asking questions about their student's home life and are now viewing that information through a different lens. A program that was designed and implemented to address the problem of food insecurity has done more than that. It has motivated a community of people that see something to do something. These changes have started to impact the secondary driver of awareness and attunement of social and economic resources, and we are now seeing a movement toward community mobilization.

#### Outcome measures

In terms of leading outcome measures, the data from this one change idea (creation of weekend backpack program) helped us understand that there is an interest in these types of change ideas, with this one idea indicating that leading outcome measures are positive toward changing community partnerships and creating awareness and attunement of social and economic resources. As for the lagging outcomes, there is some indication that we are heading in the right direction toward meeting the 2025 goal of increasing free and nutritious school meals. One example of this was highlighted in the parent surveys, with 100% of parents agreeing or strongly agreeing that they would encourage the community to support the program.

#### **Process Outcomes**

Food delivery, food supply, and students forgetting to return backpacks were three process outcome "failures" that developed during the first iteration of the weekend backpack program.

During the first few weeks of implementation, there was some confusion as to who would conduct

the weekly food inventory. This was a detail within the design of the program that required adjustment and was later rectified. As for food supply, certain food items being unavailable through our food supplier was an unexpected problem. Though the backpack program was a success, unavailable food items created a problem in our ability to consistently provide students and families with the most nutritious foods. This process outcome failure was less about program design and more about the COVID-19 pandemic, which severely impacted food supply. Lastly, students forgetting to return their backpacks after the weekend was an additional outcome failure. We did not account for students forgetting their backpacks, and how that could potentially impact food distribution the following week(s). Through this, I learned that constant reminders need to be sent home to parents/guardians. In addition, assigning numbers to students and placing those numbers on backpacks is a great way to identify the students that are having problems returning the backpacks.

#### Balance measures

COVID-19 was part of the balance measures. Under normal circumstances, there would have been more than enough staff volunteers available to assist with the packing and distribution of backpacks. But due to Covid-19, there was limited staff and pulling them to assist with backpack program tasks would have upset the balance of the organization.

All of the work involved with the program was done with the understanding that this was one change idea within a bigger system, but it was enough to help see a movement toward my final aim statement and made it all worth wanting to do it again.

## 4.2 Next Steps & Implications

# 4.2.1 Implications for Research

This project allowed me to collect data from many key stakeholders, which in turn allowed change to happen within the organization. Those I wish I had an opportunity to interview, but did not, were the school administrators. The school superintendent, principal, business manager, and director of development are the individuals within the organization that have the best understanding of the school's finances and why certain financial decisions are made. Next steps could include asking their opinions on the problem of food insecurity and whether the organization has a long-term plan to mitigate the issue for its students and families. Their perceptions of the issue, knowledge of programming, and experience with fundraising could help me see the issue from an organizational leadership perspective. Sadly, the problem of food insecurity among school-aged children does not seem to be going anywhere anytime soon. My hope is that future researchers will use what I have been able to create through my dissertation of practice, build upon it and use it to assist those within their sphere of influence.

## **4.2.2 Implications for Practice**

## Relationship building

Through the study that was conducted, what emerged as an unexpected finding was the home-school relationship that was established and/or strengthened by the implementation of the

backpack program. Students were happy with the backpacks they received at school, families were appreciative of the groceries they received for the weekend, and there was increased communication among teachers, students, and families involved in the program. This home-school relationship was strengthened by the implementation of the backpack program, but the backpack program was made possible, in part, through relationship building with community partnerships. School-family-community partnerships are cooperative projects and connections between members of the school community and community-based institutions like food banks, colleges, businesses, religious institutions, libraries, and mental health and social service organizations (Bryan & Henry, 2012). There are several reasons for developing these partnerships. They can enhance educational initiatives and the learning environment, offer assistance to families, foster parental leadership and skill development, link families to other families and groups in the school and community, and support teachers in their work (Epstein, 2010).

## Program Sustainability

One concern that I had during the implementation process of the backpack program was how the program could be sustained long-term. This is a program that has operated at Abbott Elementary school in the past but ended when the contract with the school's food service provider was not renewed. The school and students were without this program for three years until it was reestablished through the piloted program during the 2021-22 school year. It is unclear if the school worked on reestablishing the program in the months leading to or immediately following its departure, but what is clear is that a plan for long-term sustainability was not in place. One example concerning sustainability is when I had an extended absence from Abbott. For the weeks I was not there, students did not receive a backpack. Another concern is forgetting to grab a backpack being

delivered to a student on a Friday. Forgetting to grab or pack a bag meant one less student and family received a backpack that weekend. Even with a relatively small group of students receiving backpacks, it was extremely difficult for one person to complete all tasks associated with the organization of the backpack program without assistance. Kumanyika (2017) argues that synergy from all four categories of the framework is needed for effective, equitable, positive, and sustainable solutions. I agree and recommend a deliberate focus on the category of "building on community capacity" to address my concerns that will undoubtedly arise for others attempting to implement programs in the future.

Financial support is also something that is needed for program sustainability. The school's promise of short-term financial assistance with the program was helpful but is something that those with future aspirations of backpack program implementation should be aware of. A specific backer or funder may promise financial resources for a certain time; beyond that, the program is expected to find other sources of support (Schell et al., 2013). For our school, the other source of support was the food bank. It is evident from the responses from the focus groups and parent surveys that there is a long-term need for the program. To establish a program like that of the backpack program, it is imperative that relationships are established with organizations that can provide the financial resources and support needed to provide long-term sustainability to a program many children and families need and rely upon.

#### 5.0 Reflections

In this section, I will share my experience as an EdD student at the University of Pittsburgh.

Upon entering the program, it was hard to miss the school of education's mission and vision statement:

We ignite learning. We strive for well-being for all. We teach. We commit to student, family, and community success. We commit to educational equity. We advocate. We work for justice. We cultivate relationships. We forge engaged partnerships. We collaborate. We learn with and from communities. We innovate and agitate. We pursue and produce knowledge. We research. We disrupt and transform inequitable educational structures. We approach learning as intertwined with health, wellness, and human development. We address how national, global, social, and technological change impacts learning. We shape practice and policy. We teach with and for dignity. We think. We dream. We lead with integrity (Equity and Justice 2022).

This mission statement resonated with me because I have tried to do these things throughout my career as an educator. The skills that I have developed were only strengthened as a student of the program by classmates and professors that also believed in the mission. The three pillars that guide the Pitt EdD (Equity and Justice; Improvement Science; Lifewide and lifelong learning) are what have guided me and helped me keep my eye on the prize. Equity and Justice was the most salient pillar of the program, and it motivated me and other classmates to create the Equity and Justice Spirit award in 2020 following the murders of George Floyd, Breonna Taylor, and Ahmaud

Arbery. The award is an endowed scholarship that will live in perpetuity to support Black students in the School of Education.

The creation of the Equity and Justice Spirit award is just one example of the leadership skills that were strengthened as a result of being an EdD student at Pitt. Leadership is not only needed at the top of the decision-making tree; it is frequently necessary at lower levels as well to 'shake the branches' (Hughes, 2009). This idea became more evident as I progressed through the EdD program and positioned myself to shake a few branches at Abbott elementary. As a physical education teacher, I recognized where I landed within the organizational hierarchy but understood that I had a voice, energy, and desire to change the lives of many of our students and families for the better.

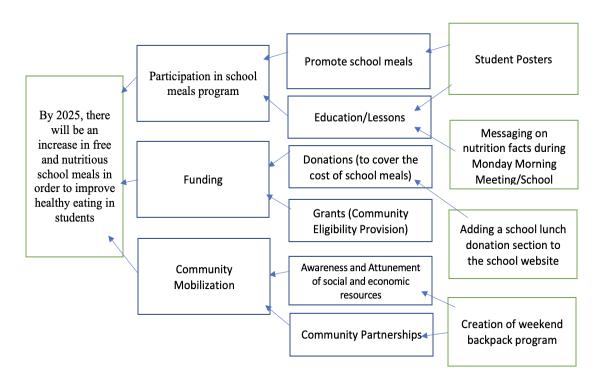
At the start of the EdD program, I had so many ideas as to what I wanted to do to address the problems within my practice. As I continued through the program, and Covid-19 fell upon us, my problem of practice and ways to address the problem became clearer. I held leadership positions that afforded me the opportunity to work alongside and learn from other school leaders in the building. My positions allowed me to provide oversight, long-range strategic planning, expansion and growth preparation, and financial support to the school. By serving on the school board and health and wellness committee, I became informed about the inner workings of the organization and better understood why certain organizational decisions happened. By serving on the school board, I learned about school finances. Finance information, for example, helped me understand why students had not been able to receive free meals (breakfast and lunch) at the school, which helped to fine-tune my problem of practice and decide on implementing the backpack program.

As I pushed through the program and started to face personal challenges, I found myself asking 'Why'. Why was I in this program? Why am I putting myself through this? Why do I drive over 1,100 miles to and from Pittsburgh every month? The answer to those questions hit me like a ton of bricks after conducting phone surveys. So, rather than explaining my why, I will end by sharing the words of a parent from the backpack program that captures the essence of my why:

"It went well. There were times we didn't have anything at home to eat, and when my son brought home the backpacks, we would eat when we didn't have anything to eat. When he brought the cereals and milk, it was very helpful, and it helped a lot. Sometimes we didn't have milk and when he brought that it was very helpful. I thank God that the teachers who have helped us, and I am thankful that teachers were able to help us, especially our students. The soups were good. The lunches helped, and our kids enjoyed the food. If there is anything that you want to add would be to help more families because there are a lot of families in need in our community. The teachers have been great to help the families in need. I want to thank them for taking the time out of their days to help the students who need it the most. Abbott elementary school is amazing. I am thankful for the teachers who have a lot of patience for the kids. My kids have been here for many years, and I am very happy with the school."

# Appendix A Driver Diagram for the Theory of Improvement to reduce food insecurity among students and families attending Abbott Elementary School.

Appendix A: Driver Diagram for the Theory of Improvement to reduce food insecurity among students and families attending Abbott Elementary School.



# **Appendix B Parent Survey**

I want to thank you for taking the time to meet with me today. My name is Marlon Mussington and I would like to talk to you about your experiences participating in the weekend backpack program. This information will be used to improve the backpack program for next time. The phone survey should take less than 10 minutes. All responses will be kept confidential. This means that your survey responses will only be shared with research team members, and we will ensure that any information we include in our report does not identify you as the respondent. Remember, you are a volunteer and can skip any questions. You do not have to talk about anything you do not want to, and you may end the call at any time. Are there any questions about what I have just explained? Are you willing to participate in this phone survey?

Demographic questions

First, I will ask you questions about your family.

1) Which one best describes YOUR race or ethnicity? (Please choose one)

White

Black or African American

Asian

Native Hawaiian or other Pacific Islander

American Indian or Alaska Native

Hispanic/Latino/Latinx

Mixed race/ethnicity

Other (please describe)

2) Which race/ethnicity best describes your child who is enrolled in the backpack food program? (Please choose one)

White

Black or African American

Asian

Native Hawaiian or other Pacific Islander

American Indian or Alaska Native

Hispanic/Latino/Latinx

Mixed race/ethnicity

Other (please describe)

- 3) Are you working parttime or fulltime?
- 4) Including yourself, how many people are in the household?
  - (Write number)
  - refused
- 5) How many children under the age of 18 are currently living in your home?
  - (Write number)
  - refused
- 6) In addition to the backpacks, does your household receive any other food assistance?
  - No
  - Unsure
  - Yes (please describe)

Survey Questions

These next questions have to do with your family and the backpack program.

- 1) The backpack program is easy to participate in.
  - a) Strongly Disagree
  - b) Disagree
  - c) Neutral
  - d) Agree
  - e) Strongly Agree
- 2) The backpack program helps my family.
  - a) Strongly Disagree
  - b) Disagree
  - c) Neutral
  - d) Agree
  - e) Strongly Agree

- 3) It is hard to provide enough food for everyone in the household.
  - a) Strongly Disagree
  - b) Disagree
  - c) Neutral
  - d) Agree
  - e) Strongly Agree
- 4) Without the program, I or another adult in the home might have to skip a meal.
  - a) Strongly Disagree
  - b) Disagree
  - c) Neutral
  - d) Agree
  - e) Strongly Agree
- 5) The backpack food program has improved my child's/children's mood.
  - a) Strongly Disagree
  - b) Disagree
  - c) Neutral
  - d) Agree
  - e) Strongly Agree
- 6) The backpack food program helped me to worry less about feeding my children.
  - a) Strongly Disagree
  - b) Disagree
  - c) Neutral
  - d) Agree
  - e) Strongly Agree
- 7) It is hard to feed everyone in my household.
  - a) Strongly Disagree
  - b) Disagree
  - c) Neutral
  - d) Agree
  - e) Strongly Agree
- 8) The backpack food program meals are the main source of breakfast and lunch for my children on the weekends.
  - a) Strongly Disagree
  - b) Disagree
  - c) Neutral
  - d) Agree
  - e) Strongly Agree

- 9) The backpack program has enhanced my child's energy level.
  a) Strongly Disagree
  b) Disagree
  c) Neutral
  d) Agree
- 10) I would recommend this program to other families.
  - a) Strongly Disagree

e) Strongly Agree

- b) Disagree
- c) Neutral
- d) Agree
- e) Strongly Agree
- 11) I would like to participate in the backpack program if it is offered next school year.
  - a) Strongly Disagree
  - b) Disagree
  - c) Neutral
  - d) Agree
  - e) Strongly Agree
- 12) I would encourage the community to support the backpack program.
  - a) Strongly Disagree
  - b) Disagree
  - c) Neutral
  - d) Agree
  - e) Strongly Agree
- 13) The backpack program has improved my child's academic performance.
  - a) Strongly Disagree
  - b) Disagree
  - c) Neutral
  - d) Agree
  - e) Strongly Agree
- 14) The backpack program has helped my child's concentration.
  - a) Strongly Disagree
  - b) Disagree
  - c) Neutral
  - d) Agree

# e) Strongly Agree

# Open-ended questions:

These final questions let you share more about what you think about the backpack program:

- 1) Are there any other ways you believe the backpack program has been beneficial to your child?
- 2) What went well for you with the backpack program?
- 3) What didn't go well for you with the backpack program?
- 4) What would you change for next time to make the backpack program better?
- 5) Is there anything else you'd like to share about your family or the backpack program?

## **Appendix C Parent Survey (Spanish)**

Quiero agradecerle por tomarse el tiempo para reunirse conmigo hoy. Mi nombre es Cindy Sangiovanni y me gustaría hablar con usted sobre sus experiencias al participar en el programa de mochila de fin de semana Esta información se utilizará para mejorar el programa de mochila para la próxima vez. La encuesta telefónica debe tomar menos de 10 minutos. Todas las respuestas se mantendrán confidenciales. Esto significa que las respuestas de su encuesta solo se compartirán con los miembros del equipo de investigación y nos aseguraremos de que cualquier información que incluyamos en nuestro informe no lo identifique como el encuestado. Recuerde, usted es un voluntario y puede saltarse cualquier pregunta. No tiene que hablar de nada que no quiera y puede finalizar la llamada en cualquier momento. ¿Hay alguna pregunta sobre lo que acabo de explicar? ¿Está dispuesto a participar en esta encuesta telefónica?

Preguntas demográficas

Primero, le haré preguntas sobre su familia.

1) ¿Cuál describe mejor SU raza o etnia? (Por favor elige uno)

Blanco
negro o afroamericano
asiático
Nativo de Hawai u otra isla del Pacífico
Indio americano o nativo de Alaska
Hispano/Latino/Latinx
Mestizo/etnicidad
Otro (por favor describa)

2) ¿Qué raza/origen étnico describe mejor a su hijo que está inscrito en el programa de comida con mochila? (Por favor elige uno)

Blanco
negro o afroamericano
asiático
Nativo de Hawai u otra isla del Pacífico
Indio americano o nativo de Alaska
Hispano/Latino/Latinx
Mestizo/etnicidad
Otro (por favor describa)

- 3) ¿Está trabajando medio tiempo o tiempo completo?
- 4) Incluido usted, ¿cuántas personas hay en el hogar?
- (Escriba el número)
- rechazado
- 5) ¿Cuántos niños menores de 18 años viven actualmente en su hogar?
- (Escriba el número)
- rechazado
- 6) Además de las mochilas, ¿su hogar recibe alguna otra ayuda alimentaria?
- No
- No estoy seguro
- Sí (por favor describa)

## Preguntas de la encuesta

Las siguientes preguntas tienen que ver con su familia y el programa de mochila.

- 1) Es fácil participar en el programa de mochila.
  - a) Muy en desacuerdo
  - b) en desacuerdo
  - c) Neutro
  - d) De acuerdo
  - e) Totalmente de acuerdo
- 2) El programa de mochila ayuda a mi familia.
  - a) Muy en desacuerdo
  - b) en desacuerdo
  - c) Neutro
  - d) De acuerdo

- e) Totalmente de acuerdo
- 3) Es difícil proporcionar suficientes alimentos para todos en el hogar.
  - a) Muy en desacuerdo
  - b) en desacuerdo
  - c) Neutro
  - d) De acuerdo
  - e) Totalmente de acuerdo
- 4) Sin el programa, es posible que yo u otro adulto en el hogar tengamos que saltarnos una comida.
  - a) Muy en desacuerdo
  - b) en desacuerdo
  - c) Neutro
  - d) De acuerdo
  - e) Totalmente de acuerdo
- 5) El programa de comida en la mochila ha mejorado el estado de ánimo de mi hijo/a.
  - a) Muy en desacuerdo
  - b) en desacuerdo
  - c) Neutro
  - d) De acuerdo
  - e) Totalmente de acuerdo
- 6) El programa de comida en la mochila me ayudó a preocuparme menos por la alimentación de mis hijos.
  - a) Muy en desacuerdo
  - b) en desacuerdo
  - c) Neutro
  - d) De acuerdo
  - e) Totalmente de acuerdo
- 7) Es difícil alimentar a todos en mi hogar.
  - a) Muy en desacuerdo
  - b) en desacuerdo
  - c) Neutro
  - d) De acuerdo
  - e) Totalmente de acuerdo

- 8) Las comidas del programa de comida en la mochila son la principal fuente de desayuno y almuerzo para mis hijos los fines de semana.
  - a) Muy en desacuerdo
  - b) en desacuerdo
  - c) Neutro
  - d) De acuerdo
  - e) Totalmente de acuerdo
- 9) El programa de mochila ha mejorado el nivel de energía de mi hijo.
  - a) Muy en desacuerdo
  - b) en desacuerdo
  - c) Neutro
  - d) De acuerdo
  - e) Totalmente de acuerdo
- 10) Recomendaría este programa a otras familias.
  - a) Muy en desacuerdo
  - b) en desacuerdo
  - c) Neutro
  - d) De acuerdo
  - e) Totalmente de acuerdo
- 11) Me gustaría participar en el programa de mochila si se ofrece el próximo año escolar.
  - a) Muy en desacuerdo
  - b) en desacuerdo
  - c) Neutro
  - d) De acuerdo
  - e) Totalmente de acuerdo
- 12) Animaría a la comunidad a apoyar el programa de mochilas.
  - a) Muy en desacuerdo
  - b) en desacuerdo
  - c) Neutro
  - d) De acuerdo
  - e) Totalmente de acuerdo

Preguntas de final abierto:

Estas preguntas finales le permiten compartir más sobre lo que piensa sobre el programa de mochila:

- 1) ¿Hay otras formas en las que cree que el programa de mochila ha sido beneficioso para su hijo?
- 2) ¿Qué te fue bien con el programa de mochila?
- 3) ¿Qué no te fue bien con el programa de mochila?
- 4) ¿Qué cambiarías la próxima vez para mejorar el programa de mochila?
- 5) ¿Hay algo más que le gustaría compartir sobre su familia o el programa de mochila?

# **Appendix D Focus Group Guide**

## Introduction

Thank you for your willingness to take part in this group discussion. The purpose of the discussion is to explore each of your perceptions regarding the presence of food insecurity within our school community. I do plan to record this session because I don't want to miss anything that you say. Do I have your permission to record? Please know that your responses will be held anonymous and that the data collected will be used for research purposes only. Before we begin, I'd like for you to state what you do at Abbott Elementary and how many years you've been at Abbott Elementary. If you would rather not state your name during the introduction, that's okay.

I'd like to begin by defining a few terms (Food security, Food Insecurity, and Hunger.

**Food security** is the access by all people at all times to enough food for an active, healthy life. Food security includes at a minimum:

- The ready availability of nutritionally adequate and safe foods.
- An assured ability to acquire acceptable foods in socially acceptable ways.

**Food insecurity** is the limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways.

**Hunger** is the uneasy or painful sensation caused by a lack of food. The recurrent and involuntary lack of access to food.

Let's talk about household food security:

## Introductory question

1. Given these definitions, what issues have you seen regarding hunger and food insecurity or food access in different parts of Providence?

#### Transition questions

2. How have you seen the issues of food insecurity play out in the children and families at Abbott Elementary?

(That is, how do you see the problem manifest itself here at Abbott Elementary School?) Probes: behavioral issues; asking for extra snack; focus/motivation; sleepiness; withdrawn

3. What factors do you think contribute to household food insecurity for our students and their families?

Probes: income; immigrant status; employment; education; access to cultural foods;

## Main questions

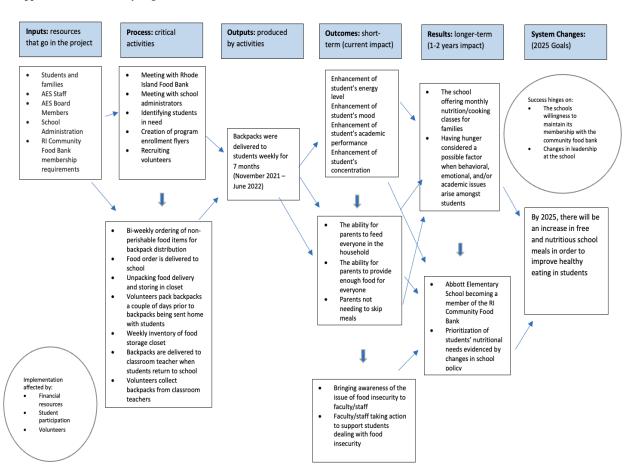
- 4. One way the Abbott Elementary community addresses food insecurity is through the weekend backpack program. Can you share a little about your experience with the program? What do you know about it?
- 5. What changes, if any, have you seen in your student(s) since the implementation of the program?

Probe: (Mood; concentration; academic performance; energy; getting along with others/behavior)

- 6. How has the backpack program impacted your awareness of your student's nutritional needs, community supports and resources for students and families, and gaps in supports and resources? Based on this awareness, do you plan on taking any action to support your student's nutritional needs?
- 7. Do you have any recommendations to improve the backpack program or ideas for other ways to improve our school community's problems with food insecurity? Concluding sentence:
- 8. Is there anything you would like to share about the backpack program or the issue of food insecurity in our students at Abbott Elementary?

# Appendix E Food Security Logic Model

#### Appendix E. Food Security Logic Model



# **Bibliography**

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