FOOD FOR THOUGHT: UNDERSTANDING THE ROLE OF FOOD AND FOOD POLICY IN LOW-INCOME SCHOOLS

A Dissertation
Submitted to
Temple University Graduate Board

---

in Partial Fulfillment
of the Requirements for the Degree
DOCTOR OF PHILOSOPHY

---

by
Erin Cassar
August, 2017

Examining Committee Members:

Maia Cucchiara, Policy, Organizational, and Leadership Studies
Erin Horvat, Drexel University
Allison Hayes-Conroy, Geography and Urban Studies
Lori Shorr, Policy, Organizational, and Leadership Studies
Sara Goldrick-Rab, Policy, Organizational, and Leadership Studies

ABSTRACT

This dissertation investigated the role of school food and food policy in three low-income, urban, predominantly African-American schools. Using critical policy analysis, this study examined two different school food programs, both of which complied with the National School Lunch Program nutritional guidelines. It employed ethnographic case study methods, including observations and interviews with a total of 59 participants over the course of two years. Findings indicated that feeling hungry interfered with students' ability to pay attention during class, and students still felt hungry after eating prepackaged school breakfasts and lunches. On the other hand, students reported feeling more full, satisfied, and ready to learn after eating freshly-prepared foods. Additionally, participants described improved engagement within classrooms, as well as a more positive climate in the lunchroom with the fresh meals. While the tone was usually punitive and disciplinary during the prepackaged mealtimes, during the fresh meals served family-style, with students and faculty eating together, the tone was celebratory and communal. These findings indicate school food is an important, yet under-researched, aspect of schooling, with many fruitful avenues for future research and practice.

ACKNOWLEDGEMENTS

This dissertation simply would not have been possible without the support of so many smart and dedicated people with whom I have had the privilege of studying and learning, and whose influences are woven in different ways throughout the following pages. I would especially like to thank my chair, Dr. Maia Cucchiara, for her critical eye and unwavering support, the countless hours she spent reading draft after draft of every chapter, and for her gentle, but firm encouragement to continually seek out disconfirming evidence, to push my analysis further, to clarify my writing, and to do my best work. I would also like to thank Dr. Erin Horvat, whose steadfast belief in me, and whose guidance, both professional and personal, helped me navigate the dissertation process while also giving birth three times. Her enthusiastic encouragement, even when I doubted myself, is the reason I took up this rather uncommon topic in the first place.

I must also thank the other members of my committee as well. Dr. Allison Hayes-Conroy, whose expertise on critical approaches to food systems helped shape the theoretical framework and the literature review, and whose advice and conversation over coffee and playdates was instrumental to my thinking on this topic. Dr. Lori Shorr's breadth of experience in policymaking and in city schools is such an asset to making this work relevant and accessible to practitioners and policymakers. Finally, I thank Dr. Sara Goldrick-Rab, whose groundbreaking work on food insecurity in higher education, and whose public scholarship as a scholar-activist, serves as an inspiration to me and so many others.

There are many past and present mentors and friends to thank as well, especially Dr. Alex Schuh, who was instrumental in identifying sites, and Dr. Sosanya Jones, who has helped me navigate the academy in various ways. I must also thank many friends and peers at Temple, especially my writing group, a lovely and incredibly gifted group of women who supported me

through the final stages of the writing process: Stefanie Kasparek, Amanda Alvarez, Alanna Durkin, Amber Perenzin, and Nili Gesser. A big shout out also must go to my Urban Education friends, especially Monica Clark and Myla Morris, as well as Ginger McCartney, Karen Pezzetti, Kaitlin Moran, and Ashley Brenner, for their feedback in the early development of this work.

My friends and family have all contributed to this project. Special thanks to my wonderful group of incredibly smart friends and neighbors who have lent an ear about this project and the process, many a time: Arati, Lex, Cheryl, He Len, Molly, and Renee. Of course, I must also thank my dear friends Amy, Beth, Teresa, Anne, and Kelly; as well as a fellow food allergy mom, Cheryl, and all of our hardworking farmers, especially John and Gail. I must especially thank my brother-in-law, Patrick, and my parents, Tom and Tricia, for each spending countless hours editing this work; and my siblings and in-laws for their support: Kelly, Dan, Laura, and Jeanine. I thank my children Benjamin, Abigail, and Owen, whose curiosity and laughter continue to inspire me, and everyone involved in their care: Kate, Sherry, Maggie, Judith, and everyone at BBY. And last, but not least, I must thank my incredibly smart, hard-working fellow traveler on this crazy life journey, my husband, Daniel, who provided the love and partnership that enabled me to pursue this life goal while (somewhat) maintaining my sanity.

Finally, I have deep gratitude for all of the participants of this study, especially Ms. Fisher, Ms. Watts, Ms. Crowley, and Ms. Campbell, who have all given generously of their time and energy, for no other benefit than the pursuit of humanity's collective knowledge.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER 1: INTRODUCTION

School lunch is a topic almost entirely overlooked in the field of education. Educators often view it as a necessary annoyance, a distraction from the more "important" tasks of schools (Weaver-Hightower, 2011a). Whereas researchers in a diverse range of fields, such as public health, sociology, geography, history, economics, and anthropology have conducted rigorous studies on this subject (Anderson, Gallager, & Ritchie, 2017; Foster et al., 2008; Heynan, 2009; Hinrichs, 2010; Larson & Story, 2006, 2010; Levine, 2008; Poppendieck, 2010), with few exceptions (Robert & Weaver-Hightower, 2011), education researchers have not yet considered the ways in which food impacts the learning environment or the school community. Despite a renewed focus on "whole child" comprehensive and community school reforms intended to address the myriad ways poverty impacts children's ability to learn (Anyon, 2005a; Noguera, 2011; Rebell, 2012), surprisingly little attention has been paid to the pernicious effects of hunger and malnutrition. Likewise, few policymakers in public health have considered the educational impact of nutrition, focusing instead on major public health objectives such as obesity reduction. However, research clearly shows that good nutrition can contribute to better school performance (Perez-Rodrigo, 2001), and healthier students are, indeed, better learners (Basch, 2011; Perez-Rodrigo & Aranceta, 2001; Taras, 2005).

In this dissertation, I draw from qualitative data collected over a two-year period in three high-poverty urban schools in order to examine how students, teachers, staff, administrators, and board members understand the role of school lunch in the daily lives of students. Using critical policy analysis, I compare two school lunch programs that both complied with the National School Lunch Program (NSLP) guidelines, but offered different types of foods, methods of

preparation, and modes of delivery. I consider participants' experiences of eating, as well as their perceptions of the programs' impact on students' physical and emotional well-being.

This study demonstrates not only that school lunch policy is a worthy topic to consider in education, but also that feeling hungry is a central experience of low-income students, impacting their experiences in schools in ways rarely considered by education policymakers. There is a disconnect between the good intentions of the NSLP and the ways its low-income recipients experience these policies in their daily lives, as many struggle with food insecurity. For most participants in this study, healthy food meant food that was fresh and filling, made their bodies feel good, and gave them the right kind of energy to sustain them through their day. However, the NSLP does not consider these ways of thinking about food; rather, it focuses on quantitative measures like nutrients and calories and misses important impacts on student engagement and learning. For schools struggling with how best to serve children living in poverty, the school lunch program can take on an important role in caring for students, both physically and emotionally, fostering a greater sense of community, and improving the school climate overall.

Background

Today, food is increasingly a concern for Americans, as many struggle with obesity and chronic disease. Nutrition experts tell us to eat a variety of foods across the different food groups, to reduce our consumption of fats, and eat more fruits and vegetables. Some critics, such as Marion Nestle (2007) and Michael Pollan (2009), have attacked processed food and food marketing, calling attention to the declining nutritional quality of many foods. Others have raised concerns about pesticide residues, genetically modified foods, and food allergies (O'Brien, 2010). Even McDonald's has begun to offer low-fat options, such as grilled chicken, salads, and

yogurt on its menu. These efforts indicate a cultural shift in recent years in the ways that Americans think about the importance of healthy food.

In schools, activists such as "renegade lunch lady" Ann Cooper (2007), celebrity chef Jamie Oliver (2011), and "Angry Mom" Amy Kalafa (2011) have called attention to the quality of school lunch in particular. Teachers and other educators are growing increasingly aware of the connection between food and learning, as evidenced by the proliferation of new and innovative lunch, cooking, and gardening programs in and around urban and suburban schools (Allen, 2012; Block, K. et al., 2012; Children's Food Trust, 2016; Hayes-Conroy, 2014; Morgan & Sonnino, 2010; Nowak et al., 2012; Waters, 2008).

As sociologist Janet Poppendieck (2010) argues, the school cafeteria is a sort of meeting place where the concerns of many intersect: those of educators, corporations that produce and distribute food, food system reformers, local farmers, environmentalists, and anti-hunger advocates, to name a few (p. 6). Thus, it is now—and always has been—a contested space where powerful interests collide. Many bemoan the outsized influence of agricultural and corporate interests in school food policies and the NSLP (Nestle, 2007; Poppendieck, 2010; Sandler, 2011; Weaver-Hightower, 2011b). In more well-off schools, there is concern about "competitive foods" which are sold alongside NSLP meals but do not have to meet USDA guidelines (Briefel, 2009; Finkelstein et al., 2008; Story, 2009). These items may contain artificial colorings and other food additives that potentially impact children's behavior (Bateman et al., 2004; Eigenmann & Haenggeli, 2007). Environmental advocates point out the excessive packaging and "plate waste." And anti-hunger advocates worry about whether poor children have enough food to eat at all (Children's Defense Fund, 2014; Edelman, 2016).

Even former First Lady Michelle Obama took up the cause, spearheading policy changes to the NSLP with the Healthy, Hunger-Free Kids Act (HHFKA) that went into effect in 2012. For the first time, calorie maximums were imposed on school lunches in order to address concerns about rising obesity rates. Some students and families, however, have expressed frustration with this approach, protesting the "one-size fits all" regulations (Yee, 2012). They note that different students have different nutritional requirements, including athletes or pregnant mothers. Despite these protests, a recent study shows that schoolchildren are, indeed, eating more fruit as a result of those policy changes (Schwartz et al., 2015).

However, for low-income students, food insecurity is a more salient concern than obesity. Indeed, educators throughout the 20th century worked to address childhood hunger, culminating in the widespread implementation of the NSLP in 1946 (Levine, 2008; Poppendieck, 2010). This program provides reimbursements to schools for lunches for each student who meet certain income eligibility requirements. Today, 95% of public schools participate, feeding 31 million children, 70% of whom receive free or reduced lunch (FRAC Facts, 2009), at a cost of $11.6 billion per year (USDA Food and Nutrition Service, 2013).

There is no doubt that the NSLP is one of the most important welfare programs in the United States (Levine, 2008) and that it is vital to the very survival of millions of food-insecure children. Poppendieck (2010) also points out that because of its scale, the federal school lunch program may even serve as an important catalyst for improving the food system as a whole, potentially improving the health and well-being of entire communities (p. 294). I will argue in this dissertation that the lunchroom can also be an important catalyst for improving low-income urban schools, and that the National School Lunch Program is not only an essential public health policy, but an important *education* policy as well.

Statement of the Problem

In response to the accountability movement, some educators, scholars, and policymakers have called for comprehensive school reforms that address the broader context of poverty. For instance, the Broader, Bolder Approach (BBA)—a national organization spearheaded by some of the nation's most respected and influential education scholars, such as Pedro Noguera, Deborah Meier, and Linda Darling-Hammond—has argued that the conditions of poverty are equally important in the perpetuation of the achievement gap as factors inside the school building. These scholars see schools not as the cause of societal inequality, but a reflection of it, and seek to attack conditions that cause poverty in order to improve schooling. Among other policy goals, they call for more mental health and parenting services, on-site medical and dental services, and access to healthy food in school buildings (http://www.boldapproach.org).

One important aspect of poverty that is often mentioned in these efforts is malnutrition, both in the sense of not getting enough nutritious food, as well as not getting enough food at all. The prevalence of hunger in urban areas in the United States has reached record levels in the last few years. Nationwide, almost 16 million children live in food-insecure households, while the rate is double that for Black and Hispanic children (CDF, 2014, p. 28). Overall, 51% of public school students in the United States qualified for free and reduced lunch based on income levels (Rich, 2015). However, this rate varies by location; in major cities and in some rural areas, the rate approaches 80 percent or more. For instance, in New York City the rate is 79% (schools.nyc.gov, 2014), in Chicago it is 80.74% (cps.edu, 2015), and even in smaller cities such as Pittsburgh, Pennsylvania, the rate is 81.81% (PA Dept. of Education, 2015).

Many of these high-poverty schools are located in "food deserts," where fresh foods are largely unavailable, and travel to a supermarket via public transportation is difficult (Beaulac,

Kristjanssonn, & Cummins, 2009; Lucan, Karpyn, & Sherman, 2010; Mari Gallagher, 2006; Truehaft & Karpyn, 2010; Whelan et al., 2002). Some of these areas might be better characterized as food "swamps," a more recent term that describes areas where nutrient-poor processed food is abundant, but fresh, nutrient-dense food is scarce (Bridle-Fitzpatrick, 2015). Some homes even lack electricity and/or working appliances, like refrigerators or stoves, which are necessary to store and prepare fresh foods. As a result, many food-insecure families rely on highly processed and easy-to-prepare foods out of necessity. And far too many children simply do not have enough to eat at all.

Chronic hunger takes its toll on children's health and their academic performance. Children who experience food insecurity have significantly higher rates of illness, headaches, fatigue, hospitalization, stomachaches, and iron-deficiency anemia, as well as developmental delays, cognitive delays, and behavior problems, compared to children who are sufficiently nourished (Alaimo et al., 2001; CDF Ohio, 2016; Center on Hunger, 1994; Taras, 2005). Over time, these health disparities lead to lower performance in school. Studies show that vocabulary, reading comprehension, math, and social skills are much lower in children who are food-insecure, compared to those who are not (Alaimo et al., 2001; Brown, 1996; CDF, 2014; CDF Ohio, 2016; Taras, 2005). Food-insecure children were also more likely to have repeated a grade, visited a psychologist, and had more difficulty getting along with others (Alaimo et al., 2001).

These statistics are alarming for many reasons, but for teachers and schools trying to educate children, the issue of food insecurity is often a hidden problem. Weiss and Melville (2014), in an editorial for the Broader, Bolder Approach, argue that hunger is "invisible" in schools, both because middle-class teachers do not recognize the effects of hunger and because poverty and food insecurity carry a stigma, so students rarely speak openly about it. Kathleen

Melville, a Philadelphia schoolteacher, articulates the problem that food insecurity poses for schools in her article co-authored with Elaine Weiss, the national coordinator for the Broader, Bolder Approach:

> The separation between the mostly middle-class adults in my school and the mostly low-income students contributes to making the problem of hunger invisible. Hunger is not a conspicuous condition. It's not like the sprained ankle that prevents a child from participating in gym class or the broken wrist that exempts a student from writing assignments. But it is just as pernicious. Children who are hungry are more likely to be exhausted, aggressive, hyperactive and anxious. But to an adult unfamiliar with hunger's effects, these signs may just seem like bad behavior. A head down during class signals laziness and aggressive behavior deserves punishment. Instead of being identified as hungry, many food-insecure students are labeled as 'undisciplined' or 'unmotivated.' (Weiss and Melville, 2014)

Anecdotal evidence suggests that some of the major issues urban educators struggle with every day, such as disruptive behavior and a lack of student engagement, may be in part caused by chronic hunger and malnutrition. Yet, if these issues are not correctly identified, the wrong solutions may be applied—solutions that are not only unlikely to succeed, but often further marginalize vulnerable communities, such as "zero tolerance" discipline policies and "no excuses" accountability measures.

Behavior in the lunchroom is also a source of stress for educators. In another study, a principal was interviewed about school food. Her first year as principal was spent "crying nearly every day, not over student learning or teacher development, but over the problems of noise and behavior in the cafeteria" (Robert & Weaver-Hightower, 2011). This anecdote shows that

lunchtime in the cafeteria, far from being an inconsequential time and place, actually has enormous meaning and implications for educators' work. These authors conclude that without considering school food, education researchers risk misunderstanding "the contexts of schools and those who run them" (p. 13).

While education researchers have largely ignored food issues, across the nation, parent and teacher advocates have pushed for healthy changes to school nutrition programs. After noticing how many of her students seemed sluggish after lunch, one teacher (Wu, 2011) spent an entire year eating her school's lunch and blogging about it. She felt unsatisfied and revolted by the lunches and the rush in which she had to eat it, longing for her usual food. After several months, she too experienced headaches and lethargy after lunch (p. 38). Wu's account is representative of a growing movement of parents, teachers, and students concerned with their school lunches. Some aim to remove soda machines, junk foods, and harmful additives from school lunch menus; others are concerned about toxic residues in food, such as pesticides (Kalafa, 2011; Wu, 2011). Along with Dr. Susan Rubin, founder of the non-profit Better School Food, school lunch reform advocate Amy Kalafa produced a documentary called *Two Angry Moms* that chronicles several of these parent groups as they attempt to overcome their district's policies and make healthy changes to their school lunch programs. In her book (2011), Kalafa found "equally poor quality food and toxic food environments" in both poor and wealthier schools. She notes, however, that the stakes are higher for kids in poor districts, for whom "school food may be the only food they eat all day" (p. 11).

In the United Kingdom, the School Food Trust, a quasi-governmental organization inspired by celebrity chef Jamie Oliver, undertook a massive overhaul of school food service in order to offer "scratch" cooking (or meals cooked from scratch, as opposed to processed frozen

and reheated meals). It also conducted many studies on these efforts, finding that "students in schools that had made changes were three times as likely to be on-task as students in control schools" (Weaver-Hightower, 2011b). While there has not (yet) been a similar nationwide effort to overhaul lunch programs in the United States, there have been some small-scale efforts to incorporate more "whole foods" into lunchrooms. For instance, administrators at Central Alternative High School in Appleton, Wisconsin, transformed their school lunch program with the help of a local bakery. They claimed that academic performance improved, truancy disappeared, behavior was better, and that "teachers are able to spend their time teaching" (A Different Kind of School Lunch, 2002). While many of these programs claim to have positive effects on school climate, student engagement, and learning outcomes, importantly, researchers have not yet systematically evaluated or validated these claims.

Thus, it is important to understand the role of hunger, malnutrition, and food in the lives and learning of students, as well as the culture of schools. While we might intuitively recognize that hungry or malnourished children cannot concentrate well in classrooms, surprisingly few education researchers have systematically studied the role of food and nutrition in schools. Few, if any, ethnographic studies in education have explored food as part of the daily routines of schools and of the daily lives and well-being of students. Likewise, few, if any, public health researchers have used educational outcomes to measure the success or failure of nutrition interventions (Basch, 2011, p. 595). Clearly, there is a research gap on this important topic.

Theoretical Framework

In this study, I use an ethnographic approach to the topic of school food to explore questions that reach beyond measurable and quantifiable indicators; that is, I am interested in exploring what meanings students and educators make about the food offered at their schools.

Below, I provide an overview of the theoretical framework that guides this study, critical policy analysis (CPA), which examines policy holistically and in context. This framework and its application to the methodological choices I have made are further discussed in Chapter Two.

Most research on school lunch policy has followed a rational model of problem-research-solution-implementation, as Weaver-Hightower (2008) has noted. In this approach, researchers identify a problem and possible solutions. The intended and unintended effects are then evaluated using specific criteria, and alternative policies are compared to determine which is most effective (Jimenez et al., 2015).

This traditional method of analyzing policy manifests in nutrition research in overly simplistic ways. For example, because nutrition policy focuses on measurable indicators like calories, sodium, or vitamins, research has tended to examine only those indicators. Some have criticized this approach as being rife with "nutritionism" (Scrinis, 2012), which reduces concerns about food to only what is measurable. Poppendieck (2010), a sociologist, points out that it is this kind of reductionistic thinking that results in french fries, fruit cups drowning in corn syrup, and a hamburger with 60 ingredients counting in federal nutrition policy as a "healthy" lunch because it conforms to the "correct" proportion of carbohydrates, fats, and calories (p. 5).

Thus, the traditional policy approach may ignore other salient concerns about the impact of policies and resultant programs. For instance, a typical study on a nutrition intervention would measure Body Mass Index (BMI), itself a crude and overly simplistic indicator of health (Evans & Colls, 2009; Guthman, 2011), before and after implementing changes to the composition of the lunch (more or less fat, salt, etc.). If the BMI rate is reduced on average, the changes would be considered "successful." This approach may overlook participants' understandings about body image and their emotional well-being, the nutritional deficits of non-obese children that

may not immediately visible or measurable, or how certain foods actually feel in their bodies, regardless of what nutritionists deem to be "healthy." Importantly, studies that focus on obesity often fail to account for the experiences of food-insecure children, who can be both obese and malnourished at the same time. Clearly, students, parents, teachers, and the general public have many more concerns about school food than can be captured in overly simplistic quantitative measurements.

In education as well, some scholars have been critical of the traditional approach to policy research (Anyon, 1995, 2006; Ball, 1994, 1997; Lipman, 2004, 2006; McNeil, 2000; Ozga, 2000; Rist, 1994; Stone, 2002). They argue that it is overly simplistic, only able to account for that which is measurable and immediate (Lipman, 2004, p. 12), and that it treats problems without considering their context (Ball, 1997, p. 264). These scholars have analyzed national education policy and school reforms by examining the power relationships, whose interests are served, and how discourses shape policy and implementation. They ask how policy impacts the most marginalized communities, and what possibilities exist to better address social problems. In order to do so, these critical policy scholars provide much richer context to the policy than traditional approaches, creating "space for resistive, counter-hegemonic knowledge production that destabilizes oppressive material and symbolic relations of dominance" (Hesse-Biber & Leavy, 2006, p. 35).

Thus, critical policy analysis requires researchers to ask a fundamentally different set of questions, such as, "Who is behind this policy?" and "Who is the voice that's being privileged in this situation, and whose voice is being marginalized?" (Diem et al., 2014, p.1082). In this way, CPA examines "the difference between policy rhetoric and practiced reality" (Diem et al., 2014, p. 1072). With a grounding in social justice concerns, CPA views policy as an expression of

values, and thus contextualizes social and power relations in order to give voice to alternative discourses and possibilities (Ball, 1997; Diem et al., 2014; Ozga, 2000).

Research Questions

The current backlash against standardized testing has reignited the debate about the extent to which poverty contributes to the persistent "achievement gap" between students of color and their white counterparts, largely associated with socioeconomic status. Many even call for educating the "whole child" and creating "community school models." While hunger and malnutrition are sometimes mentioned in relation to these questions, there has not yet been an ethnographic exploration of students' experiences with food in low-income urban schools. In this context, it is important to understand the role that food plays in the culture of schools and the impact of different approaches on students, educators, and the school as a whole. This study seeks to understand the meanings participants ascribe to their lived experiences with different school food programs.

Because food plays such an important role in culture as a whole, and because hunger and malnutrition have been shown to impede learning, there is an urgent need to better understand how school food affects schools and students' experiences in them. This study is guided by the following overarching research question: *How do students experience different approaches to school lunch in high-poverty schools?* Additionally, I ask:

- *How do students and educators experience traditional lunch programs?*
- *How do students and educators experience a school lunch program designed to provide fresh, whole foods in a communal way?*

- *Comparing the two programs, how do students and educators understand the differences in the kinds of foods offered, the food quality and presentation, and the modes of delivery?*
- *Comparing the two programs, how do students and educators understand the differences in the lunchroom climate, and the learning environment more generally?*

In this dissertation, I refer to a "whole foods" approach as one that uses primarily unprocessed foods, features on-site preparation, and includes a variety of fresh fruits and vegetables. "Traditional lunch" here refers to a prepackaged lunch, made off-site, frozen and re-heated, and composed of mostly processed foods. Both types of lunches in this study receive reimbursement through the NSLP, meaning that they both comply with the same set of guidelines for calories, fats, carbohydrates, etc. What differs is the emphasis on freshness, the preparation methods, and the mode of delivery in the lunchroom.

Significance of the Study

It is an interesting moment to conduct research on this topic. The local food movement is gaining momentum, even at large corporate supermarkets; activists and gardeners are reclaiming vacant lots for urban gardens in most major cities; public furor over "pink slime" in the beef sold in school cafeterias even reached *The New York Times* (Bidgood, 2012); and more parent and community groups are mobilizing to remake school lunches.

This study will contribute to the literature in a variety of ways. While urban schools are often specifically targeted for large-scale changes to instruction and school structure, underlying health and nutritional issues are rarely included in those reforms, despite the potential of schools as important sites for public health intervention (Foster et al., 2008). As the Tufts University Center on Hunger, Poverty, and Nutrition Policy laments:

> Unfortunately, the effects that poor nutrition has on learning and educability are often not incorporated into the efforts to improve our educational system. Key educational problems such as drop outs or school failure are rarely examined in terms of the health and nutritional status of poor children. (Center on Hunger, 1998)

This study will extend the conversation about how food may indeed be an educational concern, directly relevant to the quality of education provided by schools. It will inform educators, public health researchers, and food activists on the role of school food in the broader school culture and learning environment, connecting a diverse set of literatures from the fields of education, public health, geography, anthropology, and sociology. In addition, this study will help us begin to understand the potential educational impact of alternative policies aimed at changing the quality of food and food culture within a school, and will inform policymakers on new ways to improve the educational experiences of students, especially in high-poverty schools.

Dissertation Structure

In Chapter Two, I review the relevant literature, identifying and examining gaps in the current literature on school food in several fields: education, geography, public health, anthropology, and sociology. This chapter also presents the study's theoretical framework, critical policy analysis. Chapter Three presents the study's design, as well as the rationale for its methodology. Chapter Four provides detailed context about the two lunch programs, Traditional Lunch Services (TLS) and the Fresh & Healthy program (F&H), the three school sites, and the participants. I present important similarities and differences between the two programs, in type, preparation methods, delivery models, and participants' reception and experiences of the food provided. This context is important to understand in order make meaningful comparisons in subsequent chapters. Chapter Five examines the meanings participants made of the differences

between the two lunch programs. In particular, I argue that participants understood that addressing hunger and malnutrition at all three schools was essential to student engagement, and that, compared to the prepackaged lunches, the fresh meals program better addressed both hunger and malnutrition. Participants' understandings about healthy food differed from policymakers' in some key ways, and I offer a policy critique of the National School Lunch Program in light of these findings. Chapter Six examines how participants understood the different lunchroom climate that was engendered by each program, as well as the emotional impacts on students, and the opportunities for connection and community-building. In sharing meals with students, educators saw important openings for caring and connecting with students, and for building community. Chapter Seven summarizes the overall findings and presents the policy implications of this dissertation. Ultimately, I argue that school food policies and practices too often overlook important considerations about the impact of food and mealtime on student learning and school climate and that the benefits of approaches like F&H are evident enough that they deserve wider attention.

CHAPTER 2: LITERATURE REVIEW

In this chapter, I outline the body of research that exists on school food, school food policy, food insecurity, child nutrition, and critical approaches to food. While the research *in the field of education* is in its infancy (Weaver-Hightower, 2011a), in other fields there is a large body of research to draw from. I begin this chapter by situating the topic of school food and nutrition within a discussion of "whole child" school reforms. I then provide an overview of the literature specifically on school food policy, primarily from sociology and history, as well as dominant perspectives on childhood nutrition from the field of public health. Next, I examine the available literature on urban food deserts and "swamps," geographical areas where fresh food is hard to find, but nutrient-poor and calorically-dense processed foods are easily obtained, since high-poverty urban schools are usually located within these areas. I also provide a discussion of critical scholarship on food studies. Each section identifies the gaps that exist in the research on school food policy in education and in other fields. In the second part of this chapter, I explore critical policy analysis (CPA) and the "ecology metaphor" for analyzing policy (Weaver-Hightower, 2008) as a theoretical lens through which to view specific school lunch programs.

Urban School Reform in the Context of Poverty

In her book *Radical Possibilities: Public Policy, Urban Education, and a New Social Movement* (2005a), Jean Anyon argues that we must stop "counting on education to solve the problems of unemployment, joblessness, and poverty" (p. 3). Solving the systemic (and "disastrous") problems of urban education will require public policy reform not only at the school level, but also at the city, state, and national levels, to address issues such as poverty-wage work and housing segregation, for example (p. 3). We must "reconsider what counts as educational policy" and work toward an "expanded education policy paradigm" (p. 13). Anyon

concludes that school-based reforms are unlikely to make a difference in the quality of schooling without attention to the larger impact of poverty. She calls on education policymakers to "acknowledge and act on this power of urban poverty to dwarf most curricular, pedagogical, and other educational reforms" (Anyon, 2011, p.55).

In the same vein, other scholars of education have argued for "community schools" and comprehensive reforms which address the "whole child," partly pushing back against the accountability movement. Pedro Noguera (2003; 2011) analyzes the economic context facing urban schools. He argues that a body of research shows that "external conditions like poverty, crime, housing affordability, and health care access, exert considerable influence over conditions within schools" (Noguera, 2003, p. 83). He criticizes neoliberal, "no excuses" reformers like former Chancellor of the New York City Department of Education Joel Klein, who focus on ineffective classroom teachers and, he argues, ignore real obstacles (Noguera, 2011, p. 9). Instead, Noguera considers factors such as exposure to violence, substance abuse, and environmental toxins, drawing upon Paolo Freire's work analyzing the "conditions that constrain the lives and potential of the poor and oppressed" (Noguera, 2003, p. xiii).

Michael Rebell, the Executive Director of the Campaign for Educational Equity at Teachers College, also calls for the comprehensive educational reforms mentioned above, and argues for these services as a *basic constitutional right*. He claims:

> ...while vital school improvement efforts must continue, the country's ambitious national educational goals cannot be met unless the nation understands and confronts the core problem underlying the achievement gap: the extensive pattern of childhood poverty that inhibits educational opportunity and educational achievement. (Rebell, p. 50)

For states to adopt the measures necessary to fulfill this right requires more than the traditional services and support, such as high-quality teaching, rigorous curriculum, and up-to-date facilities and resources. It further requires early childhood education, routine preventive physical and mental health care, expanded learning programs, and family support (p. 53).

The Coalition for Community Schools promotes the community school model as a way to address similar comprehensive reforms. Community schools are "hubs," connecting schools and other community resources. Examples of this model include the Harlem Children's Zone and the Beacon Schools in New York City, and the University Assisted Community Schools in Philadelphia, led by the Netter Center. Key strategies include universal pre-kindergarten, equitable funding, afterschool programs, positive discipline, and wraparound supports. Partnerships with community organizations help provide a wide range of services, such as health and social services, and youth and community development (www.communityschools.org).

The "Broader, Bolder Approach to Education" (BBA), a national task force led by distinguished scholars Helen Ladd and Pedro Noguera, promotes a similar comprehensive, research-based policy agenda to mitigate the effects of poverty. As BBA states on its website:

> The impacts of poverty on students' ability to learn effectively—from lack of readiness in kindergarten to health-related impediments to focusing in class and disproportionate placement in segregated and under-resourced schools—are increasingly understood. (BBA Website)

In its "Policy Framework" document, in addition to in-school factors, the BBA outlines policy solutions to out-of-school factors such as early childhood programs, targeted family support from birth to kindergarten, afterschool and summer programs, programs that strengthen communities, and health clinics located in school buildings. One area they specifically address is nutrition.

Because the last decade has seen an increase in families that rely on the Supplemental Nutrition Assistance Program (SNAP), the BBA argues that more children could benefit from subsidized federal programs like school lunch, breakfast, and even dinner (BBA, 2016, p. 5). Since "schools are most successful when students are not distracted from learning because they are hungry or worried about where their next meal will come from," it proposes:

> Every child should have consistent access to nutritious food all day and all year, and the school system, with support from other agencies, should be structured to provide it without stigma or barriers to access. (BBA, 2016, p. 5).

BBA also provides case studies of schools that have integrated breakfast, lunch, snacks, and dinner into the school day, as well as other articles highlighting the issue of hunger in schools. However, BBA does not provide definitions of what it thinks "nutritious" food is, nor critiques the calorie maximums put into place with the most recent changes to the Child Nutrition Act in light of the reality of food insecurity. It also does not provide specific policy recommendations for ways (beyond participating in the National School Lunch Program), that schools can address food insecurity. Anyon, Noguera, Rebell, and other advocates of comprehensive, whole-child reforms in fact make only cursory acknowledgements of the effects of hunger and malnutrition, which are major conditions of poverty. Perhaps they assume, as many do, that the NSLP is sufficient to meet those needs. The evidence, discussed below, suggests that childhood hunger is a major problem impacting schools in ways often overlooked or mistaken for other problems. Basch (2011) argues that health disparities arising from poverty are an overlooked influence on the achievement gap (p. 593). Additionally, Anderson et al. (2017) make the case that healthy changes to the NSLP are highly cost-effective compared to expensive reforms like class-size

reduction (p. 3). Despite this, few, if any, education scholars have seriously studied food, nutrition, and hunger in relation to student academic performance or school quality.

Food Insecurity and Academic Achievement

According to the Children's Defense Fund (CDF), child poverty has risen to record levels in the United States. Overall, the rate has risen from one in 20 in the 1960's, to one in seven today. Children of color suffer disproportionately, at nearly one in three since the recession (CDF, 2014, p.5). In 2013, according to *The New York Times*, 51% of public schoolchildren in the United States qualified for free and reduced school lunches due to income levels near the poverty line, up from 38% in 2000. Over 40% of these poor children live in "extreme poverty," defined as less than half of the poverty level (CDF, 2014, p. 4).

Poverty can take its toll in many ways, including homelessness, violence, drug addiction, family instability, and other sources of chronic stress, but food insecurity remains a central and constant concern. While "hunger" denotes a temporary, uncomfortable feeling or weakness from a lack of food, the term "food insecurity" refers to a more chronic state. The Children's Defense Fund (2016) defines food insecurity as "whether a person has consistent access to an adequate amount of quality food to live an active, healthy life" (p. 3). One in five children, or 15.9 million individuals, live in households with food insecurity, with Black and Hispanic households having more than twice the rates of food insecurity among white families (CDF, 2014, p.28).

Unsurprisingly, chronic hunger is associated with more illness, headaches, irritability, fatigue, and lack of focus (Alaimo et al., 2001; Center on Hunger, 1994). Food-insecure children experience twice as many developmental delays, behavior problems, and hospitalizations, and have two and a half times the rate of headaches, and three times as many stomach aches, as children who have adequate nutrition (CDF Ohio, 2016, p. 7). Iron-deficiency anemia, which

affects 25% of poor children in the U.S., is well known to impair cognitive development (Center on Hunger, 1998; Cook et al., 2006; Eicher-Miller et al., 2009; Skalicky et al., 2006; Taras, 2005). Nutritional intake and micronutrients, such as omega-3 fatty acids, vitamin B_{12}, and folic acid, are also vital to neurocognitive development, and malnutrition can impair this process (Nyardi et al., 2013). Brown and Pollitt (1996) report that "malnutrition hinders cognitive abilities through several interacting routes," such as illness, lethargy and withdrawal, delayed development of motor skills and physical growth, and even brain damage (p. 43). Additionally, studies indicate that "undernourished children are typically fatigued and uninterested in their surroundings" (Center on Hunger, 1994, p. 1).

Behavior also suffers when children are hungry, including increased aggression and difficulty getting along with other children (Alaimo et al., 2001; Basch, 2011). Poppendieck (2010) points out that "a reduction in such disciplinary referrals is the single most consistently reported impact of universal breakfast programs" (p. 9). Food insecurity has been found to be associated with increased hyperactivity, aggression, anxiety, and bullying behaviors (Alaimo et al., 2001; Basch, 2011; Huang, 2010; Slack & Yoo, 2005; Slopen et al., 2010; Whitaker, Phillips, & Orzol, 2006). It should also be noted that even children who are not hungry may suffer behavioral consequences from a diet full of processed foods. Several studies have found a link between hyperactivity and food colorings and additives (Bateman et. al, 2004; Eigenmann & Haenggeli, 2007). McCann, Barrett, & Cooper (2007) found that a dose of approximately four ounces of sweets (the amount in a typical bag of Skittles) could increase hyperactivity in children who did not have ADHD. Other studies have similar findings (Kemp, 2008).

Chronic hunger and malnutrition can lead to long-term consequences for academic performance. In a review of the literature on nutrition and student performance at school, one

study showed that vocabulary, reading comprehension, math, and general knowledge suffer when children are malnourished, especially in their formative years (Brown & Pollitt, 1996). By kindergarten, food-insecure children are also more likely to be behind in reading and social skills (CDF Ohio, 2016, p. 7). By third grade, these children suffered a 13% drop in their reading and math scores (CDF, 2014, p. 29). Elementary-age food-insufficient children had significantly lower math scores, were more likely to have repeated a grade and seen a psychologist, and had more difficulty getting along with others (Alaimo et al., 2001). A mixed-methods study by the non-profit organization Share Our Strength (2015) found that educators report an inability to concentrate, lack of energy or motivation, poor academic performance, tiredness, behavioral problems, and sicknesses in students who regularly come to school hungry (p. 2). Other studies show an association between chronic food insecurity and increased truancy and tardiness (Murphy et al., 1998). Howard Taras, MD, concluded that "food insufficiency is a serious problem affecting children's ability to learn" (Taras, 2005). The Tufts University School of Nutrition report provides ample evidence that "in ways not previously known, under-nutrition impacts the behavior of children, their school performance, and their overall cognitive development" (Center on Hunger,1998). Basch concludes it is likely that health, poverty, and education are "causally related in reciprocal ways" (p. 594).

These studies suggest that there is a danger in overlooking the negative effects of food insecurity and hunger in schools. Without truly understanding this potential cause of many of the problems often associated with low-income, urban schools—such as discipline issues, lack of motivation, or disparities in school readiness—researchers, policymakers, and practitioners risk wasting time and resources, leaving many poor children trapped in a cycle of poverty.

School Food Policy: Past and Present

School food policy is contradictory in a number of ways. On the one hand, the National School Lunch Program was put into place to address hunger, and yet recent changes to its nutrition standards seem more concerned with obesity prevention. In the lunchroom, students are exposed to highly processed foods, and then taught in the classroom and in nutrition education lessons that they should be eating a colorful variety of fresh fruits and vegetables. As Robert and Weaver-Hightower (2011) observe, students' nutritional choices are shaped by multiple levels of governance (p. 202). This section of the literature review attempts to understand the factors and forces at work in shaping how and what food is served in schools. It provides a brief history and description of the NSLP, recent policy changes and public reaction, public health literature on childhood nutrition, as well as trends in nutrition education.

Since the implementation of mandatory schooling in the early 20th century and even before, many educators have been concerned with providing nutritious meals for their students. Observing that hungry children cannot learn, Progressive-era activists urged schools to provide cafeterias (Poppendieck, 2010, p. 47), and other local school feeding programs emerged with the help of volunteers and charities (Hinrichs, 2010, p. 481). As part of New Deal policies, the federal government began to grant aid for such programs. The National School Lunch Act was formally passed in 1946, in part to address childhood hunger. It provides cash reimbursements to any school (public, private, or parochial) for students who meet certain income eligibility requirements. Currently, 31 million students at 95% of public schools participate, and 70% of students receive free or reduced lunch (FRAC Facts, 2009). Schools receive $2.93 per meal for free lunches and are entitled to receive USDA surplus foods. Recent changes have also helped schools purchase fresh produce from local farmers (USDA, 2013). But as long as the meals

conform to set standards (based on the latest *Dietary Guidelines for Americans*), the actual food can be provided by the school itself, a centralized kitchen, or an approved vendor.

In the 1960's era of the War on Poverty, educators and other groups rallied for a breakfast program so that students would better concentrate before lunch (Poppendieck, 2010, p. 55). While many of these charitable efforts were fraught with paternalistic and "power-laden relationships between feeder and fed" (Sandler, 2011, p. 38), other efforts were more community-driven. The Black Panthers fed and ate with children as part of their political outreach (Heynan, 2009). The Panthers' breakfast program was so successful that it pressured the United States government to better address childhood hunger, and in 1966, the Child Nutrition Act established the School Breakfast Program, which now serves 10 million children per day, as well as the Special Milk Program. In 1968 President Richard Nixon further expanded the NSLP in response to pressure from the Black Panthers (Weaver-Hightower, 2011b, p. 54) and also created the Summer Food Service Program.

However, as the NSLP expanded to feed more poor children, repeated budget cuts were made to the program, and the quality of food declined. By the 1980's and 1990's, as is the case today, most schools began to offer "meal packs," which arrive prepackaged from a centralized location and are simply reheated in a microwave or industrial warmer. While these meals are very inexpensive (which school food directors need in order to make their budgets), they contain high levels of preservatives and other additives, and have been criticized for lacking in nutritional value (Poppendieck, 2010, p. 66). Additionally, there has been outrage about "plate waste," when students throw away much of the meal (p. 66). That, along with the requirement that schools must balance their budgets, and the increasing view of students as consumers, led to the prevalence of "competitive" foods offered alongside the NSLP foods. While NSLP meals

must meet USDA guidelines, competitive foods may not (p.75). One side effect of the rise in a la carte menu items was that, in schools with a high socioeconomic diversity, the subsidized school lunch has been stigmatized as existing only for poor kids (p. 73). However, competitive foods are much less prevalent in predominantly low-income schools, where students lack the means to pay for à la carte items.

Another major concern about the NSLP is that agricultural interests may overly influence school food policies (Nestle, 2007) in ways that educators may not agree with. The National School Lunch Act was originally passed in 1946 as an "act of national security" (Poppendieck, 2010, p. 51), both to address childhood hunger, and to subsidize the huge surpluses of agricultural goods that existed at that time (Poppendieck, 2010, p. 48). This explains why the NSLP is under the auspices of the Department of Agriculture (USDA), not the Food and Drug Administration (FDA) or the Department of Education, as one might expect. And it "has been mired in agriculture politics ever since" (Weaver-Hightower, 2011b).

Today, the surplus commodities that are provided to supplement tight school food budgets create "ambiguous priorities" for the NSLP (p. 54). Weaver-Hightower (2011b) asks, "is it a program to help farmers or to help children, or can it be both?" (p. 54). Sandler (2011) observes that that "the content of school-provided food is forged from the intertwined politics of agricultural surplus, USDA regulations, cooking facilities limitations, and (more recently) packaged and fast-food corporate lobbying on various fronts for the huge, captive market of public school children" (Sandler, 2011, p. 36). Well-known nutritionist Marion Nestle argues that school food is a political issue because "it lies right at the heart of issues related to equality in our society…School food is about the balance between corporate interests and those of advocates for children's health" (Nestle, 2011, p. 143).

Despite its flaws, the NSLP has come to be viewed as a welfare program (Poppendieck, 2010, p. 73)—arguably one of the most important welfare programs in the United States (Levine, 2008, p.2). As Levine (2008) notes, it is "the only comprehensive food program aimed at school-aged children" (Levine, p. 2). Furthermore, in a study of the historical effects of NSLP participation, Hinrichs (2010) found "sizable" effects on educational attainment, perhaps as a result of the added incentive to attend school for subsidized meals (p. 480). Other studies have also shown that providing meals to students can increase standardized test scores (Dotter, 2014; Figlio & Winicki, 2005; Frisvold, 2015; Imberman & Kugler, 2014), and a more recent study found that test scores rose in schools that offered higher quality meals (Anderson, Gallagher, & Ritchie, 2017). Clearly, the NSLP, however flawed and mired in politics, is *absolutely crucial* for many children, in terms of both health and education.

Recent Policy Changes and the Public Response

Recent policy changes have impacted the NSLP. In 2010, the Healthy, Hunger-Free Kids Act (HHFKA), spearheaded by First Lady Michelle Obama, reauthorized the Child Nutrition Act, and updated nutritional standards for the NSLP for the first time in 30 years. Responding to concerns about the rising rate of obesity among schoolchildren, for the first time, there is mandated maximum of 650-850 calories per meal, depending on the age of students, as well as restrictions on salt and saturated and trans fats. A serving of fruits or vegetables is also required. While students are allowed unlimited access to fruits, vegetables, and whole grains, they cannot have seconds of protein or fat. Food safety concerns were also addressed.

These changes have incited some students to protest, claiming that they do not like the taste of the new (reduced-fat and -salt) food. Some, including athletes, insist they are still hungry after lunch and cannot concentrate on their studies. They note that different students have

different needs and may require more calories during the school day. One video shows a student gorging after lunch on junk food stored in his locker (Yee, 2012). Indeed, students seem more concerned with feeling full and satisfied, than with concerns about obesity. However, a recent study shows that schoolchildren are, indeed, eating more fruit as a result of those policy changes (Schwartz et al., 2015).

A growing number of parents and teachers have also become concerned with school lunches, but again, in contrast to public health policymakers' concerns, these concerns are also not generally about obesity. Parents, teachers, and students seem more concerned about the quality of the food, how it makes them feel, and toxic residues in food, such as pesticides (Kalafa, 2011; Wu, 2011), rather than the amount of calories. After noticing how many of her students seemed sluggish after lunch, one teacher (Wu, 2011) spent an entire year eating her school's lunch and blogged about it. She felt unsatisfied and revolted by the lunches, feeling rushed to eat it, and she longed for her usual food. After several months, she experienced headaches and lethargy after lunch, just like her students (p. 38). Along with Dr. Susan Rubin, founder of the non-profit Better School Food, school food activist Amy Kalafa produced a documentary called *Two Angry Moms* that followed several of these parent groups as they attempted to overcome their district's policies and make healthy changes to their school lunch programs. In her book (2011), Kalafa argues that school food is, indeed, an educational issue (p. 6). In her research (in a non-academic context), she found "equally poor quality food and toxic food environments" in both poor and wealthier schools. However, "for many kids in poor districts, school food may be the only food they eat all day" (p. 11).

Yet, despite a growing public consciousness, education researchers have overlooked the issue of school lunch almost entirely. Education has been traditionally focused on matters of the

mind, devaluing matters of the body; thus, organizational and curricular issues tend to be the focus. Educators have traditionally viewed lunch as something that must be done when kids are in the building for more than a few hours, as health-oriented, and "utilitarian rather than integral" (Robert & Weaver-Hightower, 2011, p. 12). Worse, the marginalization of domestic spheres associated with women's work and low-paying jobs (such as cafeteria workers) have made lunch and lunch ladies the "butt of jokes or the target of vilification" (Robert & Weaver-Hightower, 2011, p.12). Finally, education scholars, like members of the general public, have become distant from the processes of food production due to modern industrialization (Weaver-Hightower, 2011, p. 16).

As Richardson (2011) argues, this lack of attention to food by education researchers and practitioners misses many potential possibilities for school-community partnerships and community building. Weaver-Hightower (2011) argues that education researchers should consider food as "an integral component of the ecology of education)—the broader interconnections of actors, relationships, conditions, and processes of which education is composed" (p.15). He contends that education researchers should, indeed, take school food seriously. However, in the absence of other research, those concerned with school food policy must look to the literature in public health to make a case for the importance of school food.

Public Health Perspectives on Childhood Nutrition

Researchers of public health generally agree with the concerned parents of the previous section, that U.S. schoolchildren generally do not eat a nutritious diet, whether inside or outside of the school building. Story (2009) argues that today's societal and environmental trends have made low-nutrition foods and beverages more accessible, affordable, and appealing than healthier foods, which then leads to obesity. These concerns apply to all children in the United

States, not merely low-income, urban children. As nutrition scholar and activist Marion Nestle (2011) observes, most children in the U.S. have enough food, but "whether children are eating the right food is another matter" (p. 143).

Highly-processed and sugary foods can lead to problems unique to the modern food landscape, where obesity and hunger may coexist (Robert & Weaver-Hightower, 2011). Michael Pollan (2008), the University of California, Berkeley journalism professor and renowned food activist, has also noticed this ironic predicament where obesity and malnutrition coincide: "A diet based on quantity rather than quality has ushered a new creature onto the world stage: the human being who manages to be both overfed and undernourished, two characteristics seldom found in the same body in the long natural history of our species" (p. 122). This creates challenges for the school food programs to ensure students not only have enough to eat, but also ensure students are eating the *right* kinds of foods (Story and Orleans, 2006; Larson & Story, 2006, 2009).

Studies suggest there are also diet-related health disparities between people of color and their white counterparts. African Americans, Hispanics, American Indians, and low-income youths are disproportionately affected by obesity and type II diabetes (Story, 2006), and premature death due to cancer and cardiovascular disease (Mari Gallagher, 2006). Neighborhoods surrounding urban schools are often described as "food deserts," or areas where residents lack readily available, fresh food, and because they often rely on public transportation, must travel long distances for their groceries (Beaulac et al., 2009; Cannuscio et al., 2010; Lucan et al., 2010; Mari Gallagher, 2006; Truehaft & Karpyn, 2010; Whelan et al., 2002). Stores in these neighborhoods are generally stocked with calorie-dense and nutrient-poor, processed, and shelf-stable foods; residents have little access to fresh, whole fruits, vegetables, meats, and fish.

Lucan et al. (2010), found that the majority of foods stocked in the stores in 17 Philadelphia neighborhoods were "almost entirely unhealthful" (p. 384). In such food deserts, residents often rely on public transportation and cannot travel very far for their groceries (Mari Gallagher, 2006). According to the 2006 report, *Good Food: Examining the Impact of Food Deserts on Public Health in Chicago*, on average, African Americans travel nearly twice as far for their groceries as other subgroups. Additionally, fast-food restaurants exist in higher concentrations in poor and predominantly minority neighborhoods (Lee, 2012).

Other research suggests that access to healthy food is not the only factor at work in shaping food choices. Time constraints, price, mobility, safety, customer perceptions, and habits also influence what food people consume (Bridle-Fitzpatrick, 2015). In addition to lacking money to purchase fresh foods—or the means to get to stores with healthier selections—low-income parents may lack the time it takes to prepare them (Slusser, 2011).

Newer research has shown that low-income neighborhoods do not necessarily lack the presence of supermarkets; rather, the issue is about "ease of access" of healthier foods (Lee, 2012, p. 1201). Indeed, the concept of a "food swamp," or an overabundance of unhealthy food choices such as fast food outlets, may be more useful in understanding the rise of obesity than that of a food desert. In an environment where there are many food choices available, but most of them are highly processed, consumer preferences can be influenced by what ease of access and frequency of exposure. For instance, cafeterias can increase sales of healthy items, like fruit, by placing these items at eye-level near check-out counters, as opposed to high-calorie snacks (Bridle-Fitzpatrick, 2015). Cannuscio et al. (2010) also found that the frequency of exposure influences low-income children's tastes. They found that corner store visits become a ritualized part of low-income children's lives, and consequently, children become "programmed" at an

early age to prefer the convenient, processed foods that are available to them. Using photovoice, photo-elicitation, and photo-novella techniques, they examine how visits to Philadelphia corner stores become a "routinized element" of the school day for children, and become a pattern of poor nutritional choices (p. 381). Indeed, it seems that children learn to prefer low-quality food as a result of these patterns. This study also describes community members' feelings of powerlessness over their food choices in a landscape dominated by low-quality foods (p. 384). These authors conclude that nutrition-related health disparities are caused by both structural causes *and* human agency (p. 388).

Thus, addressing food insecurity is no simple matter. Changing people's habits and tastes takes more than simply increasing access to healthy food by opening a new grocery store. Public health experts debate how to even operationalize the concept of a food desert or a food swamp, since there is such a wide variety of foods sold in various types of stores, and people's food environments are often more complicated than current systems used to measure them can capture (Bridle-Fitzpatrick, 2015). There is a real need for further research that can examine these dynamics, so that policymakers can truly understand the impact of policies designed to address food insecurity.

School Food Environments

Some public health researchers directly connect school food to the rising levels of obesity among children. Finkelstein et al. (2008) also characterize the school food environment as one dominated by vending machines, noting that as students move through elementary, middle, and high school, their options become less healthy. The (usually) sugary foods and beverages sold separately or in vending machines, as well as à la carte programs, offer easy access to fast foods, and food fundraisers are obstacles for good nutrition in schools (Story, 2009). However, these

"competitive foods" are less prevalent in low-income schools, where many or most students receive free lunch, and cannot afford to pay for ala carte options.

Competitive foods need not comply with national nutrition standards, the way the subsidized school lunches do. Instead, competitive foods compete with the federal school lunch program. Poppendieck (2010) notes that children and their parents really do not know the difference between the foods offered through the federal school lunch program and other competitive foods that are often placed side-by-side; these distinctions are blurred in real contexts, and perhaps intentionally so, since competitive foods are much more profitable to schools and companies (p. 4). Others worry about competitive foods contributing to the "McDonaldization" (Ritzer, 2007) of school cafeterias, rationalizing the process of feeding children that may have unintended consequences, such as conditioning children's tastes toward fast food.

In addition, cafeterias in most schools are not very inviting. After visiting school lunchrooms across the country for her study, Poppendieck (2010) observed that while many programs lacked nutritious options, cafeteria ambiance is often not pleasant, due to unnatural lighting, crowded spaces, lack of cleanliness, and an unappealing odor, which one of her participants described as "a cross between dirty gym clothes and frying oil" (p. 153). It is also rushed, resulting in students "shoveling and running" (p. 148). Children and food managers throughout her study complained about how little time they have for lunch, often less than 20 minutes. Many spend half or more of that time in line (Poppendieck, 2010, p. 148). The result is that sometimes, children eat their food so quickly, they often overeat, or do not realize they are still hungry until it is too late. Furthermore, it is rare to see real dishes and silverware, contributing to the perceived "cheapness" of the meal. Compared to lunchrooms in Europe,

American cafeterias are dull, poorly lit, and uninviting (p. 182). Certainly there are many opportunities for more comparative ethnographic research into America's lunchrooms.

School-based Nutrition Interventions & Education

The public health literature often cites schools as important sites of intervention (Foster et al., 2008). Recently, there have been numerous interventions in schools that seek primarily to reduce obesity among children through nutrition education and changes to the school lunch program. One such multi-component intervention was developed and delivered by a Philadelphia community-based organization, The Food Trust. It implemented healthy changes to the food in the lunch programs, and also included staff training, an interdisciplinary nutrition education program, and family outreach. Results were studied over two years in 10 schools in Philadelphia, and found significantly fewer students became obese in intervention schools compared the control (Foster et al., 2008).

School-based nutrition intervention efforts, driven by both public health researchers and alternative food activists, seek to improve student nutrition in two ways: by increasing *access to* high-quality, fresh foods and by *educating* students about healthy foods. However, as MacLachlan and Garrett (2008) suggest, few nutritionists take sociocultural factors into account. In a qualitative study of children's food habits in Kentucky, Roos (2010) found that children thought of consuming junk food as "normal" kid behavior, even though they had knowledge about healthy eating habits. Thus, other factors beyond nutrition education were at work in students' eating habits. He argues that while sociocultural studies have usually focused on the meanings of food in specific cultural contexts, there is a wide range of influential factors: the environment, children's daily lives and activities, and larger cultural, social, and personal factors (p. 1).

Some scholars have found that traditional nutrition education is inadequate and ineffective (Perez-Escamilla et al., 2002). Urban school nutrition education programs are often lacking or non-existent, and studies suggest that even where they exist, they do not have a lasting impact. McCaughtry et al., in an ethnographic study, found that despite the enormous need for nutrition education in urban schools, health education teachers taught little nutrition content due to poor training, a marginalization of health educators as "non-core" teachers (p. 70), and a lack of clear directives from administrators (p. 73). Again, these findings speak to the issues of food, hunger, and nutrition being low priorities among educators.

As historian Susan Levine (2008) observes, celebrity chefs have entered school lunchrooms in the last few years, seeking to "rescue children from greasy food and teach students to prefer zucchini over French fries" (p. 1). Hoping to prove it can be done on the meager budget that meal subsidies allow, chefs like Jamie Oliver "valiantly" buck the system to transform school lunches. However, private foundations are primarily funding these attempts, either subsidizing the food or paying chef's salaries, which were usually much higher than the salaries of regular school lunch employees (p. 1). Levine argues, however, that "celebrity chefs and private foundations alone cannot save the National School Lunch Program" because some children and schools face structural barriers that dictate menus and limit which children receive what (p. 1). Few schools even have working kitchens anymore (Poppendieck, 2010). This may partially explain why there have been few large-scale attempts at school food reform in the United States.

However, such efforts do exist in other countries. In England in 2006, the School Food Trust, a quasi-governmental organization, reformed guidelines and other elements of school food service. School cafeterias were overhauled, changing from frozen, processed meals to scratch

cooking. Importantly, as part of this effort, resources were directed toward research. The School Food Trust conducted numerous studies.

> One of the more rigorous studies to accomplish this 'broad agenda' was a controlled experiment to evaluate on-task behavior for schools that implemented changes to their food and their dining environments. The Trust found, among other things, that students in schools that had made changes were three times as likely to be on-task as students in control schools. (Weaver-Hightower, 2011b, p. 51).

Participation rates in school meals increased, and children ate healthier foods, with an increased rate of fruits and vegetable consumption. The social status of cafeteria workers increased, as educators began to realize their contributions (p. 51).

School Gardening and Cooking Programs

In the past decade, school gardening and cooking programs (SGCPs) have emerged in all different types of schools as the latest trend to teach students to eat healthy. Story (2009), a public health researcher, calls for strengthening and expanding "experiential classroom nutrition education" to focus on healthy eating (p. 59). One study examined a garden-based nutrition education program and found an increase in children's fruit and vegetable intake over control groups (McAleese & Rankin, 2007), indicating the potential for such hands-on nutrition programs. A report of the Food Trust and PolicyLink, recommends supporting backyard and community gardens, as well as larger-scale urban agriculture as policy interventions that can increase access to healthy diets. They found that better access to fresh food corresponds with healthier eating, thus reducing the risk of obesity and related chronic diseases (Treuhaft & Karpyn, 2010).

Thus, school garden and cooking programs are often touted as a way to improve the nutritional status of children, and are often led by energetic individuals committed to the alternative food movement. There have been a number of recent programs that connect local, farm-fresh foods to schools, as well as SGCPs like the famous Edible Schoolyard program in Berkeley, California, founded by celebrity chef and activist Alice Waters (2008). Morgan and Sonnino (2010) document the farm-to-school (FTS) movement in Scotland and Italy, in an effort to stock school lunch programs with fresh, local foods. The Agatston Urban Nutrition Initiative in Philadelphia, which runs after-school gardening and cooking programs in 20 schools, is another example. These types of programs generally cite the obesity epidemic as the primary motive for intervention, with other motivations such as environmental and sustainability issues as secondary concerns. They generally seek to provide greater access to fresh, local fruits and vegetables, and foster an appreciation for the process of growing and cooking local food.

In Milwaukee, Growing Power, Inc, headed by urban farmer Will Allen, has created food production systems that feed thousands of people in multiple housing projects. He believes that "equal access to healthy, affordable food should be a civil right—every bit as important as access to clean air, clean water, or the right to vote" (Allen, 2012, p. 7). Allen also claims that people feel powerless over their food choices under big agriculture, but that "something changes" in the youth he works with when they touch the soil for the first time:

> Children often come into my facility for the first time with their pockets filled with candy, acting wild. Something changes in them when they walk up to my worm systems and put their hands in the soil for the first time. They mellow... I have also seen the faces of children come alive when they eat their first tomato or sunflower sprout freshly picked

> from the soil. If the child planted the vegetable and watered it, the experience is particularly vivid. (Allen, p. 160)

Allen's account of the experiences of low-income students of color with fresh food for the first time is visceral and connects to a romanticized view of food and gardening that some scholars critique, which I will discuss in a later section.

An Australian study also found increases in student engagement and confidence, especially amongst "non-academic" or "challenging" children (e.g. autistic) through a gardening and cooking program at several schools (Block et al., 2012). Additionally, the Slow Food Denver school gardening programs "spurred transformation of school food culture in the classroom, in the schoolyards, in the school cafeterias, and at the district level" (Nowak et al., 2012, p. 394).

While most of these accounts are anecdotal, there are far too many stories that attest to the power of fresh food and experiences around fresh food to ignore. However, so far these anecdotal claims have been unexplored by education researchers.

School Climate Literature

There are no studies that I can find directly correlating school food policy and school climate. However, this dissertation finds a link, so an examination of the existing scholarship on school climate is warranted. Cohen (2009) defines school climate as the "quality and character of school life," including "norms, goals, values, interpersonal relationships, teaching, learning, leadership practices, and organizational structures" (p. 100). The National School Climate Center believes there are four major dimensions: safety (both physical safety as well as social-emotional security), interpersonal relationships, teaching and learning, and institutional environment (schoolclimate.org).

Interpersonal relationships is a major dimension of school climate. This category includes consistent social support from caring adults, who are willing to listen to students' problems and who know them as individuals (schoolclimate.org). The literature makes clear that students must feel like a valued part of their school community in order for a positive school climate to exist. In order to feel like they belong in a community, students must feel connected to others. Thapa et al. (2013) argue that how connected people feel to one another is one of the most important aspects of school climate:

> From a psychological point of view, relationships refer not only to relations with others but relations with ourselves—how we feel about and take care of ourselves. Safe, caring, participatory, and responsive school climates tend to foster a greater attachment to school and provide the optimal foundation for social, emotional, and academic learning. (p. 363)

Osterman (2000) also argues that students' need for belonging is an important factor in schools. "In a community, the members feel that the group is important to them and that they are important to the group. Members of a community feel that the group will satisfy their needs; they will be cared for and supported" (Osterman, 2000, p. 324). She finds strong evidence that students who feel they belong are more highly motivated, engaged, and committed in school.

The literature overwhelmingly concludes that a positive school climate has a number of important impacts on students. In their literature review, Thapa et al. (2013) review the literature from all over the world and conclude that a positive school climate has a range of positive effects, from mitigating the impact of socioeconomic status on academic outcomes to reducing aggression, harassment, and violence in the school (p. 360). Cohen (2009) argues that climate promotes academic achievement and positive youth development (p. 100). Other effects of positive school climate may include higher rates of engagement, graduation rates, civic

engagement, teacher retention, and effective school reform (Thapa et al., 2013, p. 359). These factors and conditions are overlapping and "deeply interconnected" (Thapa et al, 2013, p. 359).

Current education literature on school climate, however, does not address school food explicitly. Interestingly, Cohen (2009) cites a high school that assessed its school climate, one of the two areas of greatest concern was the quality of food in the cafeteria (p. 47). However, this anecdote remains unexplored in the literature. However, we can infer from this literature that if food plays a role in students' sense of belonging, community and relationship building, and their sense of care, then research on school food can contribute to this body of work. It seems plausible that the lunchroom and other food spaces would be an important site of development for relationships between school members, and those positive relationships, in turn, would influence the overall climate and numerous factors known to improve schools and learning outcomes. Clearly, more research must be undertaken to explore the impact of school food policy and programs, nutrition, gardening programs, and other nutrition interventions on school climate.

Alternative Food Critiques and Food Justice

There is a body of research in the social sciences, particularly in geography, that critiques the mainstream public health paradigm for understanding food. Scrinis (2012) argues that public health research mostly operates from what he calls a "nutritionism" framework, whereby the dominant mode of understanding the relationship between food and body is reduced to the nutrient level (p. 271). He also critiques "nutritional hubris" as "the myth of nutritional precision, as it involves an exaggerated representation of scientists' understanding of the relationship between nutrients, foods, and the body and a failure to acknowledge the limits of the nutrient-level perspective (p. 273). Poppendieck (2010) argues it is this perspective that results in French fries that count as "vegetables," chocolate milk sweetened with corn syrup, a fruit cup also with

corn syrup, and a hamburger containing sixty ingredients—all counting as a "healthy" lunch, conforming to USDA guidelines for the "correct" proportion of carbohydrates, fats, and calories (p. 5). There is also popular backlash against "nutritionist" advice, as Pollan (2008) famously suggested that we step back and apply "common sense" by not eating anything incapable of rotting and sticking to ingredients one's great-grandmother would recognize as food (p. 148).

Another critique of mainstream food and nutrition discourses is that the connection between diet and disease has overwhelmingly been framed through the lens of obesity. The efficacy of nutrition interventions is usually quantified by using the body mass index (BMI) as a crude marker of a reduction in obesity. For many critical food theorists, this is problematic and overly simplistic. Some have critiqued the BMI metric itself as a useful indicator of health, noting its arbitrary cutoff, inability to accurately measure body fat (as opposed to muscle), and an overreliance on the simplistic connections between BMI and health (Campos, 2004; Evans & Colls, 2009; Scrinis, 2012). Geographer Julie Guthman (2007, 2011) also argues that scientists and nutritionists do not fully understand the relationship between food intake, exercise, health, and obesity, and may be guided by their own aesthetic biases against obesity. In the same vein, education researchers Robert and Weaver-Hightower argues against that this "myopic focus on obesity" which overlooks

> ...equally important health considerations, including malnutrition, exposure to pesticides and food additives, allergies, and even the positive contributions of micro- and macronutrients supplied by school meals. For educators, researchers, and policymakers, these issues should be addressed because they can play a big factor in students' abilities to learn and their long-term potential for success. (Robert & Weaver-Hightower, 2011, p. 12)

In short, these critiques point out that while obesity is an important topic to understand, there are many other ways in which food impacts our lives that have little to do with obesity.

However, "alternative" food spaces, such as farmers' markets, community-supported agriculture (commonly known as CSAs), and school gardening programs, have not escaped critique. Alkon and McCullen (2010) argue that farmers' markets, as well as the broader alternative food movement, are spaces of white privilege, and reflect an "affluent, liberal habitus of whiteness" (p. 4) that situates certain food choices as an ethical imperative, and thus asserts the "moral superiority" of affluent whites (p. 14). White patrons of farmers' markets consistently assumed that what they perceived to be healthy, sustainable eating was a "lifestyle" or "moral" choice, and thus the reason that non-white Americans did not frequent the market was because of a lack of education or health consciousness, rather than structural problems with access and affordability (Guthman, 2008b).

Some scholars also critique Farm-to-School (FTS) programs and other alternative food efforts for reinforcing a neoliberal ideology, and thus actually exacerbating structural inequalities (Guthman, 2006; Pudup, 2008). Allen and Guthman (2006) find that while the goals of an FTS program seem to support local farms and provide nutritious food to children, the rhetoric of the program mirrors neoliberal values by emphasizing personal responsibility, individual success, consumerism, and choice, rather than collective policy change. While this rhetoric may be useful in obtaining funding for such programs, they conclude it ultimately contributes to the normalization of neoliberalism (p. 401). Alvaro et al. (2010) similarly draw upon critical theory to understand why so many Canadian governmental policies focus on individual lifestyles, despite the broader "obesogenic environment" (p. 94). They note that low-income families in Nova Scotia cannot afford a nutritious diet, relying instead on high-caloric processed foods.

Therefore, healthy school policies are limited in their overall effectiveness, since parents cannot buy healthier foods for their children due to structural constraints. They posit that policymakers may feel "obligated or pressured to support individual-level change because this is the dominant discourse" (p. 96) of neoliberalism.

These dominant popular discourses around food and obesity are also evident in the media, such as Jamie Oliver and similar chef programs, or *The Biggest Loser*, which tend to "individualize responsibility for poor health" (Sandler, 2010). In her study of contracted after-school programs that provide tutoring, child care, and recreational activities, as well as snacks and sometimes evening meals (that are not required to meet federal nutrition regulations), Sandler describes how these popular discourses intersect with parents in urban schools in problematic ways:

> These discourses maintain that the poor, inner-city parent—usually single, usually of color—is a deficient, parent: they do not know-or, in the strongest form of this discourse, they do not care—about their children's health and well-being. They cannot be trusted to make good decisions for their children, so these parents must be taught or compensated for by state actors. Urban schools must step up and compensate for what children are not getting at home by providing nutritious meals and teaching children decision-making skills. (Sandler, 2011, p. 26)

On the other hand, Sandler argues, there is the reality that low-income children's hunger is being met by "hundreds of partially publicly funded private organizations that engage with the dynamics of feeding as they see fit" (p. 27)— few of which have been studied in any significant way.

In school gardening programs and elsewhere, the romanticization of agricultural work often overlooks the history of exploitation in U.S. agriculture, including slavery and migrant work (Slocum, 2011). Despite the good intentions of the organizers, not all students experience empowerment and transformation in working the land. Guthman (2008a) finds that "many of the youth of color participating in garden projects see their efforts more as donated labor than therapy" (p. 440). Additionally, the attitude that many (white) food activists take, that they are "experts" who hold "correct and universally relevant food knowledge" leads to the reproduction of social inequalities (Hayes-Conroy, 2014). This can help explain why some African American residents of food deserts prefer the anonymity of conventional supermarkets over farmers' markets due to a history of discrimination at small, local grocery stores (Guthman, 2008a).

"Food justice" is a recent term that is gaining popularity movement. Influenced by the environmental justice movement, it seeks to address the racism and classism within the corporate industrial food system (Alkon, 2011). The goal of food justice activists is for low-income communities and communities of color to be self-reliant, and to provide food for themselves that is culturally appropriate, nutritious, and affordable (p.5). These critiques of the food movement are important, Alkon (2011) argues, because building support amongst those most deeply harmed by the current food system is essential for challenging food injustice. In order to do so, activists must understand the experiences and perspectives of low-income people of color (p. 4). Thus, these critical approaches to food underscore the urgent need for *contextualized* and *nuanced* policy research, able to account for the many different ways people experience food, in schools and out.

Theoretical Framework

This dissertation situates food policy—like other policies that impact education, such as welfare and housing—as an educational concern (see Anyon, 2005b). However, an examination of the literature on school food reveals a conspicuous gap in the field of education regarding the impact of school feeding on schools and students. At the same time, there are an increasing number of small-scale efforts to improve the quality and culture of food in schools that have so far been unexamined by researchers.

Research on school lunch policy, like much policy-focused research, has tended to follow a rational model of problem-research-solution-implementation, as Weaver-Hightower (2008) points out, and has tended to concentrate in the field of public health. This is problematic for several reasons. First, a crucial perspective—that of *education*—is missing almost entirely from the school food policy dialogue. Second, larger discourses on feeding, as well as the public health literature, treat students as passive, one-dimensional consumers of school food, and primarily use quantitative measures which cannot account for the many ways people experience food in their daily lives. In this section, I will briefly explain this approach, its limitations, and why critical policy analysis (CPA) offers a better framework with which to examine school food policy, its implementation, and its reception in the context of urban, high-poverty schooling.

Traditional policy research typically defines a problem, and then possible solutions are identified. The effects, both intended and unintended, are evaluated using specific criteria, such as cost-effectiveness, outcomes, or equity. Often several alternative policies are compared in order to judge the most effective in addressing the problem or objective (Jimenez et al., 2015). There are a number of key assumptions in traditional policy research: 1. that as a deliberate process, policy reform can be planned and managed; 2. that we can explain and predict behavior

within institutions, because goals drive action; 3. that useful and valid knowledge can be obtained in order to decide between policy solutions; and 4. that policies can be evaluated and problems can be identified (Diem et al., 2014, p. 1070-71). While this approach provides a very manageable and rational way of thinking about social problems and solutions, it often misses important views and viewpoints, and fails to account for realities on the ground, which are often irrational, contradictory, and messy.

In education, as in other fields, the traditional model of policy research has been criticized, especially in recent years with the increasing consolidation of power and control in education (Diem et al., 2014, p. 1069). Scholars such as Anyon (1997, 2006), Ball (1994, 1997), Lipman (2004, 2006), McNeil (2000), Ozga (2000), Stone (2002), and Rist (1994), to name a few, have argued that the traditional model is overly simplistic, and treats problems as abstracted from their context (Ball, 1997, p. 264). Furthermore, they argue, the traditional model is only able to account for what is measurable and immediate, failing to understand the broader context (Lipman, 2004, p. 12). In Weaver-Hightower's (2008) assessment, the traditional view

> …relies excessively on assumptions of rationality and the power of human beings to fully understand intricate actions and events. The traditional view, further, grossly misjudges the complexity and grittiness, the false starts, the unabashed greed, and the crashing failures of some policy formation and implementation. (p. 153)

Thus, CPA has emerged in the last several decades to address the "narrow vision" that most education policy studies operate within (Diem et al., 2014).

A major critique of the traditional approach is that it fails to consider the ways in which structural forces and other (often conflicting) policies constrain people's ability to enact the policy as envisioned by policymakers. As Ball observes, much research "about" education that

does not consider itself "about" policy (and we might add food and school food here, as the critique is similar), and thus treats teachers, classrooms, and students as "free-standing and self-determining," and "unaffected or unconstrained" by the interaction of multiple policies – as if their patterns and choices are entirely their own.

> In this sense this kind of research slops neatly back into the unreflexive, 'blame-based' tactics of policy-makers wherein policies are always solutions and never part of the problem. 'The problem' is 'in' the school or 'in' the teacher but never 'in' the policies. (Ball, 1997, p. 265)

This observation is also particularly relevant to a discussion about food, where many studies attempt to understand and quantify the impact of a food policy or nutrition education program, for example, without understanding the context of those nutritional choices, resulting in policies which situate the blame 'in' individuals and their unhealthy food choices, rather than 'in' food policies or structural constraints. For instance, many low-income people certainly understand the dominant view of healthful eating, may even desire to eat this way, and may even have healthy foods available for purchase in nearby stores. However, there may be forces beyond their control that limit their ability to choose the foods they wish to buy, such as the high price of fresh produce compared to the artificially low cost of processed foods. It is important in this view of policy critique, to examine issues of power explicitly, as well as to examine how policies are actually enacted in context, not simply how policymakers expect or assume they will be enacted.

While these critical policy researchers draw from a number of theoretical perspectives (Diem et al., 2014), they primarily focus on critical theory, which aims to

> …reflexively step outside of the dominant ideology (insofar as possible) in order to create a space for resistive, counterhegemonic knowledge production that destabilizes

> oppressive material and symbolic relations of dominance. Critical theorists seek to access 'subjugated knowledges' and often examine the 'micro-politics of power' (Foucault, 1976). (Hesse-Biber & Leavy, 2006, p. 35)

While traditional positivistic research is often motivated by a "social efficiency" goal, CPA seeks social justice as its ethical grounding (Ball, 1997, p. 264). Thus, different questions are asked, compared to traditional positivistic research. In addition to examining the larger context—the systems, culture, institutions, structural and historical conditions—questions involve "whose interests are being served by the way the educational system is organized, who really has access to particular programs, who has the power to make changes, and what are the outcomes of the way in which education is structured" (Merriam, 2009, p. 35). Other questions involve how power is negotiated and how the current distribution of power reinforces social inequalities (Merriam, 2009, p. 35). For example, scholars might ask, "Who is behind this policy?" and "Who is the voice that's being privileged in this situation, and whose voice is being marginalized?" (Diem et al., 2014, p.1082).

Below I will expand on several main differences between traditional policy research and critical approaches: an examination of power, an emphasis on understanding context, and the importance placed on examining discourses and giving voice to the people who are affected by policy. Finally, Weaver-Hightower offers an "ecology" metaphor for understanding policy (Weaver-Hightower, 2008).

A key focus of the critical approach is a close examination of power dynamics. Because CPA is interested in promoting social justice, it examines hegemonic social structures for how they result in "the marginalization and oppression of those without power" (Merriam, 2009, p. 35). Lipman (2004) argues that policy debates are contentious precisely *because* they are about

power: “who gets to define social agendas, how they are defined, and what alternatives are presented as viable” (p. 14). CPA questions these assumptions, exposing issues of unequal power relations, and exposes where “...dominant interests seek to further their social and political agendas by presenting them as the common interest” (p. 14). Noting Prunty’s contribution (1985), Weaver-Hightower (2008) points out that “policies serve the interests of specific people, usually the already powerful. Policies are, in other words, inherently political” (p. 153). So, if policy is an expression of values (Ozga, 2000), *whose* values get expressed and in what ways are important considerations. CPA challenges the assumption of “value-neutral” decision making, and that issues of power must be attended to (Weaver-Hightower, 2008, p. 153).

Ball (1994) argues that we should understand how “collections of related policies” exercise power through knowledge production and truth claims. These discourses

> are about what can be said, and thought, but also about who can speak, when, where and with what authority. Discourses embody the meaning and use of propositions and words. Thus, certain possibilities for thought are constructed. (Ball, 1994, p. 21).

He draws upon the work of Foucault and post-structural analysis to examine how discourses transmit, produce, and reinforce power, and also how they can undermine and expose power (p. 2). Analyzing dominant discourses is important because, as Lipman argues, they legitimate social order by constructing “‘commonsense’ understandings, or taken-for-granted assumptions, about social reality” (p. 14). Ozga (2000) questions the source, scope, and pattern of policy, and looks for the “narrative” in policy texts:

> …they tell a story about what is possible or desirable to achieve through education policy. They are thus able to be read as any narrative is read: they may be scrutinized for their portrayal of character and plot, for their use of particular forms of language in order

> to produce impressions or responses; they may have an authorial 'voice' or seek to convey the impression of multiple viewpoints. (Ozga, 2000, p. 95).

Discourses have the power to uphold a hegemony, and "work to impose a particular understanding of social problems and to define the parameters of possible alternatives so as to limit the possibility of thinking otherwise" (p. 14). In these ways, CPA calls for a close examination of the truth claims and narratives that policies promote, in both official and unofficial policy documents, literature, and wider discourse.

One main difference between traditional policy research and critical approaches is the emphasis on understanding the complexities of the policies, people, schools and communities impacted by a policy (Diem et al., 2014, p. 1082). We must contextualize the social and power relationships of those writing, implementing, and experiencing policy, taking into account global economic and cultural forces (Ozga, 2000, p. 13). CPA overturns the assumption that policies are always "clear, abstract and fixed" and can be "realized in the same way in every setting" (Ball, 1997, p. 265). Rather, CPA acknowledges that policies can be "awkward, incomplete, incoherent, and unstable" and "that local conditions, resources, histories and commitments will differ and that policy realization will differ accordingly" (p. 265). In this way, CPA examines "the difference between policy rhetoric and practiced reality" (Diem et al., 2014, p. 1072).

As a result of this emphasis on understanding context, CPA advances a broader view of "policy" and "policymaker" than traditional policy approaches do. Ozga (2000) argues that we should not restrict our understanding to those documents with "policy text" stamped on them. Rather, we should widen our view, as long as there is clear justification (p. 95). Ball (1994) also argues that discourses are part of policy, along with policy texts. Similarly, both Ball and Ozga argue for a broader definition of "policymaker," so that in Ozga's (2000) work, teachers and

other school personnel can be policymakers, since they are deciding how to implement state and federal policies (p. 3).

Ball (1997) discusses the displacement of people in traditional policy research. Where people are present in traditional research at all, they are often "cardboard cut-out people, one-dimensional caricatures who fail to display the complexities, contradictions and paradoxes that you and I demonstrate in the face of change" (p. 270). Consider his observation about traditional policy research in the following passage:

> The prevailing, but normally implicit, view is that policy is something that is 'done' to people. As first-order recipients 'they' 'implement' policy, as second-order recipients 'they' are advantaged or disadvantaged by it. (Ball, 1997, p. 270).

Instead, he calls for the "peopling of policy research" where we "capture the complex interplay of identities and interests and coalitions and conflicts within the processes and enactments of policy" (p. 271). He challenges us to think about the people and voices in our work and "how we engage with the social and collective identities of our research subjects—the 'teacher,' 'parent,' 'policy-maker': their gender, class, race, sexuality, and physical ability" (p. 271). This "peopling" of policy is essential to the idea of policy enactment, which "refers to an understanding that policies are interpreted and 'translated' by diverse policy actors in the school environment, rather than simply implemented" (Braun et al., 2010, p. 549).

Ultimately, critical policy analysis is grounded in "a commitment to transform social relations" (Lipman, 2004, p. 13). It seeks to expose taken-for-granted assumptions in the dominant discourse and "cultural systems that oppress and marginalize certain groups of people" (Merriam, 2009. p. 36). Because of this commitment, many critical scholars see the purpose of their work as informing and influencing policymakers and to "bridge the gap between policy and

practice" (Diem et al., 2014, p. 1078). A critical orientation also "enabled them to communicate authentically with and be useful to a variety of stakeholders," especially to local educators (p. 1078).

Lipman calls her work "politically engaged ethnography and activist research" (Lipman, 2005) within the context of neoliberal economic policies that have contributed to a growing socioeconomic inequality. Such policies include the "unregulated global flows of capital, multinational agreements to liberalize trade (e.g., the North America Free Trade Agreement), structural adjustment policies...," which cheapen labor, lower wages, break unions, reduce benefits, export jobs, and degrade health and safety standards (Lipman, 2005). As Bourdieu (2001) argues in his last book, the threat of neoliberalism is so great that academics can no longer afford to be objective. He, too, encouraged scholars and activists to mobilize and form a "collective work of critique" (p. 14) in resistance to this threat. Thus, critical policy scholarship can be directly applicable to local practitioners as well as policymakers who wish to advance social equality and push back against harmful policies.

Weaver-Hightower (2008) suggests critical policy researchers apply the metaphor of an ecology to their analyses, in order to study the contexts of policy systematically (p. 154). He argues that

> A policy ecology consists of the policy itself along with all of the texts, histories, people, places, groups, traditions, economic and political conditions, institutions, and relationships that affect it or that it affects. Every contextual factor and person contributing to or influenced by a policy in any capacity, both before and after its creation and implantation, is part of a complex ecology. (Weaver-Hightower, 2008, p. 155).

A researcher would examine the ecosystem's actors, relationships, environments, and processes. "A policy ecology analysis urges the researcher to identify the influential actors, to understand what relationships exist and must be dealt with or changed, and what challenges reside in the environments and processes of any ecology" (Robert & Weaver-Hightower, 2011, p. 11). Drawing from other theories such as organizational theory and systems analysis, he argues that "the metaphor of an ecosystem is more appropriate than one of *stages* or *circuits* because the interaction of environments, groups, and events capture better the fluidity of policy processes" and can better incorporate the "messy workings" of power relations, history, culture, economics, and social change (p. 154). Thus, a critical approach to school food requires us to ask, "Who feeds whom what, how, and for what purpose?" (Sandler, 2011, p. 33).

Using critical policy analysis, this study attempts to understand the ways in which school food policies are actually "enacted" (Braun et al., 2010) and experienced by people on the ground. It will examine the key issues of power, what values get expressed through nutrition policies and who benefits. It will also examine the discourse on nutrition and school lunch programs, asking whether participants share the same understanding about food and its impacts as policymakers. It will provide a broader context to the issues that are important to participants with regard to food at school, to shed light on both problems and solutions that have largely gone unexamined in the field of education. And it will view students, school food workers, school aides, teachers, and administrators not simply as recipients of policy, but as having agency, shaping the ways in which policies are actually understood and enacted.

Critical policy ethnography offers a methodology capable of examining "questions that are often ignored or silenced by traditional strategies and enables the researcher to explore the practices that create, enable, and sustain educational policy" (Diem et al., 2014, p. 1073). This

dissertation will contribute to the emerging literature on school food in education, which will in turn inform education policymakers, practitioners, and policymakers on new ways to improve the well-being and educational experiences of low-income children.

Conclusion

This chapter situates the existing research on school food policy and practice within larger discourses on whole-child reforms in the field of education, as well as literature on food in public health, sociology, history, and geography. It has identified gaps in the literature, notably an absence of analysis and critique by education researchers on the impact of school food policies on schools and students, as well as a lack of evaluation of innovative new ways of doing school food.

There are unresolved tensions in the motivations for current school lunch policy, for instance, between the desire to reduce obesity rates and the need to reduce hunger in schoolchildren. Furthermore, the effects of school food cannot always be quantified. Federal policies that simply reduce calories in school lunches to address rising obesity rates across all socioeconomic levels may ignore the very real concerns over food insecurity, hunger, and malnourishment that low-income people face daily. The singular focus on reducing obesity and measuring the effectiveness of nutrition programs through obesity markers, may ignore other ways in which food impacts students' health, learning, and engagement in schools. Quantitative measures cannot fully account for the complexity of the school food policy ecology—where popular discourses on nutrition and health that frame healthy eating as an individual choice, as well as national policies and reforms, privately funded programs, and the realities of poverty and urban schooling intersect. Ultimately, scholars of public health, educators, and those in the social sciences must work together to address these complex issues.

In this study, I seek to bridge the gap in the literature on the topic of school food, particularly as it relates to education. Both current school lunch policy and educational reforms fail to consider the educational impact of school food policies. They also do not address the potential for better nutrition and different ways of feeding students to improve school climate and educational outcomes. As Robert and Hightower (2011) argue,

> Questioning the current school food ecology should be accompanied by a vision of what ought to be. Knowing who feeds whom, what, how, and for what purpose—and knowing the sociocultural systems of inequality that frame the what, how, and why—should be a starting point, not the end goal. (p. 205)

In these complex circumstances, "ethnographers are wont to move both closer in and further out, to gain a thick understanding of day-to-day life in urban schools from the perspective of those targeted by policies and reforms, and to also place this day-to-day life in its broader political context and historical perspective (Sandler, 2011, p. 27). Thus, a well-designed qualitative study using critical approaches for analysis is urgently needed to illuminate emerging questions about the role of food in schools, and to identify future lines of research. In the following chapter, I will present this study's design, outlining the methodological choices and rationale that follow from the gaps in the literature and the theoretical considerations outlined here.

CHAPTER 3: METHODS

Overview

As discussed in the literature review, people living in poverty suffer disproportionately from hunger, malnutrition, and chronic diseases related to malnutrition. Since children who experience food insecurity are more likely to have health problems such as asthma, aggression and violence, inattention and hyperactivity, vision problems (Basch, 2011), and more frequent stomachaches, headaches, and illnesses (Alaimo et al., 2001), some argue these disparities are an overlooked influence on the achievement gap (Basch, 2011, p. 593; Center on Hunger, 1998). Thus, it seems logical that low-income students and schools could greatly benefit from school lunch programs intended to improve nutrition. This study is designed to investigate how participants understand efforts to change school food in ways intended to promote health, and what they perceive the impact to be on their classrooms and schools. It addresses the following research questions, repeated from chapter one: *How do students experience different approaches to school lunch in high-poverty schools?* Additionally, I ask:

- *How do students and educators experience traditional lunch programs?*
- *How do students and educators experience a school lunch program designed to provide fresh, whole foods in a communal way?*
- *Comparing the two programs, how do students and educators understand the differences in the kinds of foods offered, the food quality and presentation, and the modes of delivery?*
- *Comparing the two programs, how do students and educators understand the differences the lunchroom climate, and the learning environment more generally?*

Because these questions are concerned with participants' *experiences* and the meanings they ascribe to them, which require in-depth knowledge in context, qualitative methods are warranted in this study (Merriam, 2009, p. 23). Qualitative research, unlike quantitative research, makes observations over time in a natural setting, with face-to-face interactions and multiple sources of data (Creswell, 2009). As Hesse-Biber and Leavy (2006) note, while quantitative studies, such as medical studies, can provide knowledge about something, "only qualitative research can address the experience of [it]" (p. 4). Flyvbjerg describes the benefits of qualitative research, which can account for the "complexities and contradictions of real life" (Flyvbjerg, 2006, p. 237). Interviews can provide objectivity by "allowing the object to object" (Kvale & Brinkman, 2009, p. 243). In my observations and interviews, I have been particularly attentive to any tensions and contradictions, especially those who question or critique their school's lunch program or the policies which undergird it. Given my grounding in critical policy analysis (CPA), my data collection pays particular attention to issues of power and to participants' understandings of health and food, and how these may differ from policymakers'. Thus, this study is a multi-sited ethnographic case study, which I will explain below.

Ethnographic Case Study Research Methods

Case Study. This study is a "case study," because the focus of the research is on lunch programs at three schools. When the unit of analysis is a "bounded system" it is described as a "case study" (Merriam, 2009, p. 23; Creswell, 2009, p. 13). While there is no consensus on the definition of "case study" (Bassey, 1999, p. 27), it has been described as a study that "investigates a contemporary phenomenon within its real-life context" (Yin, 2008, p. 13). It is "intensive, holistic description and analysis of a single entity, phenomenon, or social unit," and is "particularistic, descriptive, and heuristic" (Merriam, 2009, p. 18). Case studies are especially

useful when it is impossible to separate variables from the context (Yin, 2008; Simons, 2009) and are "widely accepted as a research approach for evaluating complex education innovations in specific contexts" (Simons, 2009, p. 13). They are also useful for "exploring and understanding the process and dynamics of change" (p. 23). For example, this study looks at an innovative lunch program which integrates freshly-prepared whole foods (the "Fresh & Healthy" program), fairly recently implemented at two sites, as well as a more typical "heat-and-eat" prepackaged lunch program ("Traditional Lunch Services," or TLS).

Case studies have several other advantages as well. They can be flexible in time-scale, focus on issues, allow for multiple perspectives, and "represent different interests and values in the programme" (Simons, 2009, p. 18). They can be "a step to action" and "their insights may be directly interpreted and put to use" (Bassey, 1999, p. 23), which is helpful, especially for policymakers. When written "in the language of participants," case studies can allow "access to findings that others can recognize and use as a basis for informed action" (Simons, 2009, p. 18).

A "case" is chosen because it is an instance of a process, issue, program, or concern, or because it is "intrinsically interesting" to the researcher (Merriam, 2009, p. 42). Researchers look for what is common and particular about the case (Stake, 1995, p. 238). Merriam argues that "particularization," not generalization is the aim, to "add to knowledge of a specific topic" (Merriam, 2009, p.24). However, others argue that when the case is well chosen, it can allow for qualified generalizations. However, these generalizations will be "fuzzy," meaning they can tell us that something *might* happen, "but without any measure of its probability" (Bassey, 1999, p. 46). Flyvbjerg (2006) argues that we can increase generalizability through the "strategic selection of cases" rather than randomized sampling (p. 229). He argues that the typical case does not provide the richest information. Instead, we should look for *critical cases*, rich in detail,

in order to "clarify the deeper causes behind a given problem and its consequences" rather than to merely "describe the symptoms of the problem and how frequently they occur" (Flyvbjerg, 2006, p. 229). Later in this chapter, I describe in detail how I came to choose a "typical" case (the Traditional Lunch program) and a "critical" case (the Fresh & Healthy program), as well as a combination of the two, for this collective case study.

Multi-sited Cases. When a set of several cases is researched, it is called a "collective case study" (Stake, 1995) or a "multi-site case study" if multiple sites are involved, where "the individual cases share a common characteristic or condition" and are "categorically bound together" (Stake, 2006, p. 5). O'Reilly (2009) argues that multi-site ethnographies could be considered a form of collective case study (p. 26). In this study, there is cross-case analysis of three programs, which are instances of school lunch policies in action: one a more "typical" (the pre-made and reheated) and two innovative (the Fresh & Healthy program). The sites where these programs occurred provide rich, real-life context, where variables have been controlled for to the extent possible (all three sites are small, non-public elementary/middle schools, serving a primarily low-income African-American population, located in an urban environment).

Ethnographic Methods. Not all case studies use qualitative methods, however, so labeling a study a "case study," does not indicate any particular methodology. Ethnographic methods were chosen for this dissertation, since an in-depth understanding of the context, culture, actors, and relationships was required to address the research questions. What defines ethnography is its focus on human society and culture (Merriam, 2009, p. 27), in order "to understand the interaction of individuals not just with others, but also with the culture of the society in which they live" (p. 23). Data collection consisted primarily of participant observation and interviews, which provide "thick description" (Geertz, 1973). Ethnography requires

researchers to "go inside the social worlds of the inhabitants of their research setting, hanging out and observing and recording the ongoing life of its members" in order to "provide detailed accounts of the *everyday practices and customs* of a culture, subculture, or group" (Hesse-Biber & Leavy, 2006, p. 230). Ethnographic case studies use these methods to "focus on a *particular* project or programme, though still aspiring to understand the case in its socio-cultural context and with concepts of culture in mind" (Simons, 2009, p. 24). However, there is a recognition here that "true" ethnographies, as done in anthropology for example, are so very time-consuming, it is rare that they include multiple sites (O'Reilly, 2009, p. 26). Thus, an ethnographic case study is perhaps better described as "micro-ethnography" (Simons, 2009, p. 23).

Critical Ethnography. Finally, in alignment with this study's theoretical framework, I draw from critical ethnography as well. As Merriam (2009) explains, "what makes critical research *critical* is that it seeks not just to study and understand society but rather to critique and change society" (p. 34). This tradition situates the research within political, social and cultural contexts, examining power: who has it, how it is distributed and negotiated (p. 10). Critical policy researchers, such as Jenny Ozga (1990) argue for ethnographic methods to analyze policy. She argues that policy research should "bring together structural, macro-level analyses of social systems and education policies with micro-level investigation, especially that which takes account of people's perception and experience" (p. 359). Similarly, Lipman (2004) links political, cultural analysis of education policies with ethnographic approaches that are rooted in a particular time and place. She believes a multi-level analysis of structural and cultural perspectives is necessary in order to understand the complexity of policies as enacted on the

ground and to present new possibilities for agency (p. 16). O'Reilly describes what critical ethnographies do:

> Critical ethnographies therefore attempt to expose the hidden agendas, challenge oppressive assumptions, describe power relations, and generally critique the taken-for-granted. They are explicitly political and critical but do not consider this to undermine the scientific nature of what they do. Indeed, critical ethnographers argue that every attempt at representation has consequences and that there is no neutrality. (O'Reilly, 2009, p. 52)

Merriam (2009) notes that critical approaches can be combined with other methodologies (p. 36); here, critical ethnography is combined with case study.

Site Selection Process

As a former public-schoolteacher, I began this project with a hunch, from my own teaching and life experience, that students' health and ability to learn is impacted by food in more ways than educators typically acknowledge. At the outset, I assumed, as many do, that the main problem with unhealthful eating was a lack of nutritional knowledge, which could then be remedied by more effective nutrition education programs. I was especially drawn to what I now see as a romanticized idea of school gardening programs, that seek to provide "hands-on" nutrition education. In the summer of 2012, I visited several sites: a school-based farming program connected to a local food co-op, a well-funded city-wide school gardening program in about 20 city schools, and a local urban farm that provided summer jobs and field trip opportunities to several neighborhood schools.

However, as I spoke informally with garden educators, I began to realize that very little of the produce grown at the farms actually made its way into the school cafeterias. Several educators expressed frustration that while they generally felt positively about their ability to get

students interested in growing, eating, and preparing fresh vegetables and fruits, many students still could not afford to buy such produce at their own farm stands. I realized that access to fresh food, due to cost and other factors, was a much bigger problem than simply "educating" people about more "healthful" ways of eating. This led me to focus on what was happening in school cafeterias. Why was it so hard to get fresh food, even produce grown in their own school gardens, into students' meals? Recalling my own experiences as a teacher doing "lunch duty," I also had questions about the culture of lunchtime and the possible impact of fresh food on the learning environment.

My original plan was to compare lunch programs in a low-income urban public school with a wealthier suburban public school nearby. I approached the school district in which I lived at the time, one of the wealthiest in the area, but I never could get past the secretaries. They would give me a phone number of a district official, who sent me to someone else, where my voicemails would go unreturned. I realized I would need to have some sort of personal connection, an "in," to gain access to a school, especially at the district level. It proved much easier to do this at small, independent schools. As my proposal evolved, I decided to focus on comparing lunch policies across similar low-income schooling environments, but I still hoped to include a city public school as well.

In the fall of 2013, as I neared my proposal defense, I leveraged a connection to the principal of a low-income independent school, Mr. Ford. He graciously agreed to allow me to conduct my first round of research at his school. After my proposal defense, I applied to Temple's Internal Review Board (IRB), which took over a month to approve my study. It took another full month to get in touch with the point person Mr. Ford assigned to me. Unfortunately, my first planned visits in November of 2013 were postponed due to snow days and holidays, so

after one initial visit in December, I began observations in earnest in January 2014, completing them in June 2014.

During the spring of 2014, I began to reach out to other contacts for my second site. After consulting several former teachers in the school district, I compiled a short list of possible schools. After attending a prospective parent tour of the most promising public school, I approached the principal. It took several visits reaching out to her before she finally agreed to allow me to conduct my second phase of research at her school. Despite her written approval, however, the Southampton school district denied my request, several months later in the summer of 2014. Its reasoning was that there were already too many studies being conducted in the district on school nutrition at that time, and my study would overburden their office and school personnel. This decision set my study back by several months, as I scrambled to find another site. I reached out to several friends and colleagues, who referred me to various charter schools. I was gently warned at one particular charter school that it would take months to gain the appropriate approvals because it was part of a larger charter school network. This was quite discouraging. Most discouraging, though was how often my emails, phone calls, and pleas went unanswered.

In the fall of 2014, I again leveraged a personal connection with an education consultant with whom I formerly worked, and secured a charter school as my second site. Again, this process, and IRB approval, took much longer than I anticipated. I began observations in November 2014 and continued through March 2015.

Having at this point given up on the possibility of including a public school, I began leveraging yet another personal relationship in February 2015 with a woman at my church who worked for an independent middle school that had recently built a kitchen to house the same

Fresh and Healthy Program as my first site. After several months of back-and-forth emails, including a lengthy personal plea to the head of school in which I included my initial findings from the other sites which I had presented at the American Educational Research Association, I was finally approved in May of that year, and promptly began my observations. Luckily, this school operated on a trimester schedule, and had a summer program, so I was able to continue my observations through July. I also conducted a follow-up visit at Thanksgiving, as well as several more interviews between September and December 2015.

Overall, I found that the only successful efforts on my part occurred when I had a personal connection to the school administration. I also found, as many researchers have before me, that small, independently run schools, such as charter, private, or independent schools, were much more welcoming and amenable to my study than large districts and charter networks. Without layers of bureaucracy, I only had to convince one or two people of my own trustworthiness and the merits of my study, and it helped immensely to have others vouch for me on a personal level. However, because of these prior relationships that I drew on, at times I worried that staff and students might see me as aligned with the administration.

I understand why, in this era of high-stakes accountability, school officials are reluctant to agree to unknown parties investigating and asking questions at their schools. At the same time, however, I also wonder about the quality of studies conducted inside school buildings, especially the schools most in need (low-income, minority, with much turnover), when school district officials are so guarded. When some, particularly those that are struggling, refuse to let researchers inside at all, how can we make meaningful comparisons across schools and districts?

For this study, each of these challenges in negotiating site access resulted in a reconsideration of my methods. Ultimately I am very pleased with the comparison between the

two lunch programs that I was able to achieve across the three sites, which ended up being quite similar in location, population, and school policy environments. However, I also regret that I cannot make conclusions about a larger district or a public school environment due to a lack of access.

Design of the Study

In this multi-sited ethnographic case study, between December 2013 to August 2015 (and additional follow-up in November 2015 and April 2017), I conducted participant observation weekly for four to five months at each of the three sites, for a total of 109 hours of observation, as well as 59 interviews of students, teachers, aides, and administrators. Informed by critical policy analysis, I looked for ways in which participants' understandings and concerns about food differed from official recommendations, guidelines, and discourses, and the intentions of the policymakers. I sought to understand how they thought about food in their school, the quality and quantity, the mode of delivery, and the impact on learning. I was curious to see whether low-income African-American children and their (generally) white middle-class teachers came to similar or different understandings about the effects of their school's food program.

The Research Sites

Yin (1994) argues that "each case must be carefully selected so that it either (a) predicts similar results (a literal replication) or (b) produces contrasting results but for predictable reasons (p. 46). I purposefully chose each of these lunch programs and sites because they serve as "critical cases" to investigate more deeply a problem and its consequences, rather than to merely "describe the symptoms of the problem and how frequently they occur" (Flyvbjerg, 2006, p. 229). Below, I explain my rationale for selecting sites and my data collection procedures.

In selecting sites, I sought to find schools that were as similar as possible, for a more meaningful comparison between the different lunch programs. All three are high-poverty schools[1], and participate in the Community Eligibility Provision (CEP)[2], so they offer breakfast and lunch at no cost to all of their students. All three serve primarily African-American students, all located in "food deserts" in different sections of the same major city in the Northeastern United States. All three operate outside the traditional public school model, which allows them to experiment with different methods more easily, as school officials have the ability to make decisions over lunch without a large bureaucracy. Franklin Elementary and Chester Episcopal School are independent, and Washington is a charter school (see Table 1 below).

Table 3.1 ***Site Information***

	Franklin Elementary	Washington Charter	Chester Episcopal
Type	Independent	Charter	Independent; Episcopal diocese-affiliated
Grades	PreK-5	K-6	5-8
Enrollment	91	168	64
African-American	96%	91.3%	96.8%
Economically Disadvantaged	90%	95.6%	100%
Average class size	15	22	16
Lunch program (per week)	TLS 4 days F&H 1 day	TLS 5 days	F&H 5 days
Breakfast	TLS 4 days F&H 1 day	TLS 5 days	TLS 5 days

[1] High-poverty schools are defined by the National Center for Education Statistics as schools where more than 75% of students are eligible for free and reduced-price lunch. (https://nces.ed.gov/programs/coe/indicator_clb.asp). Income eligibility guidelines for free and reduced lunch in 2013-14 were $31,005 and $44,124, respectively, which is 130% and 185% the federal poverty line of $23,850 in 2014.

[2] The Community Eligibility Provision (CEP) is a provision of the Healthy, Hunger-Free Kids Act of 2010, which allows high-poverty schools and districts to serve meals at no cost without collecting applications. (https://www.fns.usda.gov/school-meals/community-eligibility-provision)

I chose these sites because of the similarity in demographics and neighborhoods, the autonomy administrators enjoyed over most decisions, and their differing lunch policies. Chester has a whole foods lunch every day, Washington Charter has a traditional lunch every day, and Franklin has a partial implementation of the same whole-foods program one day per week, with the same traditional lunch the remaining four days.

The Lunch Programs

In order to make the comparisons meaningful, I chose sites with important differences in lunch policies and practices. At the time of the study, Chester partnered with the Fresh and Healthy Program (F&H) to provide a freshly prepared, whole-foods lunch every day of the week; Washington had a more traditional heat-and-eat style lunch provided by Traditional Lunch Services (TLS), and Franklin had a combination of the two—a partial implementation of F&H program one day per week, with TLS providing lunch the remaining four days. At both Washington and Franklin, the traditional lunch from TLS was sourced from the same vendor: students were served prepackaged and reheated meals that include typical cafeteria food, such as chicken nuggets, pizza, or hamburger, with an apple or baby carrots, and a milk (strawberry, chocolate, or plain low-fat), served in disposable containers with plastic covers, and disposable plastic "sporks." Students line up to receive their meal components as the lunch manager checks off their names from a computer program. The Fresh and Healthy Foundation provided technical assistance to schools, which hired a local chef and prepared fresh meals on-site from whole ingredients. Meals might include roast chicken, fish tacos, or baked ziti for entrees, a green salad with homemade dressing, roasted zucchini or broccoli as a side, and strawberries and homemade whipped cream for dessert. The meal features an abundance of fresh, colorful fruits and vegetables, both raw and cooked. The meal is served family-style, with students, teachers, and

administrators eating together at round tables, set with tablecloths, ceramic dishes and silverware. The chef often circulated to see how the meal was being received.

Data Collection

My data primarily consist of interviews with school community members about how they experience school food and food policy and the impact on students and the school. I also conducted observations of staff and students as they interacted during lunch, of the physical environment, and of other food-related spaces within the school (e.g., nutrition class, school garden, food event). Finally, I considered artifacts and literature from lunchrooms and classrooms.

Table 3.2 ***Summary of Data Collection***

Site	Hours of Observation	No. of Visits	Dates	Interviews
Franklin School	32.5	16	12/18/13-5/21/14	18
Washington Charter	33	13	11/13/14-4/7/15	19
Chester Episcopal	43.5	16	5/6/15-8/6/15 & 11/24/15	18
TLS and F&H officials			7/27/15 & 3/20/17	4
Total	109	45	12/18/13-11/24/15	59

Observations. My observations primarily occurred in community spaces: at lunchtime, and in classrooms, hallways, assemblies, and after-school programs. I observed most often in the cafeterias and in classrooms: a fifth-grade classroom at Franklin, a mixed-grade (4th through 6th) classroom at Washington, and a fifth-grade English classroom at Chester. However, I also observed nutrition classes, cooking classes, and community events, to get a sense of the

messages students were receiving about food and the school climate and culture overall. Participants were recruited at each site through the "snowball sampling" technique (Hesse-Biber & Leavy, p. 71), beginning with my "gatekeeper"— in two out of the three sites, this was the principal.

I began my research at each site by conducting observations in the cafeteria during lunchtime, introducing myself and the purpose of my study. During these informal conversations, I identified key informants, including a teacher whose classroom I wanted to observe, and asked them for permission to observe their classroom and students before, during lunch, and after lunch, once per week for several months. I also ensured the selected teacher was willing to be interviewed. As I observed students before and after lunch, I paid particular attention to signs of engagement, such as heads being down, or fidgeting. I also listened for any comments or questions that would indicate if and when students became hungry.

At Franklin, I followed a fifth-grade class before, during, and after lunch. I also observed a nutrition lesson with the same class, as well as an after-school cooking class, and a holiday assembly. In the classroom, I helped tutor students, I passed out papers, and sometimes watched the class while the teacher went to make copies. I helped monitor students as they lined up before and after lunch, and as they walked through the hallways. At Washington, I also helped tutor students during class time, especially as their state test approached. I helped students with their test preparation booklets. I observed an after-school cooking class--the final in a series that culminated in a dinner for their parents--as well. I also observed a school-wide talent show. At Chester, I was just an observer in a fifth grade English classroom. The teacher did not seem to want me to engage much with the students. I also observed in the chapel before the school

gathered together before a community lunch every Wednesday, as well as a Thanksgiving dinner attended by parents.

I also participated in preparing for and cleaning up after lunches. At Franklin, I often helped prepare the salad, chopping vegetables and fruits, as I chatted informally with the chef and other volunteers. Once, I even whipped cream by hand with a whisk. I sat with groups of children at the round tables and shared in the Fresh & Healthy meal with them. On TLS days in the cafeteria, I either sat with a group of teachers who were eating their lunches, or sat with children and informally talked to them about TLS lunch and the school in general. At Washington, my role in the cafeteria was as an observer. The lunch workers always declined by offers to help, and there were fewer opportunities to prepare food. I sat off to the side, watching students from a distance, because students already had assigned seats, and there was no room for me to sit with them. However, the upper grades ate lunch in their classroom. When I followed the class before, during, and after lunch, I stayed in the classroom while an aide monitored lunch, and I was able to sit with and speak to those students more. At Chester, the chef rarely needed help in the kitchen, but I often helped the lunch aide set up for lunch, and clean up after lunch. Students there stayed until 5:00pm each day, and so I also helped deliver and distribute the afternoon snacks, sometimes called "cold dinners," directly to the classrooms. I also collected menus, schedules, class handouts, and nutrition curricular materials at each site.

Once I had built rapport with the teacher whose classroom I observed, and had observed for enough time to get a "feel" for and build rapport with the students, I asked the teacher for advice about how to interview students. I found that it was best to send consent forms home with all students. Teachers then helped me choose student interviewees from those who returned their forms and assented to being interviewed themselves, taking into consideration how comfortable

they might be in speaking to me, and balancing other factors like gender. While I did my best to control for age and achieve gender parity, I was unable to do so at every site. As Hesse-Biber and Leavy (2006) acknowledge, my choice of informants, particularly for the students, depended heavily on who was available and willing (p. 71). For instance, at Chester, after several attempts, I only received four consent forms back from the fifth-grade students' parents. They were all girls, so I was unable to achieve gender parity at that site. At Washington, it turned out that the class was a mixed-grade class which included grades four, five, and six. Thus, some of the students I interviewed there were younger or older by one year than the students I interviewed at the other two sites. All in all, however, I was able to keep most variables generally constant, such as type of school policy environment (small, non-public), socioeconomic status, race, and general age of students whom I interviewed.

Semi-Structured Interviews. In this study, I conducted semi-structured interviews to learn about the meanings students, teachers, staff, and administrators ascribe to their experiences with food at their school. I began with a pre-determined list of questions (see Appendices A, B, C, and D for interview protocols), but I also allowed the conversation to flow as naturally as possible. I wanted interviewees to feel comfortable telling me what *they* wanted me to know about the topic and not feel confined to my list of questions. I also wanted to have the freedom to follow up on an interesting point they made during the interview. At the same time, in order for consistency across interviews and to be able to make meaningful comparisons, I had several general "areas" I made sure to cover during each interview, such as their own understanding of what healthy food was, their observations and feelings about their school's lunch program, and any comparisons, changes, or effects they saw between the two programs they saw. Because my interviews were often conducted during school hours, when participants were pressed for time, I

quickly "set the stage" of each interview, opened by directly stating my purpose, and delved right into the most important interview questions (Kvale & Brinkmann, 2009, p. 130). In this way, I was able to cover more ground in a shorter amount of time.

In all, I conducted 59 semi-structured interviews with fifth graders, teachers, staff, administrators, and board members across the three sites, as well as two interviews with management at the Fresh & Healthy Foundation and TLS, one of which was a group interview.

Table 3.3 ***Interviews***

	Franklin	Washington	Chester	Total
Students	6	8	4	16
Teachers	6	5	5	16
Staff	2	4	5	12
Administrators	3	1	3	6
Board Members	1	1	1	3
TLS officials	--	--	--	3
F&H official	--	--	--	1
Total	18	19	18	59

Interview length varied, based on time constraints and age. Student interviews averaged about 20 minutes, which was as long as I could keep their attention, while teacher interviews averaged about 45 minutes to an hour (the length of a prep period, in most cases), but administrator interviews were often longer. Interviews took place during or after the school day, at a time and location of the interviewee's choosing. Teachers generally opted to be interviewed during their preparation period or lunch, in their classrooms, and often only had one class period available for the interview or less. As a former teacher myself, I was conscientious about that time constraint. Students, on the other hand, were generally less talkative and thus, their interviews were shorter. Students were interviewed at a convenient time and place dictated by their teacher that would minimize disruption to their learning (e.g., during silent reading time,

etc.), and were always conducted in a public place (e.g., a hallway nook). Some administrators chose a time during the day, while others opted for after school, depending on what their schedule allowed. Most adult interviews were conducted in an empty classroom, office, or library, but particularly at Chester, some interviews were conducted in an open space like the dining hall, where other teachers or students were. I took great care to pause the interview if there were other students or teachers in close hearing distance, and sometimes checked in with the interviewee mid-interview to see if they were still comfortable with the location. Two of the board members were interviewed in their homes, while one was at a cafe.

I asked participants about their understanding of the role of food in school and the reasons for and the effects of the particular food policies at their school. They were asked about their views, preferences, and feelings about food and the learning environment, and at the two sites that had an alternative program, changes or differences they have noticed before and after the whole-foods lunch was implemented.

Data Analysis

I sent interview recordings to be transcribed by a recommended and reputable professional service, taking care to ensure participants' anonymity by never revealing site names, locations, or participants' last names. Transcripts were returned within 24 hours, generally allowing me to read and reflect on them before the next interview. During all phases of data collection and analysis, I regularly wrote analytic memos to reflect and expand upon my field notes and interview transcripts, to identify and explore emerging themes, and to assess my process (Saldana, 2016, p. 44). I involved my participants in identifying themes and codes by regularly asking them during informal conversations or in interviews about themes I had noticed in my analytic memos. This served as another way to check my data and be made aware of my

own biases. I also began writing and presenting conference papers after collecting data at the first site as another way to analyze data as I went along. Some of these early findings helped shape and direct data collection at the subsequent sites.

After I had read through all of my data, and re-read it (Saldana, 2016, p. 41), I formalized a coding scheme (see Appendix E) based on emergent themes from my analytic memos, as well as my theoretical framework and the literature. I then revised and refined this scheme at several points during the process, recognizing that this type of research is iterative and that both inductive and deductive analyses are needed (Huberman and Miles, 1994). Interviews, field notes, and documents collected from the sites were coded and analyzed using Atlas-ti. According to Johnny Saldana (2016), a code in qualitative work is "most often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data" (p. 4). Coding is used to summarize, distill, and condense data (p. 5), allowing for patterns to emerge, which "help confirm our descriptions of people's five R's: routines, rituals, rules, roles, and relationships. Discerning these trends is a way to solidify our observations into concrete instances of meaning" (p. 6).

Saldana argues that "coding well requires that you read, re-read and re-read yet again as you code, re-code, and re-code yet again" (p. 41). Therefore, I coded in "cycles" (p. 234), and at several points, reorganized my coding scheme. I merged several codes that were too similar, and re-coded some which were ill-defined at the beginning of the process. I then went back through the entirety of my data again after the initial round of coding, to ensure all data was coded according to my scheme, and to check the consistency of code meanings.

At the end of coding, I ended up with a smaller list of codes than I initially began with (Saldana, 2009, p. 234). There were nine main codes, which were *Traditional Lunch, Fresh and*

Healthy Program, Food, Obstacles, Bodily Responses to Food, Nutrition Education, Sense of Community, Identity, and Policies and Procedures. Each of these categories contained 7-20 sub-codes. For instance, the code *Food* contained *at home* (what students eat at home), *from home* (food students bring from home), *healthy food*, *unhealthy food*, *packaging*, *temperature*, and *taste*, to name a few. Some codes attempted to categorize students' comments about how food made them feel physically (*hunger, fullness, stomachache, headache,* etc.)—especially as it related to their schooling experience (eg. *ability to learn, attention/engagement, energy*). Some codes captured participants' descriptions or opinions about types of food (e.g., *fast food*, *healthy*, *unhealthy*, *taste, freshness*) or opinions about their lunch program (e.g. *lunchroom ambiance*). Some codes captured comparisons, between their current lunch program(s) and previous lunch programs in the same school (*costs, benefits, consequences*), or lunch programs in previous schools (*other school lunch*). Other codes captured educators' opinions or feelings about students' lives (*chronic stress, food insecurity*). And some codes captured participants' comments or my own observations about what happened during lunch (*plate waste, teachers' lunches, procedures/paperwork*).

I then organized these codes around my emerging arguments, and began the process of organizing and condensing the data further into detailed outlines of each chapter. As the arguments took shape, I re-read my data yet again, then revised and refined further. Just as I had analyzed and coded in "cycles," I also wrote in cycles, presenting at several professional conferences in the fields of education, sociology, and food studies during and after data collection was complete. The feedback I received from the peer review process was enormously helpful as the study and my writing progressed.

Role of the Researcher

At each site, participants invited me to become part of the community. I tutored children during class-time, ate with students during lunchtime, and attended community events. Hesse-Biber and Leavy (2006) describe four degrees of engagement for a researcher in a research setting: complete observer, observer-as-participant, participant-as-observer, and complete participant (p. 245). At Franklin and Chester, both schools were used to and welcomed outsiders coming in to volunteer, and both had full-time dedicated roles to facilitate volunteering. At these two schools, I was very much seen as a regular volunteer, and so my role was more "participant-as-observer." During the Fresh & Healthy lunch program, I helped prepare food, wash dishes, and do other cleanup tasks. At Chester, I was additionally asked to help file paperwork with the state in order to receive reimbursement for the food service. This task took many hours of my time away from the site, but it truly deepened my understanding of the administrative tasks associated with school lunch programs. At Washington, my role was more "observer-as-participant" because while my presence was known, my role was more peripheral (p. 250), and I was less able to volunteer my time in the same ways.

Creswell (2009) acknowledges that because qualitative researchers "make an interpretation of what they see, hear, and understand," (p. 176) it is important to "identify their biases, values, and personal background, such as gender, history, culture, and socioeconomic status, that may shape their interpretations formed during a study" (p. 177). Realizing that I cannot separate my interpretations from my personal background, history, contexts, and prior understandings (Creswell, p. 176), here I discuss my own factors that have shaped my work. I am a white, college-educated, middle-class female who has lived in the suburbs of the metropolitan area where the study was conducted for the last eight years. During most of that time, I have

been a full- and part-time doctoral student at a local university, where I have taught several courses in the education department. Prior to that, I taught full-time in low-income middle and high schools in the New York City Department of Education. Given my positionality as a former teacher, I found it fairly easy to build rapport when interacting and interviewing the primarily white teaching staff at each of my participating sites. However, even greater thought and care was required in order to build rapport and trust with participants who differed from me culturally, as all of the students did, as well as some of the staff, teachers, and administrators.

I am also the mother of three young children, who were born during the course of my doctoral work, and so I have been concerned about the quality of food that I feed to them. Throughout the duration of the study, I was personally involved in the local food movement through local farms and CSAs (community supported agriculture), farmers' markets, as a member of my local food co-op, and other non-profit food advocacy organizations. As such, I also see how I am biased toward believing that fresh, local, whole foods are unqualified goods, perhaps reflecting my own racial and class positionality. For instance, geographers Alkon and McCullen (2010) argue that farmers' markets are often spaces of whiteness and affluence, which exclude low-income people of color. Looking at a similar alternative food program, the Fresh and Healthy lunch, I was, therefore, particularly diligent in seeking out disconfirming evidence, and interviewing school community members who did not seem to "buy in" or were critical of these types of efforts.

Validity & Reliability

Simply put, Bassey (1999) says, validity "is the extent to which a research fact or finding is what it is claimed to be" (p.75). However, he goes on to argue, in qualitative case studies, the case is chosen for its interest to the researcher, and not because it is necessarily a "typical"

example that can be repeated. Arguably, a better concept than validity and reliability is Lincoln and Guba's (1985) idea of "trustworthiness," which considers how credible the findings are (the "truth"); how transferable or applicable the findings are in other contexts; how dependable or consistent; and how neutral the findings are, that is, shaped by the participants and not researcher bias. Kvale and Brinkmann (2009) suggest that the "craftsmanship" and "credibility" are both important to the validity of a study; that is, the researcher's moral integrity is equally as important as the methods (p. 248).

Reliability in qualitative study refers to the "internal consistency" of the data (Hesse-Biber & Leavy, 2006). To ensure reliability, I have used Gay and Airasian's checklist (2003), reproduced in Hesse-Biber and Leavy (2006). Some of these questions include:

- Is the researcher's relationship with the group and setting fully described?
- Is all field documentation comprehensive, fully cross-referenced, annotated, and rigorously detailed?
- Were the observations and interviews documented using multiple means (e.g., written notes and recordings)?
- Is interviewer's training documented?
- Is construction, planning, and testing of all instruments documented?
- Are key informants fully described, including information on groups they represent and their community status?
- Are sampling techniques fully documented as being sufficient for the study? (p. 68)

In this study, I have checked for the accuracy of the findings I present using procedures suggested by Creswell and others. I have triangulated different data sources (Creswell, 2009, p.

190; Hesse-Biber & Leavy, 2006, p. 65): comparing similar findings in statements by different participants, between my field notes and interview data, and across sites. I have also used member checking (Creswell, p. 191), during subsequent interviews and follow-up conversations, to check that the themes I was seeing resonated with my participants, as the study progressed. Additionally, I have sought out disconfirming points-of-view and considered the meaning of outliers (Kvale & Brinkmann, 2009, p. 250). I have made my methods, thinking, and questioning as transparent as possible, in order to increase the trustworthiness of my findings.

Ethical Considerations

In qualitative research, as with all kinds of research, there are important moral and ethical issues to consider. First and foremost, it is imperative to protect the rights and confidentiality of all participants. As Kvale and Brinkmann (2009) point out, morally responsible research is dependent on the "moral integrity of the researcher, his or her sensitivity and commitment to moral issues and action" (p. 74).

Throughout this study, my primary consideration was the safety and well-being of my participants. Especially since I observed and interviewed minors, who are considered a vulnerable population, I took extra care in building trust and safeguarding their well-being. I viewed myself as a guest in each of the schools. I followed all rules and procedures required for each setting, providing up-to-date clearances to each site prior to commencing research, and signing in at the appropriate desk at each visit. At two of the sites, I wore a nametag throughout each visit. I submitted the study my institution's Institutional Review Board for review, and followed all recommendations. The study did not proceed without the consent of the principal at each school, and informed consent was obtained for every participant. Written parental consent was obtained for student participants prior to the interviews, and I read aloud assent forms to

student participants, as well as obtaining their signatures, prior to the interview commencing. I let each participant know that they could end the interview at any time for any reason. I have protected confidentiality by using pseudonyms for all names, including the city, sites, programs, and participants. All consent forms and data are locked in files at my home office, and electronic records are contained on a password-protected computer.

Additionally, ethical considerations must ensure that the independence of the research is maintained, and is not "co-opted" from above or below, that is by funders or participants. While I have identified with my participants, particularly the teachers in this study as a result of my background and positionality, I have always maintained a "professional distance" (Kvale & Brinkmann, 2009, p. 75) in these interactions, as well as in the analysis of the data.

Limitations

I believe ethnography provides a rich context to the current state of school food programs, as well as possibilities for reform. I also believe the personal, relational, and emotional aspects of this topic can inform larger debates about education, health, learning environments, community, and even effective school reform (e.g., whole-child reforms). However, because I only observed three schools, and only interviewed selected participants at each site, my findings are specific to that time and place, and bounded by each of the cases. More research would clearly be needed in order to generalize at larger scales.

Because interviews were mostly conducted during the school day, for the convenience of students and teachers, there were often multiple interruptions, and sometimes others present in the area. Especially at Chester, some interviews were conducted in public spaces, with other students and staff in the vicinity. In one interview, the principal walked into a private office unannounced. At these moments, I always paused the interview, and checked in with the

interviewee to make sure he or she was still comfortable. Still, I worried that, as a result of these intrusions, interviewees would not be as open or honest as they might have been.

I also wish I was able to be more consistent with the number and length of interviews. At Chester, only four students returned parental consent forms, so I was unable to interview as many students as I did at the other sites. The teacher at Chester with whom I worked to arrange the interviews also provided very little time for the interviews, and cut two of them off early, in order for the students to get to their next educational task. Thus, unfortunately these interviews were shorter than those at the other two sites.

Finally, as I discuss in the following chapter, I was unable to conduct research in the public schools in the city of Southampton. After obtaining the principal's consent at one public school, I applied to the district as per their requirements. Unfortunately, the district rejected my application. While I regret not being able to make a comparison to a public-school setting, I do believe the data generated from three sites I was able to gain access to have provided interesting and useful insights on this topic that may apply to public schools as well.

Benefits of the Study

Beyond my role as a volunteer in each school, participants did not directly benefit from this study. As a volunteer, I helped to varying degrees at each site. For instance, at Franklin, I helped the fifth-grade teacher in the classroom, by tutoring small groups of students, walking students to the lunchroom, and covering the class for a few minutes while the teacher made copies. At both Franklin and Chester, I was able to help with preparing and setting up the Fresh & Healthy lunches. Both Franklin and Chester were accustomed to volunteers coming to help on a regular basis, so they always had tasks for me to do. However, at Washington, though I was willing to help out in any way I could, the school had less experience with volunteers and offered

fewer opportunities for me to help out in the same ways. That being said, it could be possible that participants further reflected on the role of food in their school and in their lives, beyond what they normally would have, as a result of my questioning and bringing topics to their attention.

CHAPTER 4:

THE CONTEXT OF THE CASES

The purpose of this chapter is to offer the detailed context necessary to understand the complexities of the policies, people, schools, and communities (Diem et al., 2014) impacted by the two different lunch programs that comply with requirements of the NSLP. Because critical policy analysis challenges the view that policies are always "realized in the same way in every setting" (Ball, 1997, p. 265), and rather, understands that the process of enacting policies can be unstable and context-dependent, this study takes local context seriously. I first offer an overview of the city environment, including a discussion of the neighborhoods in which the schools were located, often described as "food deserts." I then provide detailed descriptions of each school site, including a general background and history of each school, the lunchrooms/cafeteria environments, and the classrooms I observed. I also attempt to answer Ball's call for the "peopling of policy" (1997) by describing key participants in order to "capture the complex interplay of identities and interests and coalitions and conflicts within the processes and enactments of policy" (p. 271). I provide background and description of each of the two types of lunch programs, noting how participants understood the differences.

The Context of the City

Southampton[3] is a large, postindustrial city in the Northeastern corridor of the United States. As a result of demographic changes over the last few decades, African-Americans, together with Latino and Asian minorities, make up the majority of the population. In fact, it has one of the largest populations of African-Americans in the U.S. To preserve anonymity, in this

[3] All names have been changed to protect confidentiality, including the names of the city, as well as organizations, schools, and participants.

section, I will use rounded and general numbers, rather than specifics, and the sources of these statistics (generally, national and local anti-hunger organizations and newspapers) will not be cited.

While Southampton is home to many historic sites, unfortunately it is home to a large income disparity as well. One quarter of residents and fully one-third of children in Southampton live below the poverty line, making it one of the poorest cities in the country. Food deserts, as defined in the Literature Review (Chapter Two), are prevalent in Southampton. While Southern states, such as Mississippi, Louisiana, and West Virginia have much higher "food hardship" rates (FRAC, 2015, p. 2), according to one source, the larger metropolitan area including Southampton experiences food hardship at a rate of about 17%. Another national hunger relief charity estimates the food insecurity rate in Southampton at about 20% of the total population, and still another estimates it is more like 25%, nearly double the national rate. In the particular neighborhoods where this study was conducted, the food insecurity rate is estimated at over 33%. Across the city, about one-third of residents in Southampton rely on the Supplemental Nutrition Assistance Program (SNAP) every month. One anti-hunger advocate described the situation in recent years as "dire," with emergency food pantries and soup kitchens increasingly unable to cope with the demand.

In the city of Southampton in 2014, approximately 80% of public- and charter-school students were eligible to receive free or reduced-price lunches (though not all actually participated), and in the state as a whole, 40% of students were eligible. As a result of its high poverty rates, the public school district in the city began offering free breakfasts and lunches to all students (without needing to apply) under the U.S. Department of Agriculture's Community Eligibility Provision (CEP). The CEP is a provision of the Healthy, Hunger-Free Kids Act of

2010 which allows high-poverty schools and districts to serve meals at no cost without the added administrative burden of collecting applications.

The Context of the Neighborhoods: Food Access and Hunger

Against the backdrop of poverty across the city, each of the three sites was located in a food desert. In the following section, I describe the neighborhoods around the schools, and use teachers' accounts to depict key characteristics of the students' homes and communities. Because I did not visit students' homes myself, I cannot to speak to the validity of the teachers' observations. It is possible that there are some distortions associated with common patterns of deficit thinking (Nieto, 1996; Valencia, 1997). However, while perhaps not wholly accurate, teachers' observations about their students and their students' homes will help contextualize the discussion in chapters five and six about how teachers understood the food policies at their schools.

At Chester, teachers routinely visited their students' homes. Ms. Crawford said that as a rough estimate, about 50% or more of their students are "pretty significantly food-insecure." She said, "There definitely is a need, especially a need for something home cooked, or fresh" (Interview, 6/10/15). Other teachers agreed, saying the incidence was "pretty high." Mr. Clark said,

> I think many of them don't even know that [food is] scarce at home. They just think that's the way it is... it might look like locking the pantry. It might look like skipping breakfast. Very few of our kids eat breakfast before they come here. A lot of the time it's fast food. McDonald's, there's a ton of fast food in this neighborhood. (Interview, 6/10/15)

Another teacher, Ms. Cummings, who had done many home visits over the years, thought that only about 10% of Chester families lived in homes with kitchens that are fully "functional," which she described as having electricity, food in the refrigerator, with pots, pans, and utensils. At the other end of the spectrum, "the shocking ones," a few families lived in homes without electricity at all, with empty countertops, doors taken off the cupboards, and mice everywhere (Interview, 7/15/15). Ms. Campbell, an aide who lived in the neighborhood, told me about running cords from her house to her neighbors' when they had their electricity turned off (Interview, 6/11/15).

According to Ms. Cummings, "the vast majority" of Chester families are using their kitchens to reheat food, but not necessarily to prepare food, relying instead on processed and ready-to-eat meals. They may not cook, but they will have cereal and milk available, for instance. She added, "Maybe they'll reheat some Chinese takeout in the microwave, or maybe they'll cook a microwave meal, but I count that as taking out food. If you're heating something up in the microwave, to me it's the same" (Interview, 7/15/15). Ms. Campbell, the aide who lived in the neighborhood and has herself suffered from food insecurity at certain times in her life, thinks the neighborhood needs more food cupboards and farmers markets. "I think a lot of families got away from [cooking fresh food] here in [my neighborhood] because it's easier and cheaper to buy junk food." However, she went on, parents "need to get involved, just to save they children [sic] lives" (Interview, 6/11/15). Here, while she acknowledged the obstacles people often face in obtaining fresh food, she also felt it was imperative that parents in her neighborhood come to understand the importance of feeding their children healthy food and make what efforts they can.

While all three schools in this study went beyond the norm to address students' needs,

Chester, in particular, took a charitable approach to addressing food insecurity in the neighborhood. However, this proved to be no easy task, and one that required administrators to examine their own assumptions. Mr. Chase, the head of school, described the intractable problem of addressing hunger in a food desert. He said, "The easy thing to do, and what we, especially white WASP-y folks, they think to do, is just to shower the families with food." But the problem was much bigger than that. While he thought they did a good job of getting food to families, he wanted the staff to visit families and learn more, and ask questions like, "where is that food going? Is it being prepared? Are they cooking it or are they giving it away? Do they have an oven? Do they know how to cook?" (Interview, 6/29/15). He told a story about their first year, when a well-meaning church from a wealthier neighborhood donated a truckload of eggplant. "It was great. Every family and every child went home with like two or three. Where do you think where they ended up?" He went on to say, "They actually ended up, a lot of them, as footballs. The kids were actually throwing them on the streets like back and forth...Because the families didn't know what to do with them" (Interview, 6/29/15). He also told me that he thought food insecurity had a lot to do with family instability, because it occurred more often when mothers and grandmothers, who traditionally did the cooking, were absent for some reason (in the anecdotes from other staff, such reasons given included chronic illness, drug use, and prison). The remaining family members, who may have been working to support the family and lacked time, or lacked the knowledge, resources, or skills, were unable to step in and cook.

Ms. Cummings, a math teacher, described a similar moment when she realized she needed to check her own assumptions. Here, she describes a conversation with a student about onions.

> Sometimes the kids say, "My mom doesn't want onions. We don't know how to cook onions." And it's a lot of times when I've been in their homes, they're not range stoves. They're just microwaves. So...You can't eat onions. You're right. What are you going to do with that? (Interview, 7/15/15)

Again, this comment echoes that fact that food insecurity is not simply a problem of access to food, but one of knowledge, time, and resources (such as having electricity and a working stove). Chester staff learned that solving food insecurity is not as simple as making healthy food available.

In trying to address the food insecurity problem that the teachers and administrators say was present at Chester, the school had used several approaches. The principal, Ms. Craig, described the school's learning curve. In their first year, they created a "peanut butter-and-jelly bar" for students who didn't like the food or wanted more to eat. However, it did not work out as planned, because the kids would eat seven sandwiches or more. They had to deal with the "hoarding mentality," which she describes below:

> Kids won't stop eating if there's food in front of them, if there's food insecurity at home. That's a thing. You can't actually put unlimited food in front of a child who has food insecurity because they will eat until they actually get sick. We had to learn that lesson.. The peanut butter and jelly got out of control. (Interview, 7/29/15)

Even with donations of peanut butter from churches, it became "astronomically expensive" to provide unlimited peanut butter-and-jelly sandwiches. While theoretically, a peanut butter and jelly bar sounded like a great solution to help hungry kids, in actuality, it was still not enough to meet the students' caloric needs. These stories indicate that teachers believed there was a very real need among the students for basic necessities, including healthy food—or any food at all, in

too many cases. They also indicate how difficult the problem of food insecurity is for schools to address by themselves.

While teachers at Washington could not speak to food insecurity at home (partly because the school drew from many neighborhoods), at Franklin, teachers made similar observations as those at Chester about a lack of access to fresh foods in the immediate neighborhood. Faye, a lunch aide who grew up nearby, described the neighborhood as having "all these corner stores," which have very little fresh produce. The only produce that the nearest supermarket carries are bananas, apples, and frozen vegetables. She bemoaned the lack of fresh strawberries, blueberries, and raspberries. She also described the difficulties residents have transporting their groceries. She said,

> Who wants to walk all the way down there or catch the bus and put all the food on the cart? They deliver, but still, the people can't afford the delivery. Who wants to do that? They did just put [a new supermarket] over here on [10th] Street, but that's still a bus ride to get to that. That's two bus rides to get to that. (Interview, 5/13/14)

Faye's comments echoes Ms. Campbell's from Chester, that fresh food was harder to obtain than corner store processed foods. These comments reiterate the literature on food insecurity, which describe the ubiquity of corner stores offering junk food, as well as the obstacles people face obtaining fresh groceries when they lack transportation to get to supermarkets located outside their immediate neighborhoods (Hillier et al., 2011). While the teachers at these sites differed in the extent to which they blamed parents, all observed that fresh food was more expensive and more difficult to obtain than processed foods in the neighborhoods surrounding their schools.

The Franklin School

The Franklin School was a small, independent elementary school that served grades pre-K through 5, located in one of the highest-poverty sections of the city. Under the Community Eligibility Provision, it served free and reduced lunches to all of its 91 mostly African-American students. The school was modeled after, and had a unique partnership with, one of the most exclusive private schools in the area; many board members and founders originally came from this elite private school. As a result of this partnership, the school boasted extremely low class sizes, with about 15 students per teacher and often a teacher's assistant as well. Many staff members and teachers also previously worked in some of the area's most elite private schools. They focused on the "whole child," with an explicit emphasis on getting their low-income African-American students into the elite private schools and the high-performing charter schools for middle and high school. While the school did not require tuition, they did require parental involvement, and staff were constantly in touch with parents and caregivers. There was even a full-time position devoted to "family coordinator," and it was her job to be in contact with families. Since they relied on donations for the entire cost of their program, they also had a robust philanthropy program and were always looking to forge new partnerships. Three separate positions were dedicated to this cause: "Strategic Initiatives Officer," "Director of Philanthropy," and "Director of Annual Giving."

The Learning Center, where the school was housed, was a fairly new building, in stark contrast to the old run-down row homes that lined the street, some of which were abandoned. The front of the building was all glass, so the receptionist could see who was at the door. Once they were buzzed in, visitors had to sign in at the desk. They were then directed upstairs to the

school's main office on the second floor. Once upstairs, an aide greeted them from her desk in the hallway, and signed them into the school's visitor log as well.

On my first visit to the Franklin School, Mr. Ford designated Ms. Faith, the family coordinator, to be my liaison. An African-American woman in her mid-fifties, Ms. Faith was full of life. Clearly respected by students and staff alike, she infused a hearty sense of humor and a dose of love wherever she went. She gave me a tour of the school. The first floor, and certain spaces in the floors above, were used by the community center that shared the building with the school. The classrooms were located on the second and third floors, while the cafeteria and bathrooms were located in the basement. There were additional spaces—offices and a "Pepsi Teen Lounge"—along this hallway that were used by the community center.

My observations at Franklin focused on a fifth-grade classroom, which was located on the third floor at the end of the hall. Ms. Fisher was a petite white woman with short dark brown hair, in her early forties. She usually had a serious expression, but became animated when speaking. Her students clearly respected her, as did her colleagues, and she was dedicated to her job. At the front of Ms. Fisher's room was a low bookcase with cubbies, filled with hats, coats, and other belongings. Stacks of textbooks and art projects were piled on top. An LCD screen was installed in the center of the board above the cubbies, and also a free-standing whiteboard near the desks, which Ms. Fisher often used to jot down ideas or work through a math problem. Her desk was located on the left side, opposite the door, so she had a clear view of the hallway and who was entering. Next to her desk was a file cabinet, with board games like *Life* on top. On the right side of the room was a large classroom library, filled with paperback books. Next to the library, desks with computers wrapped around the back of the room, under a wall of windows, for a total of 16 computers, several more than the number of students in the class (usually 11-12).

Several bulletin boards livened up the room, with word walls that included such words as "classify," "community," "deodorize," "encouragement," "electricity," and "performance." Another bulletin board was dedicated to "Mathcabulary," a chart of math words, as well as charts for the parts of speech, and independent reading tips, such as "Good readers think deeply about characters, ask questions while they read." A Tulane University banner was also prominently displayed. Student desks were arranged in a U-shape facing the front of the room and the free-standing whiteboard, where Ms. Fisher would often sit in her rolling desk chair. There was a bright red rug in the center with a white flower design. Next to the fifth-grade classroom was a cozy nook, including a table and four chairs, where I conducted many of my interviews.

The overall tone of the school was calm, inviting, and respectful. I was told they taught the 3 C's—curiosity, courage, and compassion. Faye, a lunch aide, told me the school's size is the main difference she sees between Franklin and nearby public schools. "When you have a smaller school, you are able to get a lot more things done quicker because it's a smaller school" where teachers can meet students' individual needs. She went on to say, "Here, with the lower kids, we do have another assistant, but even if we don't we still have somewhere where they can go to get themselves together and somebody who can talk to them. At a public school, they don't have that anymore" (Interview, 5/13/14). She also told me they aim to help parents as well as students, to "be all on the same page," because "half the time" when there are problems with a child, it has to do with family problems (Interview, 5/13/14).

The nutrition teacher, who came twice a month and worked in many schools in the city, observed that there were "huge differences" between Franklin and other schools she worked in. At other schools she works in, the teachers and administrators are preoccupied with worries about the state tests and behavioral issues, and just can't give students the attention they need.

"Just the fact that there are more students makes it a different animal," she said (Interview, 3/6/14). The main difference was that at Franklin, the classes were much smaller than in public schools, and so the teachers were able to support students better. She also said that teachers were "health conscious," and encouraged students to participate in her nutrition lessons, sometimes even doing "quick research" on the spot, if necessary. She compared the school environment to Catholic schools, where teachers are "on board" and most students are "very involved." Students agreed that Franklin offered a calmer environment due to its smaller size and higher ratio of adults to children. Farrah, a fifth-grader, described her former public school as crowded, and "like everyday there be a fight." However, at Franklin, "It's a smaller amount of kids here and we get to learn more" (Interview, 5/15/14). The small, close-knit family feel was the distinguishing characteristic of this school.

Franklin's Lunchroom

Franklin's lunchroom was located in the basement and had no windows, but was cheerful nonetheless. Because the art teacher also used the space for art classes, and her storage room was adjacent, student artwork always appeared on bulletin boards. Early in my visits, these included chalk drawings of cakes using different values of light and dark, and portraits in the Cubist style. Over the months, the artwork displayed changed, and included Puerto Rico-inspired carnival masks and tie-dye hearts, as well as drawings of ceramic jars.

The bulletin boards on the walls featured several inspirational posters, which read "Eat Right," with cut-outs of bread and jelly, cookies, and milk; "Get the Message: Eat Smart" (with a picture of an African-American girl on her cell phone); "Attitude is a little thing that makes a BIG difference" (with a picture of a bulldog). Another chart said "My Food Plate," with a picture of a plate divided up into four: Fruit and Protein (smallest portions), Grain, and Vegetable, and a

circle called “Dairy,” outside the plate to indicate a cup of milk. On the file cabinet behind the rectangular tables was a magnet with an apple, that read, “Lunch Ladies ROCK!”

There were approximately 10 round tables, with six chairs each, and two rectangular tables on the left side of the lunchroom near the entrance. From Monday through Thursday, the school served the regular breakfasts and lunches, which came frozen from a central distributor. The lunch manager, Florence, a petite African-American woman in her fifties, would reheat these meals in the plastic wrapping and cart the main meal, plus the other meal components (such as apples, baby carrots, salad, etc.) into the lunchroom. She then arranged the meal components on these rectangular tables in the front. The daily lunch schedule was as follows: 11:15-11:45 for preschool and Kindergarten, 11:45-12:15 for first, second, and third grades, and 12:15-12:45 for the fourth and fifth grades. Next to the tables was a round ice bin with black and white spots like a cow, filled with milk. On regular lunch days students chose their milk, from skim, whole, lactose-free, chocolate or strawberry. But for Friday’s Fresh & Healthy lunch, everyone took skim in the green container.

On Fridays, during the whole foods lunch, students use “real” plates and silverware, which must be hand-washed in the sink in the kitchen. Heather, who coordinated donations and volunteers for the school, explained that volunteers stay most of the afternoon after lunch on Fridays in order to finish the dishes. While they do have a small dishwasher, it is very slow, and she thinks it is faster to do it by hand (Field notes, 3/16/14). These volunteers are often employees of local businesses and corporations that want to “give back” to the community. The school also hosts monthly gatherings of “friends” of the school, specifically targeting 20-something professionals.

The Participants at Franklin

While the students at Franklin were almost all African-American, the faculty and staff were very diverse. The administrators were all African-American, and the teachers were Caucasian, Asian, and Latino. The cafeteria workers and assistants were all African-American, with the exception of the part-time chef for the Fresh and Healthy Foundation, who was white.

Table 4.1 *Demographic Information for Participants at The Franklin School*

Name	Race/Ethnicity	Approx. Age	Sex	Marital Status	Role
Ms. Faith	Black	50-55	F	Married	Dir. of Families
Florence	Black	50-55	F	Unknown	Lunch Manager
Mr. Ford	Black	40-45	M	Married	Principal
Ms. Fallon	White	20-25	F	Single	Nutrition Teacher
Ms. Fisher	White	40-45	F	Married	Teacher
Chef Frances	White	40-45	F	Unknown	Chef
Faye	Black	25-30	F	Single	Assistant
Ms. Foster	White	45-50	F	Married	Social Worker
Ms. Fuller	Black	45-50	F	Single	Dir. of Enrollment
Ms. Fernandez	Hispanic	45-50	F	Married	Teacher
Ms. Faber	Hispanic	40-45	F	Married	Teacher
Mr. Flynn	White	20-25	M	Single	Teacher
Ms. Fairchild	White	50-55	F	Married	Board Member
Felicity	Black	10-11	F	--	Student
Farrah	Black	10-11	F	--	Student
Felesha	Black	10-11	F	--	Student
Fatima	Black	10-11	F	--	Student
Freddy	Black	10-11	M	--	Student
Forest	Black	10-11	M	--	Student

The Students at Franklin. Like many children living in the neighborhood, most of Franklin's students lived in poverty. The school counselor described "a lot of chronic stress" in the lives of these children: "...parents in jail, domestic violence, parents who work late nights and kids having to stay up late as a result maybe because they're getting picked up, they're at a daycare or they're at their grandparents' house and have to get picked up when the parent gets off work, sleep disruption and deprivation, single parenthood, poverty, a lot of those" (Interview,

6/3/14). This "chronic stress" was also described as "chaotic," because some children lack a regular schedule and routine to their days. A few students also live in homes with domestic violence.

The lack of options associated with poverty also translates to students' food choices. As one teacher noted, their students do not have much choice in the food they eat: "Our kids don't have choices oftentimes in what they are eating for lunch or even dinner. You eat what's put in front of you. I think that's definitely an aspect of privilege that kids at other schools probably experience. Our kids not so much" (Interview, 6/6/14). She and others noted that many of their students did not often eat with caregivers.

The Teachers and Staff at Franklin. I have chosen to profile several key informants at Franklin, who were instrumental in helping me understand and navigate the school, including the principal; the family coordinator, who was assigned to be my "point person"; the fifth-grade teacher, whose classroom I observed for many weeks; and the school aide who coordinated lunchtime. I spoke with each of these informants many times in the course of my fieldwork, and they helped me identify other participants who would provide insights as well.

Franklin's principal was an African-American father of three young children. Mr. Ford had grown up in a poor neighborhood himself and could relate to many of the struggles of his students. He was warm, friendly, and approachable, and spoke eloquently and passionately about the school's mission. In front of a room full of people, he had the demeanor and voice of a preacher. He admitted his wife was a "health nut," and they fed their own children lots of fresh food from an upscale market.

A warm, friendly African-American woman in her fifties, the family coordinator, Ms. Faith, had grown up in a different era, it seemed. She spoke about her own mother, who had had

10 children, and would wake up at the crack of dawn to cook a hot breakfast, often oatmeal. Everyone would sit down and eat together before going to work and school. Despite a very tight budget, her parents knew how to make the food stretch, often with homemade soups and stews. Ms. Faith was very opinionated about what she saw as the breakdown of the family structure in many poor, African-American communities, and believed food and mealtimes suffered as a result.

Ms. Fisher was the fifth-grade teacher. A white woman in her late-thirties, with two school-age boys at home, she was short and petite, with seemingly endless energy and full control of her classroom at all times. Although she believed that whole foods were healthiest, she did not consider herself to be rigid about it, and did not limit sugar at home, for instance, as many of her friends did. But if her boys wanted cookies or something sweet, she said she was more inclined to make it from scratch than to buy highly processed items, which she considered unhealthy.

Faye, an African-American woman in her mid-twenties, was an assistant at the school. She had begun by working part-time in the after-school program, and had recently been promoted to a full-time position, mainly helping in the cafeteria. As the main person in charge of keeping order during lunchtime, she was tough on the kids, often enforcing silence for the first ten minutes of the lunch period. She clearly cared about hte kids, telling me she did this so students would eat their food and not be hungry when they went back to class.

Florence, an African-American woman in her fifties, was the lunch manager. She often wore a t-shirt and sneakers since she was on her feet so much throughout the day. She reheated the TLS components, arranged them for the lunch line, ordered food, and completed TLS paperwork. On my first day at Franklin she mistook me for someone from the central TLS office

and looked very concerned. Faith assured her I was actually a researcher from the local university, but I got the feeling Florence never really got over her suspicion of me. Despite my repeated attempts to gain her trust, however, she declined to be interviewed for my study.

Washington Charter School

Washington Charter School is a Montessori charter elementary school serving 168 students in grades K-6. Like Franklin, Washington's student population is mostly African-American, but is a little more diverse, with several Latino, Asian, and/or white students in each grade. According to its online profile, Washington's average class size was about 22 students. I almost always observed a teachers' aide or Special Education teacher in the classroom with the lead teacher, so the adult-to-student ratio was fairly low.

The school was located in another low-income neighborhood of the city, a much more industrial area near the airport. Within a mile of the school were a power plant, a train depot, a car wash, an auto parts store, and a fast food place. The school faced a busy street, with trolley tracks and multiple lanes of traffic. A gas station and car repair shop sat across the street. The main entrance was located off of a side street, with row homes and a few vacant lots. Several of the row homes across the street from the school had boarded-up windows, and one had an eviction notice posted.

The school is a three-story brick building with a pleasant courtyard to greet visitors. Raised beds planted with wildflowers and a painted "road" adorn the pavement. Banners hung from the building, showing messages such as, "Welcome to WCS" and "Average is Over." A series of fenced areas flanked the sides and rear of the building. One had benches and paintings above including a rainbow above a heart, a sun, a coconut tree, and a flower. New, colorful playground equipment gleamed in the sunlight. Behind, a multi-colored mural showed children

holding hands, as well as two large white doves above a globe with a peace sign. On my first visit, children were running around and squealing with delight. There were also basketball courts, but other than weeds, no green space. There was an empty pool in one of the fenced areas, and it was unclear whether it was on the school's property.

On my first visit, the principal met with me, and a student representative gave me a tour. In the lobby, photos of the students' hung on the walls. Blue carpet covered the floor and chairs lined the walls. The second floor of the school, which houses the administrative offices, the multi-purpose room (used as the cafeteria), lunch hallway, nurse's office, and upper-school classrooms, is roughly the shape of a T. The main entrance, stairs, and offices are at the bottom of the T.

Because Washington follows a Montessori program, the classrooms are mixed age. The "lower elementary" classes consist of grades Kindergarten through three, and the "upper elementary" classes are grades four through six. Most of my observations at Washington focused on Ms. Watts' classroom, where she taught a mixed-age group of fourth- to sixth-graders. There were smaller wooden shelves filled with Montessori materials, such as baskets of blocks and manipulatives, that lined the walls. She often sat on an area rug, which featured a map of the United States, to read aloud to her students, who would gathered around her, sitting with their legs crossed. On the wall near the rug was a large flat-screen monitor, where she often showed educational videos. Sometimes she sat with a group of four or five students, who would work from their test prep workbooks, or clipboards, which they pulled from a wicker basket.

Numerous motivational posters with statements like, "The Sky's the Limit!" dotted the walls. There was a container filled with "warm fuzzies," which seemed to correlate with and an ongoing tally of students' "warm fuzzy" points written on the board. Directly left of the door was

the classroom library, with books in overflowing baskets organized by genre and reading level. Above the classroom library was a big piece of chart paper that read, "We're all different but as a team we fit together!" Student art in the form of puzzle pieces was glued to the chart paper. A poster listing the parts of speech was on another wall. Above her desk in letter cutouts were the "Guiding Principles" of "Respect, Responsibility, Safety, and Teamwork." One corner was called the "Peace Corner" and had two chairs, presumably for working out differences as they arose, though I never observed any children sitting there for mediation purposes. Near the peace corner was a computer station with about four computers.

While Washington did not participate in the Fresh & Healthy lunch program, Ms. Winslow, the principal and CEO, and many of the teachers were particularly interested in integrating the growing and cooking of fresh foods into the Montessori curriculum. In the fall when I observed, the school had just begun participating in an after-school cooking program called "Kids in the Kitchen," where volunteers from the larger community came in once per week and taught a small group of students to make a healthy recipe, after which they sat down and shared the meal. Ms. Winslow had recently lost her mother. She had received a number of donations to the school in her mother's memory and had decided to install a "teaching kitchen" in one of the classrooms on the first floor. The teaching kitchen would provide a space for cooking lessons, during and after the school day. She had also previously won a grant to install a new playground outside, which had recently been completed, and had received money to install a vegetable garden in the courtyard. She had hoped to run a weekly farmer's market in the summer and fall as well. She called this "real-life learning," since it is a Montessori school (Field notes, 11/15/14). She wants her teachers to see that gardening involves math, science, social studies, language and literacy.

Several teachers introduced new fresh fruits and vegetables during snack time, and expressed interest in doing more of this. Ms. Wagner, a lower elementary teacher, explained, "I would love for kids to be involved in creating lunches, a lot of fresh fruits and vegetables...I would love for kids to be able to take part in the creation of it and also to have it just be fresh and real food" (Interview, 3/30/15). In her interview, Ms. Winslow explained that she also hoped to incorporate food grown by students in their garden into their lunches and breakfasts. "It is a hope of mine that we would one day have a full-service food service at this school that is run by us" (Interview, 1/13/15). However, they do not yet have the revenue to do so, and it would require a new school building because their current one did not have room for a full kitchen and all of the facilities necessary.

Washington's Lunchroom

At Washington, students ate the regular lunch every day in the multi-purpose room. Like at Franklin, these meals came frozen from a central distributor, and were reheated in a tiny kitchen located in the basement. A small, dark, and windowless space, the kitchen was not fully functional, housing only a freezer, refrigerator, a sink, and a warming oven. Staff then carried the meals, as well as the other meal components and milk, up two flights of stairs in milk crates. The hallway outside the multi-purpose room was used to serve the meals. A big round cooler held milk on one end. The cooler advertised the National Football League on the side and read, "Fuel up to play 60." Next to it, two long rectangular tables stood against the wall with windows, where students would line up, take a tray, collect their lunches, and enter the multipurpose room through a door. Staff would sit on the end of this table with a laptop, and enter the reporting information for each student: their name and what meal components they took that day. There were white lacy curtains hung from the windows. An old file cabinet and copier wrapped in

shrink wrap were stored in a corner of the hallway. A poster read “Dark green veggies in the house tonight” and “Eat your greens - they’re nature’s rock stars!” with a picture of a woman made of spinach, kale, and Swiss chard. On another wall, a poster said, “Let’s stop bullying at Washington Charter.”

The multi-purpose room lived up to its name. In addition to housing three lunch periods, it was also the art room, as evidenced by three large jugs of paint near the sink at the front. There were small cabinets as well. At the back, there were art supplies, a computer, a big stand that held five large rolls of colored paper, a paper cutter, and large plastic bins of supplies. One of the cabinets had a sign that said, “Clay containers.” While conducting observations at Washington, I also saw the room being used for music class, dance rehearsals, and whole-school gatherings.

During lunch on any given day, about 24 students took their seats on the left side of the lunchroom, at two tables. The long tables had a bench attached on only one side, and the tables faced each other such that a teacher would be able to walk up and down between them to help open lunches, etc. A second class would arrive and take their seats at a pair of tables on the right side. The third class would take the two tables in the back. Several motivational posters hung on the walls around the lunch tables, reading, “A lot can happen when you eat your colors. Make half your plate fruits and veggies. They’ll help you eat smart to play hard!” (USDA and Food and Nutrition Service), and another said, “Explore a world of possibilities in the garden and on your plate.” I noted the contrast between the colorful posters and the lack of color in the actual school lunches. Sometimes meals would include a shiny apple or small cup of iceberg lettuce, usually the TLS meals offered shades of tan or brown items, like pizza, hamburgers, chicken tenders, or spaghetti and meatballs. Sides were often also brown or tan, including baked beans, French fries, or mashed potatoes.

The Participants at Washington

As at Franklin, students at Washington were almost entirely African-American. Roughly 96% are African-American, 1% Asian, 2% Caucasian, and 1% Latino. Most of the teachers were white, as was the principal. The school aides (except one who was Latina), cafeteria workers, receptionist, and administrative assistants were all African-American. See Table 4.2 below.

Table 4.2 *Demographic Information for Participants at Washington Charter*

Name	Race/Ethnicity	Approx. Age	Sex	Marital Status	Role
Mr. Willis	White	45-50	M	Married	Board Member
Ms. Wagner	White	30-35	F	Unknown	Teacher
Ms. Warren	White	40-45	F	Married	Teacher's Aide
Ms. Weinberg	White/Arab	35-40	F	Married	Teacher
Ms. Weston	White	25-30	F	Single	Music Teacher
Mrs. Warner	White	45-50	F	Married	Special Ed Teacher
Ms. Wallace	Black	35-40	F	Unknown	Lunch Manager
Nurse Wade	Black/African	45-50	F	Married	Nurse
Ms. Walter	Black	50-55	F	Unknown	Kitchen Worker
Ms. Williams	Black	50-55	F	Married	Behavior Specialist
Wynter	Black	11-12	F	--	Student
Waylan	Black	10-11	M	--	Student
Wesley	Black	9-10	M	--	Student
Wakia	Black/African	9-10	F	--	Student
Whitney	Black	9-10	F	--	Student
Wekesa	Black/African	10-11	F	--	Student
Wyatt	Black	11-12	M	--	Student
William	Black	11-12	M	--	Student

Most students lived in the neighborhood; however some travel from other parts of the city, and a few, I was told, rode the bus an hour or more each way. There were also quite a few

sibling and cousin groups. About 23% of students are classified in Special Education and the school employs three full-time special education teachers, a reading specialist, a part-time special education coordinator, a part-time audiologist, a part-time speech pathologist, and an occupational therapist. The school has several English language learners as well.

The Students at Washington. Like the students at Franklin, most at Washington Charter live in poverty. According to Ms. Watts, most live in single-parent homes in a "low-socioeconomic area" (Interview, 12/16/14). Teachers at Washington Charter, like those at Franklin, described chronic stress, violence, and poverty in their students' daily lives. Ms. Watts told me, "I know one student saw his father die, get shot. I mean, there are a lot of things that they're dealing with at home. It just seems unstable to me. It doesn't seem warm and nurturing" (Interview, 12/16/14). However, she was also careful to note that some of her parents are really caring and engaged, help with homework, and come to meetings with her, so there is a "mixture." While it is impossible to know if teachers' perceptions accurately represented their students' home lives, it is fair to say that the teachers I spoke with understood poverty and chronic stress to be widespread among their students.

As with all three sites, students at Washington wore a uniform. The girls' uniforms were burgundy polo with the school logo: some wore a burgundy and gray plaid jumper with a pleated skirt, while others wore gray slacks. Some also wore a matching burgundy sweater, with black shoes. Boys wore gray slacks and a navy blue polo with the school logo, also with black shoes. Most of the girls wore their hair braided.

During their sixth grade year, most students spent considerable time and effort toward applying to middle schools. Ms. Winslow said that many go to one of the city's charter schools

with a good reputation. A few go to private schools, which she thinks is "amazing" (Interview, 1/13/15).

The Teachers and Staff at Washington. Ms. Winslow, the principal and CEO, was a white woman in her forties. She was slim, focused, organized, and driven. Her mother had recently passed away, leaving her some money she was going to use to create a "teaching kitchen" at the school in her mother's name. Her interest in the topic of food, she told me in her interview, stemmed from her experience as a mother of two young boys, both of whom reacted negatively and behaviorally to food dyes. Hence, when she became CEO, she implemented the "food dye ban" at Washington. She believed, based on her own experience as well as research she has read, that food dyes contribute to ADHD behaviors.

The teachers at Washington Charter were mostly young, white, and female. All of them were very friendly, smiling as they greeted me in the hallway. Ms. Watts, whose classroom I observed the most, taught in the "upper elementary," grades four through six. Her room was named the "Nelson Mandela" room. A young, white woman in her mid-twenties, she was always well dressed and energetic. She was friendly, but also strict with her students, often admonishing them for talking out of turn or breaking the rules. For instance, when a student was talking during independent reading, she said, "You need a book and you need to be sitting. Wanda, you need to be reading. Lunch is over!" (Field notes, 1/13/15). When students became too loud, she would ring a bell on her desk, at which students immediately became quiet. She carefully monitored who entered and left the classroom, ensuring that everyone used a sign-out sheet. However, she was also warm and encouraging, praising students who read quietly during independent reading or asked good questions during class discussions.

Ms. Weinberg, another upper elementary teacher, coordinated the "Healthy Times" newspaper for the school and was very interested in addressing food insecurity in the neighborhood. As Libyan Jews, her parents were exiled in the 1960's and immigrated to the U.S. She was passionate about combating hunger. Thus, she was critical of some of the school's policies, specifically the principal's ban on food dyes, because of her own experiences with hunger as a child, "We just grew up not having those things. You just didn't have. Food was definitely something they struggled to put on the table" (Interview, 2/3/15). She recalled her parents shopping at discount markets, where they got discounted and out-of-date items, and making everything at home. Avocados, and other "higher-end fruits and stuff," were something they never had. Because of these experiences in her childhood, she did not think the school should put any limits on the snacks children brought, because she said those kinds of snacks were what was available and cheap. Healthier snacks, like avocado or fresh produce, or even whole-grain versions of processed foods, simply were not available or affordable to the students and their families.

The cafeteria workers at Washington were all African-American. Ms. Wallace, the lunch manager, filed all of the paperwork for food orders and to receive reimbursement from the state for the free meals. A warm and friendly African-American woman in her mid-thirties, she greeted everyone with a smile, and was always willing to help students in her soft-spoken, mild-mannered style. Because she was responsible for ordering the TLS lunches, she told me that she often asks for students' feedback about particular dishes and even tastes the lunches herself to decide what to order (Interview, 1/13/15).

Ms. Williams, an African-American woman in her early fifties, was the "positive behavior specialist." She used a variety of positive techniques to keep order in the lunchroom.

She often played games with the students to encourage them to be quiet, such as "boys versus girls," tallying points on the board for which group was quieter. Once, she entered the lunchroom energetically and said, "Wave your hands in the air! I don't see them." Then she paused for students to wave their hands. "Freeze! Put them down!" She was friendly and loving with the kids, but had no tolerance for misbehavior. For instance, on one of my first visits, when students got too loud in the lunchroom, she replied, "[Room] 102! That means y'all gettin' too loud!" and covered her mouth with her finger, raising her other hand in a peace sign. About half of the students in the lunchroom put up peace signs immediately (Field notes, 1/13/15). Of note, Ms. Williams told me she had recently re-examined the way she ate because of a heart condition, reducing sugar and junk food in her own diet.

Ms. Walter was the kitchen manager, an African-American woman in her fifties. She grew up on a plantation "down South," and still loved to cook and grow tomatoes in her plot in a nearby community garden. She also spoke eloquently about how food today (in the "North") tastes so different and bland compared to the fresh food she knew growing up in the South. In fact, she refuses to eat fish from the grocery store, instead preferring to eat fish freshly-caught by her brother, when available. She also organized a weekly dinner at her church, and encouraged all the church members to eat more fresh foods and cook more often. According to Ms. Winslow, Ms. Walter was all "about the earth and what grows" (Field notes, 11/15/14). She was responsible for actually reheating the food, thought the TLS lunches were very nutritious, and was proud of the work she did.

Chester Episcopal Middle School

Chester Episcopal is an independent middle school which, at the time of this study, had only been operating for four years. As at the other two sites, students were mostly African-

American and came from the immediate neighborhood. With an extremely small student population of 64, it boasted an unusually high adult-to-student ratio. Class sizes were about 15, with a full-time teacher and a teacher's assistant in every classroom, and the administrative staff was quite large, including a head of school, principal, assistant principal, director of development, and director of high school placement. Chester was founded as an Episcopal day school, and modeled after Anglican schools across the world. "Endorsed" by the Episcopal diocese, with its "blessing," the school had its own board of directors and functions independently. As long as they promoted Episcopalian and "gospel values," the administration was free to make its own curricular and other decisions, according to Mr. Chase, the head of school (Interview, 6/29/15). Students recited a pledge that reinforced these values, that emphasized being an active member of the community, a commitment to social justice, mentoring peers, leading by compassion, excelling in school and career, and healing the environment as a child of God (Field notes, 6/29/15).

As an Episcopal school, Chester sought to meet students' physical, emotional, and spiritual needs, in addition to their academics. Mother Charity, a former Episcopal priest who served as the school's sexton, explained,

> ...the very business of [Chester Episcopal] is to transform the lives of the deeply impoverished children. That's our job. We take children from the neighborhood and in a four year period of time, provide them with food security, clothing security, teaching. and an environment where they can learn and transform their lives. Instead of going to [the local school], which is a very, very challenging, urban, urban school that does not have the kind of care that it needs to [get them into] competitive high schools. (Interview, 6/12/15)

Students at Chester feel it is like a "family." One student, Caylee, explained, "it's a good place...they help people with problems and they make sure they're okay. They make sure that nothing will happen to them. They watch them. It's just a really good school" (Interview, 6/29/15). Another student, Caydence, went on to explain, "If it wasn't for Chester, I would have been at another school getting bullied and getting pushed around" (Interview, 7/1/15). Students seemed to feel taken care of and protected by the staff, who sometimes even walked students home to ensure their safety.

Chester had been granted permission from the Episcopal diocese to use an abandoned church property in one of the poorest neighborhoods in the city. The grounds included a chapel, surrounded by a graveyard; a parsonage, where the head of school lived with his partner; another building used to house AmeriCorps volunteers; and the church, which had been converted into the main school building. Upon arrival, visitors had to ring the doorbell, and someone physically came to open the door. Compared to other schools, with their buzzers and remote entries, it made for a very warm welcome. Up a short flight of stairs, the receptionist sat at a desk with monitors for security cameras, as well as the guest sign-in log. Walking down the hallway, three adjacent classrooms were on the left. All had windows, so it was easy to see inside. Bookshelves lined the hallway, overfilled with paperback books and with lavender and ivy plants perched on top (Field notes, 6/23/15).

Ms. Carroll's English classroom, where I conducted my classroom observations, was a former chapel, complete with an altar in front, dark wood paneling, and stained-glass windows. Above the alter, in gold letters, read "Ye doth shew the Lord's death till he come." Outside her classroom was a closet area, with coat hooks, shelves, and binders. On the wall, there was a display of "5th grade photography," a collage of photos of the students. Inspirational messages

were posted around the doorway: “Wrong is wrong even if everyone is doing it. Right is right even if no one is doing it;” “Shoot for the moon. Even if you miss, you’ll be among the stars;” “Dare to be remarkable;” “Be cheerful and pass it on;” “I can accept failure but can’t accept not trying;” “Truth burns up error.” In several of the classrooms, signs were posted under the light switch that read, “Formal Language Zone. Code-switch, please.”

Chester’s Dining Room

Formerly a basketball court, the basement housed the “dining room,” as participants preferred to call the cafeteria, which also served as the school’s main gathering space. The space felt surprisingly bright, with high windows on both sides. At one end was a large, bright sign, “The Luccia Brothers Neighborhood Kitchen,” referring to the restaurant company that donated the majority of the funds to renovate the kitchen and make it possible to bring in the Fresh and Healthy Foundation. There were many round tables dotting the cafeteria. Three large refrigerators were located in one of the corners.

The space closest to the stairs was partitioned off with low bookshelves and contained desks and a chalkboard, where religion classes were held. Old church pews lined the right side of the dining hall, and folding chairs lined the other side. On the one long wall, four banners with the House names (their groupings for homeroom): Patientia, Benevolencia, Industrias, and Humilitas. These names were supposed to invoke an elite private school, sort of like in Harry Potter, as one of the staff members informed me.

On the other long wall hung three banners with huge photos of Chester students. One was “technology” with a photo of a student at a laptop. One was “music,” with about 10 students playing violins, and one was “sports clinics” with a team photo of students by a soccer goal, with basketballs. In between these banners were two flags: one Episcopal, and one American. There

were 12 round tables, each with eight black plastic chairs. On the far side, there were two stainless-steel serving tables close to the entry to the kitchen. On the right side stood three large, stainless-steel refrigerators. On the left side, three large stainless-steel food warmers were placed, with trays of food of inside. Behind these warmers, photos made it look like a meat shop, with a picture of hanging meat and cheeses. On the near side were tables, chairs, desks, and three portable chalkboards serving as dividers; the space functioned as a classroom at other times in the day. Large strings of light bulbs, like Christmas lights, hung across the top of the ceiling. The high windows that lined each side provided a lot of natural light to the space as well, in contrast to many dark or artificially-lit basement spaces.

At Chester, the cafeteria was called the "dining room." Mr. Chase, the head of school, explained that names were important to him and the principal, Ms. Craig:

> It's not the cafeteria. The dining room, I think we treat that room and food in a very respectful way, and so I think students take it seriously. I think the students, now that they have a part in setting up the tables, I think they take it seriously and think it's an important part of their day. (Interview, 6/29/15)

The school had recently obtained funding from a local restaurant chain to renovate the kitchen, with the goal of being able to prepare fresh meals through the Fresh and Healthy Foundation. In November of the school year that I observed, they hired a full-time chef (salary paid by the school) and began to serve the Fresh and Healthy Foundation menu every day of the week. Prior to November, for the last two years, they had offered regular re-heatable meals from the same organization as Washington Charter and Franklin. After November, they also continued to use that organization for their breakfast and snack program. However, they also provided unlimited fruit for students at breakfast and all day long. The fresh fruit usually came from donations, from

local grocery stores like Trader Joe's. Managing the paperwork required for reimbursement from the state, no easy task, routinely frustrated Mother Charity.

During a typical lunch, six to eight students grouped by grade or House, sat at round tables, usually with an adult. Each table had a "table captain" who helped set the table and serve the meal, family style. After a prayer by the head of school and an introduction of the food by the chef, the table captains would bring serving dishes over to the table, and students would pass them. At the end of the meal, dessert was served in the same manner. Students worked together to clear the table, separating untouched food (for the "share" program, donated to needy families), as well as trash and compost in the correct bins. According to Ms. Crowley, some of the compost is used in the garden, and some for the chickens. She also said that students needed constant reminders about what could be composted (Interview, 7/29/15). Ms. Campbell was primarily responsible for cleaning up, washing tables, collecting table linens to launder, and running the dishwasher. The school also relied on a steady stream of volunteers, most from associated congregations. I often helped in these tasks as I observed and talked with the staff.

The dining room was the center of life at Chester. During my observations, students, teachers, and administrators wandered in and out, holding meetings, doing work, and chatting. The kitchen was located through a ramp in the back, though some of the kitchen equipment (like the refrigerators) needed to be housed in the actual dining hall, due to space restrictions. The first room had multiple sinks, ovens, and stainless-steel counter spaces. Up a few steps in the back was an unfinished space that functioned partially as a pantry and an office. As there were many exposed pipes, I was warned to watch my head in the "danger zone." Walls were lined with heavy-duty shelves filled with packages, aprons, and non-perishable food items, like canned tomatoes, spices, cereal boxes, etc. There were also several desks, including Mother Charity's

desk with the computer where she entered all of the paperwork requirements to get reimbursement from the state for the free meal program (Field notes, 5/20/15).

In the back of the school, there was a kitchen garden, with several raised beds full of kale, herbs, and tomatoes. On my initial tour, Ms. Crowley showed me a gigantic chicken coop, with a large rooster and about six to eight hens. Some were smaller and mostly clustered above in the roosting area. She told me how to clean the coop and what to feed the chickens. There was a half a watermelon covered in flies that looked like it had been pecked at. She also told me about how they had to fox-proof the coop. The coop itself was donated by a volunteer who had some farming experience. I asked her about zoning, but she didn't know; they had just assumed it was fine, except for the rooster, which crowed and bothered the neighbors (Field notes, 6/11/15).

Chester participated in what they called the "Share" program, where they collected food daily and bagged it up for families in need. Ms. Campbell and Mother Charity were the two primary staff members whom I saw bagging food and sending it upstairs to particular teachers to give to students on their way home. They collected the food from leftovers in the cafeteria, donations from local grocery stores such as Trader Joe's, and an external organization, also called "Share" (contributing to the confusion around this term). Episcopal churches also gave non-perishable donations that often ended up in the "share" bags. At Thanksgiving, an entire garage was filled to the brim with such donations, which volunteers (including me) bagged up into complete meals with gravy, mashed potatoes, canned vegetables, rolls, juice, cranberry sauce, and prepared desserts. Bigger families received more. Usually the bags consisted of prepared or microwavable items, or items that needed no preparation (fruit or carrots), because staff believed that some homes did not have fully working kitchens or cooking capabilities.

Mostly these bags went to the families of students at the school, but they would also provide them for other residents in the neighborhood.

Mother Charity said that at any given time, there are about four or five families in "real, real need" at the school, including one student's family that included three younger siblings and a newborn at home. While the school is not a food bank, they distribute bags of food for their students, sometimes daily, from donations. Mother Charity said she picks up 30 boxes of food twice weekly from Trader Joe's. Ms. Campbell said she often calls parents herself. She would say, "Hey, we got some meats here and there's some fresh produce, we have collard greens and string beans, why don't you come down?" (Interview, 6/11/15). Like Ms. Cummings, she mentioned that the fifth grade class was in particular need. This year, they sent food home with each fifth-grader every other day. Mother Charity expressed how overwhelming the job was, saying they really needed a staff of seven for a "fully developed food program that truly supports the food desert that this neighborhood lives in" (Interview, 6/12/15).

> Yeah, food security in this area is definitely questionable so we get calls at least two or three times a month from the neighborhood. "Are you having your shared food program? Are you providing share bags?" When we have it we can invite them to come receive a share bag from us, but sometimes we don't have it. There's a need and we could be meeting it better. (Interview, 6/12/15)

Many teachers believed that the need in the neighborhood is great, not just among their own students' families. "There is room to develop such a thing both for the neighborhood and for our families that are directly connected with the school," she said, suggesting that in the future they might incorporate a whole food bank at the school. The students and their families appreciated these efforts. Often, teachers heard at conferences that parents hoped the food would continue

coming home. Charmaine, a fifth grade student, said she thinks the program is good, "because people who don't have a lot of money, can eat without spending any money, and they can eat healthy. They can eat healthy foods and good foods at the same time" (Interview, 7/1/15).

At times, however, the share bags were heavy and difficult for the kids to take home. It was a challenge for them to "find better ways to manage that and protect the dignity of the families involved" (Interview, 6/12/15). Ms. Colman mentioned that sometimes they even drive a student home, or call the parents to pick it up, so the child didn't struggle with trying to carry four or five grocery bags. She also emphasized that "it can be kind of embarrassing if it's not presented in the right way and nobody wants to be the kid that's taking four bags home" (Interview, 7/10/15). She explained they are trying to make it a "school norm," where all the kids take a bag, so no one student feels embarrassed.

The Participants at Chester Episcopal

As at the other two schools, the students population at Chester was almost entirely African-American. The teachers, staff, and administrators were almost all white—something that drew criticism from members of the Episcopal diocese. In fact, during my observations, an "anti-racism committee" from the diocese came to interview and observe members of the community regarding race relations at the school. However, both the chef and the lunch assistant were African-American, and one other aide, who I did not have the chance to interview.

The Students. The majority of Chester's students came from the immediate neighborhood, and most came from one particular elementary school, according to the principal. I was told that most students came from single parent households, and sometimes both parents were absent. In those situations, the students were being raised by older siblings or grandparents.

Table 4.3 *Demographic Information for Participants at Chester Episcopal*

Name	Race	Age	Sex	Marital Status	Role
Mr. Chase	White	35-40	M	Married	Head of School
Dr. Carter	White	90	F	Married	Board Member
Ms. Craig	White	35-40	F	Married	Principal
Ms. Cullen	White	30-35	F	Married	Assistant Principal
Ms. Crowley	White	55-60	F	married	Staff
Mother Charity	White	55-60	F	Married	Staff
Father Cross	White	20-25	M	Single	Priest
Mr. Clark	White	25-30	M	Single	Staff
Chef Williams	Black	50-55	F	Single	Chef
Ms. Campbell	Black	45-50	F	Single	Kitchen Worker
Ms. Colman	White	25-30	F	Single	Teacher
Ms. Chan	Asian	25-30	F	Married	Teacher
Ms. Crawford	White	30-35	F	Married	Teacher
Ms. Cummings	White	30-35	F	Single	Teacher
Caylee	Black	10-11	F	--	Student
Cynthia	Black	10-11	F	--	Student
Charmaine	Black	10-11	F	--	Student
Caydence	Black	10-11	F	--	Student

Like those at the two other sites, students at Chester typically came from impoverished homes. At Chester, however, the teachers and administrators regularly interacted with parents and caregivers, and conducted regular home visits, giving them a first-hand experience of the conditions in their students' homes. Ms. Chan, the science teacher, said many students there had experienced trauma and food insecurity, and that some parents are "missing" or uninvolved. Housing insecurity was another issue:

> I think there's a lot of shuffling too. Some nights, they're at mom's house. Some nights, they're at grandma's. Some nights, they're at Aunt whatever. Sometimes they're at... It's a lot of inconsistencies. Then there are also the ones that are going through severe trauma like abuse, things like that. (Interview, 7/10/15)

The English teacher, Ms. Crawford, agreed, saying that the incidence of food insecurity amongst the students was "pretty high," though it varied by grade. She thought it was worst among fifth-graders. "Now there's the [local grocery store], but there's not really anything else around here where they can get anything fresh. There's definitely a food need," she said (Interview, 6/10/15).

Additionally, teachers told me that high rates of food insecurity led to a reliance on cheap, ready-to-eat, processed foods, due to a lack of time, cooking skills, electricity, or cooking equipment. Ms. Cummings, the math teacher, told of the living situation of one of the students in the school whose mother was in prison. An older brother was the legal guardian for two middle-school students, whom she described as "fending for themselves." She said, "At that point, that was a household that they were completely living off of junk food, or Trader Joe's food that we were giving them. That's hard because we give them Trader Joe's chicken...Raw chicken, or frozen chicken" (Interview, 7/15/15). I asked her what she thought the kids were eating in that situation, and she replied, "Just junk. Other than when they were here, pizza, Chinese food. Probably mostly Chinese food. Then, bodega, chips" (Interview, 7/15/15). She went on to describe "shocking" living conditions in some other homes, where kitchens were lacking basic appliances like refrigerators and ovens, electricity, or cooking equipment. "Kitchens that are empty. Dated appliances, empty counter tops. Maybe the cupboards are there, but their doors are taken off of them. There's no electricity in the home, so you know that there's no refrigeration. Mice everywhere" (Interview, 7/15/15). She went on to tell me about two homes where she watched the rodents run in and out of the kitchen while she sat in the living room. Clearly, living in this kind of poverty, as well as dealing with unstable family relationships, made cooking and eating fresh foods impossible for some students and their families, who came to rely on cheap, processed, and ready-to-eat foods.

The Teachers and Staff at Chester Episcopal. The administration at Chester consisted of Mr. Chase, head of school; the principal, Ms. Craig; and an assistant principal, Ms. Cullen. Mr. Chase was a white male in his late thirties, who had previously worked at other schools in the city, including a charter school. Ms. Craig, white mother of two in her late thirties, was a stern and focused woman who had previously worked as a teacher in other urban school districts. While she rarely smiled, she was very thoughtful and kind. On Fridays, she brought her infant daughter to school, who was passed around from teacher to teacher. Ms. Cullen, a white woman in her early thirties had a warm, bright demeanor. She often wore brightly colored, fashionable clothing, styled her hair in a large bun, with sparkly necklaces and earrings. Dr. Carter was a revered member of the school community. A 90-year-old member of the board, she was a former medical doctor who'd had a storied career. At Chester's inception, she had donated large sums of money to get the school up and running, even paying Mr. Chase's salary in the first year.

The sexton, Mother Charity, had responsibility for custodial work and managing paperwork for the food programs, but her influence extended beyond those tasks. She was a heavy-set white woman, a former welder and Episcopal priest, with a short, crew-cut hairstyle. She wore casual khaki pants, a long-sleeve t-shirt and zippered sweatshirt, with red sneakers, in contrast to most of the teachers who dressed much more formally. She was a resilient and hard-working woman, who got others to do what she needed them to do, and assumed everyone was there to help. She really didn't take no for an answer, as evidenced by several occasions when she would give me boxes of snacks to carry and distribute upstairs just as I was about to leave. But she was also very friendly and kind. On my first visit, she smiled wide and said, "Welcome to [Chester] – welcome home!" (Field notes, 5/20/15).

Chef Williams is a beloved and revered figure at the school. She is a tall, African-

American woman, who formerly worked for another private school in the city. She often tailors the recipes to the kids' tastes. She observed, for instance, that they probably did not like whole chickpeas. The first time, most of the food came back. She was appalled at the waste, so the second time, blended them into a sauce instead, and they were mostly eaten. Now, the whole foods organization consults with her as they create their recipes (Field notes, 5/6/15). The students and staff raved about her love and care. Mother Charity told me about Chef's "love potion," which she makes for her when she gets a sinus infection, consisting of lemon and whole garlic bulb, and swears this potion prevented her from having to take antibiotics this year (Interview, 5/20/15). Caylee, a fifth grade student, said of Chef Williams, "She knows what to feed us and what not to feed us... She makes it so everybody is one big community or family can eat it at once and they can feel good about it" (Interview, 6/11/15). Almost everyone mentioned her legendary kale salad, which most students gobbled up, contrary to my expectations. The popularity of her kale salad is what led Father Cross to call her a "miracle worker" (Interview, 6/10/15).

Ms. Campbell, an aide and parent of a Chester student, lived in the neighborhood. An African-American woman in her mid-thirties, she had experienced poverty and food insecurity firsthand. She told me she loves her job and "does whatever it takes so kids feel at home" (Field notes, 5/20/15). Her primary responsibilities included washing table linens, uniforms, and dishes, and generally helping prepare and clean up after meals. She also functioned as a parent liaison, since she had such close ties to the neighborhood. Whenever parents visited the school, they always gave Ms. Campbell a warm hug.

One day during my observations, I noticed that an "anti-racism" committee was visiting the school from the Diocese. The school had been criticized by some in the diocese for lacking

African-Americans on the teaching staff and in leadership positions. Mother Charity was clearly upset and defensive about this. She said from the beginning, Mr. Chase had wanted African-American members on the teaching staff, to reflect the students' racial and cultural heritage. But the qualified African-American applicants were not happy with the low salary offered; they wanted twice as much (which would make it comparable to salaries at nearby public schools). Mother Charity offered that she herself makes one third of her normal salary. She views it as charitable work. But she surmised, perhaps only those who come from some level of privilege—those with a dual income, family wealth, etc —would be able to subsist on this salary. So the school hadn't been able to attract qualified African-American teachers or leaders as of yet. But, and she said she thought this was very courageous, Mr. Chase was choosing to "lean in to the pressure" by going to the diocese and asking for this committee to come into the school. She said she was furious with some of her peers in the diocese—other clergy members including priests she knows— who had refused to help Chester until it reflected a diverse staff. She became animated and stern as she spoke about this difficult situation for the staff.

Lunch Programs at Franklin, Washington, and Chester

As discussed earlier, Franklin, Washington, and Chester were chosen for this study because of the different lunch programs each school offers. Here I will describe the two main programs, Traditional Lunch Program (TLS) and Fresh and Healthy (F&H). My descriptions will focus on the content of the meals, the ways the meals looked, smelled, and tasted, and how they were served.

The Traditional Lunch Program

The Traditional Lunch Services (TLS) is a city-wide non-profit agency that, for over 40 years, has provided snacks and meals to schools, daycare centers, after-school and summer

programs and administers the federally-funded Child Nutrition programs. According to their website, they provide school lunches in 92 schools, serving 7,000 children in the city per day. According to its website, 77% of these schools participate in the Community Eligibility Provision to provide these meals free to all students. In an interview, the Director of School Programs described how TLS came into being to provide meals to Catholic schools, many of which did not have kitchens sufficient to handle the number of meals needed. Thus, TLS matches the federal resources that are available to provide school meals with schools that need them, now including charter and independent schools in addition to parochial schools. She said TLS thinks of itself as an "anti-hunger organization" (Interview, 5/20/17).

The menus at both Franklin, which used TLS for their breakfasts and lunches four days per week, and at Washington Charter, which used TLS for breakfast and lunch five days per week, were very similar. Breakfast menus included dry cereals (frosted flakes, cinnamon toasters, toasty o's), muffins (blueberry, banana, orange-cranberry, apple-cinnamon), egg and cheese on a bagel, fruit, milk, and juice ("wango mango vegetable juice" for instance) (Field notes, 3/6/14). The juices seemed to be especially popular. At Chester Episcopal, which used TLS for its breakfast and afternoon snack programs, Mother Charity commented about the veggie juice that "there's at least a lot of nutritional sugar" in the juice, so she orders the juices all the time. Similarly, a student at Washington told me how much she loves the juice, because she loves her veggies. The juice package boasted "no preservatives or additives."

Lunch menus included such items as spaghetti and meatballs; penne pasta, chicken nuggets or tenders, baked beans, and apple juice; BBQ chicken, fajitas, and fiesta corn; crispy chicken filet, toasted cheese sandwich, sliced turkey or meatloaf, mashed potato, veggie juice, and fruit (Field notes, 3/6/14). Corn dogs, tater tots, and pizza were also common offerings.

Other common items included soy nuts, which claimed to be made with non-genetically modified soy, and contained eight ingredients, as well as grilled cheese, which seemed an unnaturally orange color (Field notes, 4/17/14). Often, very shiny red apples, oranges, small styrofoam containers of iceberg lettuce, or small bags of baby carrots were also available as meal components on trays as students came through the lunch line. Sometimes apple slices would be available in a plastic bag (instead of whole apples). Students were incredulous when I asked to see the ingredients. "Ingredients?" they said, surprised. The ingredients listed were: apples, calcium ascorbate, prepared from ascorbic acid, and calcium to prevent discoloration (Field notes, 1/25/15).

With the exception of the pizza, which was heated up in individual cardboard boxes, most of the main meal component and sides were packaged in black plastic containers with plastic film. At the start of lunch, a chorus of crinkled plastic erupted as children stabbed the plastic film with their sporks (Field notes, 1/14/14). Sometimes, cheese would get stuck in the plastic wrapper, for instance with grilled cheese sandwiches, and children would have to peel off the hot sandwich, leaving gooey cheese in the wrapper. Many would then lick the plastic wrapper to get all of the cheese (Field notes, 1/14/14).

At Franklin, while a few chose chocolate milk, most students chose strawberry milk, the ingredients of which were: nonfat milk, sugar, cornstarch, carageenan, artificial flavor, salt, FD&C Red 40. Several teachers across the sites specifically mentioned how bothered they were by the inclusion of food dyes into the milk, including the principal at Washington, who had instituted a ban on food dyes at the school. She had not been successful in banning the strawberry milk, however. A tray of hummus was sometimes available on a side table, as well as packets of French and buttermilk dressings. At both Franklin and Washington, I observed some

students taking four or five packets of the dressings and eating them directly, without putting them on salads. Certain items, like chicken nuggets, were usually served with packets of honey mustard, which had a list of ingredients several lines long and included corn syrup, extractives, and preservatives.

Students at Franklin enjoyed lunchtime, because, as Farrah explained, it was their "break time," a time "when we can talk about the school day" (Interview, 5/15/14). However, compared to the special Friday lunches, they were lukewarm at best about TLS offerings. Several boys complained that their meal of chicken nuggets and sweet candied yams "don't smell good" (Field notes, 3/10/14). Another boy barely ate. He told me he didn't like the food. "It doesn't go together in my stomach," he said. He hadn't even opened his spaghettios and had only nibbled at the grilled cheese (Field notes, 4/17/14). At Washington Charter, a boy complained that his pasta was "nasty" (Field notes 12/16/14). Other students complained about the temperature, that items were cold when they should have been warm. A few had specific requests, such as no more tuna fish or chicken nuggets (Field notes, 11/19/14). However, during interviews, lunch workers across the sites, as well as the TLS managers, told me about the many procedures they had in place to elicit student feedback on meal choices and taste tests, and told me they were very receptive to changing or substituting particular meal components that students did not like.

Teachers described TLS lunches as "utilitarian." There seemed to be agreement about how the lunches, while not as fresh or as good as they could be, were much more nutritious than what students would eat otherwise. The nurse at Washington agreed, saying that while the food "is better than any other place that I can say," she "cannot say that it's still 100% of what it should be to me, but at least, they are doing their best" (Interview, 1/20/15). Washington's art teacher described them as "nutritional," because there was always "some kind of fruit, apples,

orange, or whatever" as well as protein, and they never get candy. She thought it was great that they offered soy instead of nuts, because of all of the allergies (Interview, 2/3/15). At Washington Charter, several students regularly brought their own lunch. However, the items they brought seemed much more processed than the TLS lunches. Typical items I saw included Capri-Sun juice boxes, Yahoo chocolate milk, apple juice, Entenmann's Little Bites, and various types of sandwiches. One girl brought a Lunchables each day, consisting of crackers, cheese, and pepperoni, and Oreo cookies.

While most teachers described TLS meals as "healthy"—or at least "health*ier*" relative to other options, the food wasn't as fresh as they would like to see. Ms. Watts said that while these lunches include "necessary food groups," they didn't look appealing to her and she didn't think the kids like it that much. The muffins and bagels "seem to be a little bit dry and maybe not so tasteful" and the lunches are "not something that I would want to eat" (Interview, 12/16/14). Mr. Flynn said, "The regular lunches, Monday to Thursday, they're fine. They're very, I guess, utilitarian in a way; they just come out of the microwave in plastic packaging, plastic ware. Every student has an individual tray. The food isn't nearly as appealing or nearly as fresh, and every kid has his or her own individual tray (Interview, 6/3/14). Here, teachers expressed their concerns about the bland taste of many of the offerings, and about the ingredients and processing.

TLS also offers an afternoon snack program, which Chester uses. Mother Charity called it "basically a cookie and a juice. Or, chips and a juice." I helped Mother Charity distribute these snack boxes on several occasions during my observations. We would count the students in the class, pack that number of boxes into a crate, and deliver them to the classrooms directly. Mother Charity would check off students' names as they collected their box. Inside the box, usually there

were several items, such as small boxes of cereal, flavored yogurt, juice, string cheese, fresh fruit or fruit snacks. The yogurt was sometimes problematic, if it broke and splattered all over the other items (Field notes, 5/27/15). Ms. Colman described the snack as "a little bit gross." She also bemoaned the cold chicken nuggets "that are not real chicken." However, she said at that particular time of year, they also get nectarines, which is good, and she likes that the kids "actually really always eat the little salads." One student, Cynthia, said she doesn't eat the snack all the time, that sometimes she's "not in the mood" or she's full after the Fresh & Healthy lunch (Interview, 6/20/15).

Teachers' Lunches during TLS. For Mr. Ford, the principal of Franklin, teacher participation in the lunch program provided "compelling evidence" and "feedback" to him about how well they were doing. He looked to staff participation in the Fresh and Healthy Foundation as evidence they were doing something right. He told me most of the staff chose not to eat the "pre-fabbed stuff produced by TLS" and either did not eat or brought their own lunch. But on Friday, "everybody is eating what's been prepared in the kitchen downstairs. And our students, our staff, love it" (Interview, 2/25/14). I, too, saw almost all teachers ate the Fresh and Healthy meals with the students at Franklin on Fridays, and every day at Chester.

However, teachers rarely ate TLS lunch offerings, almost universally preferring to bring their own on those days. Often these would include sandwiches, or leftovers from home, or they would dash out to a store and bring back something. At Franklin one day, Ms. Faber brought bottled water, grapes, a sandwich, and a "Juice Plus." Ms. Kim brought quinoa and spinach. Another teacher ran out to buy something, and a fourth snacked on a bag of pretzel twists (Field notes, 12/18/13). As lunch approached, I often observed Ms. Fisher munching on string cheese or drinking a cup of tea in her classroom (Field notes, 3/14/14). Prior to the Fresh and Healthy

program implementation at Chester, teachers told me that at lunch, most teachers would sit in the adjacent house, away from students, and bring microwavable meals from Trader Joe's. An aide at Washington commented that the TLS lunches looked "much more appetizing" than what she had had in school. Still, she preferred to bring her own leftovers from home. One time, when the kids were having "Fiesta Chicken," she said, "if the meals looked that good all the time, maybe adults would want to eat it more" (Field notes, 2/3/15).

Some teachers agreed with students that the TLS food was not fresh enough to appeal to them personally. Mr. Ford also rarely ate the TLS food. He said, "I actually feel more heavy after I've eaten it. Because it's a lot of breaded stuff... It's just not as fresh" (Interview with Mr. Ford, 2/25/14). Ms. Crawford, at Chester, agreed that TLS lunches were unappealing. "I personally wouldn't eat it. I'll eat it if it's the fruit cup, but the sandwich is very unappealing to me" (Interview with Ms. Crawford, 6/10/15).

Another complaint was that the portions were too small. Ms. Fuller explained that the portions are too small for her. Asked whether she ate TLS lunches she replied, "I generally don't. I'm a grownup. That little tiny saucer of food is not going to do it. It's like a snack... It doesn't fill the hole." (Interview, 5/21/14). In fact, she thought the portions were too small even for many of the students at Franklin, since the kindergartners received the same amount as the fifth graders. Like other teachers at Washington and Chester, she did not find the food appetizing, because she did not see a lot of vegetables, and what she did see was not fresh:

> When they bring it in it's like a frozen thing and it just doesn't look appetizing. The fact that all the teachers bring their own food says something. If you forget your food people are likely to say, "Cover my class for 10 minutes, I'm going to run over to Whole Foods

and I'll be back." Rarely is someone like, "I'm so stuck that I'll eat the kid food." (Interview, 5/21/14)

Similarly, at Washington Charter, Ms. Watts explained that she brought her lunch every day, because she gets really hungry, implying that the school food would just not be filling to her. She described how she gets "hangry" (or angry when hungry). For breakfast, she likes yogurt or cereal and a banana, and for lunch a salad. That day she ate turkey and bean chili from Whole Foods, which she said was "delicious" (Interview, 12/16/14). I observed other teachers at the school eating avocadoes, bananas, Easy Mac, and salads with tomato, cheese, and egg. Overall, most teachers and administrators brought their own lunch, preferring fresh foods, such as salads, produce, and sandwiches.

Notably, however, cafeteria workers and younger assistants and aides, mostly African-American, *did* eat the school lunch regularly at all three schools. It was inexpensive or free for them to do so. All of the workers I interviewed that served the TLS lunch also thought it was very healthy food. For instance, Ms. Wallace, the lunch manager at Washington, said it was "phenomenal," and that they "all communicate with one another to ensure that every student here eats...I don't want nobody to go home hungry" (Interview, 1/13/15).

The Fresh and Healthy Program

Like TLS, the Fresh and Healthy Program (F&H) is run by a city-wide non-profit organization, and provides technical assistance to schools serving fresh food, cooked on-site. However, unlike TLS, F&H does not actually provide the food; schools order the food and prepare it on-site. It was founded in 2008 by a well-known chef in the city and several of his associates. Motivated to tackle the issue of childhood obesity, the founders leveraged their connections and experience to design menus that complied with federal guidelines for

government-subsidized school meals, and prepare freshly made lunches to students at a summer camp. Their efforts evolved into a program that served school lunches daily or weekly at 10 schools, and after-school cooking classes at many more, ultimately serving 45 schools and 5900 students. According to their website, they aim to "help kids experience the connection between healthy eating and healthy living."

The Chief Operating Officer, Caroline Cahill, is a white woman in her mid-forties, and a busy mother of four children. She dressed stylishly and carried a black leather bag, often checking her smart phone. While I never saw her visit Franklin, I saw her many times at Chester Episcopal, one time hosting a group of men and women dressed in suits, carrying briefcases and smart phones. She seemed really excited to show off Chester's new kitchen, and I gathered that these were officials of some kind. Only a few schools have full-service kitchens, she explained to them. While it's a step-up in quality (presumably from TLS offerings), the chefs still don't have the ability to "be creative," she added (Field notes, 7/1/15).

When a school signed on with them, the Fresh & Healthy Foundation provided some kitchen equipment, chef jackets, round tables, and training for their chef and cafeteria workers. They also sent sous-chefs to help if the school needed it. The school was required to hire a chef that would be a school employee (not paid by F&H). The chef and lunch manager worked together to order the required ingredients from local farms and distribution companies. The school itself purchased the ingredients and actually paid the salary of the chef who prepared the food. Chefs were allowed and expected to make changes and substitutions to recipes based on their own experience and what they knew about their students' tastes and preferences. Some of Chef Williams' changes were so popular that they were integrated into the recipes for all the schools. Chefs also had to make on-the-spot substitutions for fresh produce that was unavailable

at the time. These were some of the reasons, according to Caroline Cahill, that schools needed to hire chefs—not just kitchen workers. The chefs needed to have the training and experience to make substitutions that would preserve the integrity of the recipe and its nutritional requirements. Thus, F&H did not actually provide the food, just the "brand"—the recipes, training, methods, and support.

The Fresh & Healthy Foundation developed recipes and menus for each site, ensuring that every recipe complies with the NSLP requirements for reimbursement, using software programs to help in this task. Without this compliance, low-income schools could not receive funding from the state (actually federal money, but administered by each state) and would not be able to participate in the Fresh & Healthy program. The Foundation sought to implement its program in public schools, grow in scale, and ultimately impact state and federal school food policy (Interview, 7/27/15). Thus, even though some schools paid for their own meals and did not receive state reimbursement, it was still critical that each recipe complied with these strict requirements. I will expand on the policy impacts of F&H as well as the tensions between F&H and TLS in later chapters; however, a brief summary is below as well.

In many of F&H's schools, TLS, while no longer providing the meals, still served as the "school food authority" for the school, submitting copious amounts of required paperwork to the state, a herculean task schools often needed to outsource. TLS was the school food authority for both Franklin and Chester for the F&H meals as well as TLS-provided meals. At each school, there was an employee whose task it was to enter each student who took a meal that day, what meal components they took. This was true even for snack. The employee must also enter the total meals in their inventory before and after the meal. Every meal, meal component, and milk was to be accounted for. This presented challenges in figuring out how to account for freshly prepared

meals that were served family-style. At times, there were disagreements between F&H and TLS about certain recipes. One such disagreement—a bitter one, by some accounts—occurred over F&H's use of the phrase "a pinch of salt" in recipes. TLS did not believe it was exact enough to comply with the requirement for sodium. I was told by Chester administrators and Caroline Cahill that the relationship between F&H and TLS was often tense, perhaps because TLS viewed F&H as a threat.

F&H meals were similar at both Franklin and Chester. They were very colorful, with abundant vegetables, and usually a fruit-based dish for dessert. The recipes paid attention not just to flavor and nutrition, but to the visual impact as well. At Franklin, some of the menus included: Baked ziti with scratch tomato sauce, fresh thyme, low-fat mozzarella, and cottage cheese, roasted zucchini in olive oil, and carrots; grapes and clementine slices with strawberry whipped cream for dessert (Field notes, 1/10/14); Tilapia with panko breadcrumb crust, rice, cauliflower, asparagus, and tomato salad (Field notes, 3/14/14); and Baked chicken wings with panko breading, fingerling potatoes, roast carrots, salad, and for dessert, pineapple and blueberries with mint (Field notes, 5/16/14).

At Chester, some of the popular menu items included: Moroccan chicken stew, coconut rice, romaine salad with carrots; pineapple for dessert (Field notes, 6/23/15); Tuna melts, sweet potato fries, firecracker string beans, with jalapeno on top (to which there was a loud "woo!" from a group of students and much clapping when Chef Charles announced it) and strawberry banana smoothie for dessert (Field notes, 5/20/15); and Roast turkey, biscuit, roast potatoes, the infamous kale salad, and peppers; blueberry yogurt smoothie for dessert (Field notes, 6/11/15). Some of the kale was even grown in the garden in the back of the school. Another favorite mentioned was the Bolognese, with pasta, turkey, and a special sauce using herbs from the

garden. The plates were always colorful, filled with an array of fresh fruits and vegetables, in sharp contrast to the monotone TLS meals. When a meal was cooking in the dining hall, the savory aromas filled the entire school.

In addition to the differences in the types and preparation of food itself, the F&H paid careful attention to the dining experience. Rather than being served in traditional lunch lines as with the TLS experience, students during a F&H lunch would serve as "table captains," wearing a chef jacket, and set the tables with a tablecloth, silverware, cups, and "real" plates. They would serve their table, family-style, where each round table received large serving dishes of food, and students would pass the dish, sometimes even serving each other, like at big family gatherings. Students would then work together to clean up as well.

Chester and Franklin both relied heavily on a steady stream of adult volunteers to help prepare and clean up. At Franklin, volunteers from local businesses and corporate offices (mostly white professionals) helped chop vegetables and fruits, brought out dishes, set and cleared tables. I, too, was recruited to help with the preparation and clean-up. Once, I even whipped heavy cream by hand, which took more than 20 minutes. With only one tiny dishwasher, volunteers spent several hours each week hand-washing dishes after the Friday meal. At Chester, volunteers (again, mostly white) came from affiliated Episcopal churches and some from local colleges. Some were regular volunteers, and others came in groups. I, too, helped serve and clean up, wiping down tables and gathering the table linens for the wash. I helped fold clean napkins and tablecloths, and sorted clean and dirty dishes for washing. Clearly this model of dining was incredibly labor-intensive compared to the heat-and-eat style, in which all of the components were disposable. It must be noted that both Franklin and Chester had full-time positions for volunteer coordination already in place, so directing volunteers to their dining program was not

difficult. Clearly, the labor involved would serve as an obstacle in other types of school situations.

Conclusion

This chapter opened by describing the broader context of the city and neighborhoods, including a discussion of teachers' perceptions of food insecurity in students' homes. I also provided detailed descriptions of key participants and observation-based data at the three sites. All three sites were located in struggling neighborhoods of the same large city. The three schools served high-poverty African-American students, almost exclusively, and all offered free lunch to all of their students, while none offered ala carte items for sale. All three also expressed care and concern for students in various ways, providing many opportunities to engage parents, families, and the surrounding community, and offering a "whole child" approach to education.

Additionally I provided observation-based data for the two types of lunch programs involved in this study: Traditional Lunch Services (TLS), which provided breakfasts and snacks to all three sites, lunches to two sites (Franklin and Washington), and had previously served lunches to Chester. Consisting of primarily processed foods, these meals arrived frozen, and were re-heated in industrial warmers before being served to the students in a lunch-line. The second program, the Fresh and Healthy Program, provided lunches to two sites (Franklin and Chester). These meals was freshly-prepared by a trained chef, whose salary was paid by the school. This program was labor-intensive, relying on volunteers to help prepare and set up the meal, and on teachers and other staff members to sit with students. Despite the differences in the types of foods, both programs complied with the same set of federal nutrition guidelines in order to be eligible for reimbursement from the NSLP.

CHAPTER 5:

HUNGER, FULLNESS, AND STUDENT ENGAGEMENT

In the previous chapter, I described two lunch programs in three schools, both of which comply with the same nutritional requirements of the National School Lunch Program (NSLP). While the three schools are similar in many ways (location, demographics, non-public), the two lunch programs are very different. This chapter addresses the following research question: *Comparing the two programs, how do students and educators understand the differences in the kinds of foods offered, the food quality and presentation, and the modes of delivery?*

In this chapter, I analyze how students, teachers, staff, and administrators at each of the three sites understand these differences, as well as the role their food program plays within the daily life of students at the schools. Almost unanimously, participants at the two sites that offered the Fresh & Healthy lunch program, Chester and Franklin, believed that the Fresh and Healthy Program offered fresher, tastier food, and left them feeling more full and satisfied. The experience of fullness was especially important to students, because the experience of feeling hungry at school was prevalent at all three sites, particularly when students accidentally missed (or intentionally skipped) the free breakfast program. Students also reported feeling hungry *even after* eating the TLS breakfasts and lunches, which many attributed to the food being more processed than F&H. Finally, students described feeling unable to learn as a result of feeling hungry.

From these data, I make several arguments. Drawing on the work of Critical Policy theorists, I show how participants' understandings differ from official policy texts, and how the NSLP would be improved if it took participants' understandings into account. The differences between the two lunch programs were consistent with an almost unanimous agreement among all

participants about what "healthy" and "unhealthy" foods are, how they feel after eating them, and how they impact students' ability to learn. Participants talked about the pre-made and reheated TLS lunches in the same ways as they described *unhealthy* foods—as processed food and "fast food"— which leave them feeling hungry and unsatisfied. They also expressed similar concerns about the ways in which these foods affected their bodies, in turn impacting their ability to learn. The Fresh & Healthy program, in contrast, with its freshly prepared food, was consistently described as healthier, more "filling," and providing a more sustained "energy" during the school day. At all three sites, participants emphasized fullness as an important goal, suggesting that the *lack* of fullness was a source of concern for students and teachers. Indeed, many in this study saw a direct connection between student fullness and the learning environment. The effects of hunger, which can manifest in ways, such as a lack of engagement or disruptive behaviors, whose cause often goes unrecognized by educators, researchers, and policymakers. Lastly, I offer a policy critique about the National School Lunch Program nutrition guidelines. If policies express values (Ozga, 2000), *whose* values get expressed and in what ways are important considerations.

Importantly, this study is not, and was not intended to be, a program evaluation of these two particular programs, or an assessment of the objective quality of food, cost effectiveness, or any other measure. In reading the critiques of the TLS food below, keep in mind that freshly prepared food, for many reasons beyond any particular food service provider's control, is very resource intensive. F&H requires a fully functioning kitchen, a full-time trained chef on a salary paid by the school, as well as trained workers who assist the chef, do the ordering and inventory, and file paperwork for reimbursement from the government. Most schools today, including one of the schools in this study (Washington), do not have fully functional kitchens capable of

preparing fresh meals. The costs associated with upgrading equipment and renovating school buildings to accommodate full commercial kitchens are prohibitively expensive, as are the costs associated with training and paying skilled chefs and food workers. In this context, TLS offers an efficient and economical approach that allows schools not to have to worry about a complex set of compliance issues, while at the same time providing a basic, nutritious meal. And like F&H, TLS officials as well as the lunch workers were excited and passionate about providing fresh produce to students, even as they operated under a very different set of constraints and challenges, the biggest one clearly being the lack of funding allocated to school meals.

Instead, this comparison illustrates how federal policy gets enacted and experienced in particular places by particular people. Thus, the arguments I make are not about these particular programs' effectiveness, but are intended to shed light on larger policies, practices, and priorities that impact schools, as well as offer counter-narratives to the dominant discourse about school food. In doing so, I hope to open a space for thinking about the "realm of possibilities for thinking otherwise" (Lipman, 2004, p. 15) about problems affecting high-poverty urban schools.

Feeling Hungry at School, Unable to Concentrate

One of the most salient findings in this study is that hunger is a prevalent concern affecting the daily experiences of low-income students at school. As previously discussed in chapter two, the National School Lunch Program (NSLP) was originally implemented to alleviate the negative effects of food insecurity in schools (Levine, 2008; Poppendieck, 2010). However, as the federal program evolved, concerns about obesity have impacted its implementation in significant ways, resulting in more recent restrictions on calories and fats. These restrictions can mean that some students do not get enough to eat. For example, students who receive free and reduced lunch are not allowed to take seconds of certain items, even if they

are still hungry, due to calorie maximums. This was problematic for many students in this study, because they told me they had difficulty paying attention in class when they felt hungry, often complaining of lethargy, headaches, and stomachaches.

As I discuss below, this study was not designed to assess the incidence of food insecurity, but rather, to understand how students and teachers make sense of their experiences with their lunch programs at school. Especially if we take seriously students' claims about feeling hungry at face value (as I think we should), however, these findings are consistent with prior research that has shown that children who are food-insecure have higher rates of illness, headaches, fatigue, and stomachaches, as well as developmental delays, cognitive delays, and behavior problems, which in turn can lead to significantly lower performance in school (Alaimo et al., 2001; Brown, 1996; CDF, 2014; CDF Ohio, 2016; Taras, 2005).

Here, I present representative data that show these trends at each site and explore participants' explanations for why students felt "hungry." While clearly being "hungry" in the sense of chronic food insecurity is the most urgent need—one that must be met with any food available—it is also clear from the literature that even children who get enough calories can still be malnourished, or suffer from blood sugar swings, from eating too many calorie-dense, but nutrient-poor foods.

A note about terms. In this dissertation, I distinguish between the temporary feeling of "hunger," and the more permanent condition of "food insecurity," or not having enough to eat on a regular basis. In this chapter, I report data that speak to students *feeling "hungry" at school*. In many cases, this could refer to a temporary condition, resulting from skipping breakfast on a single occasion, for instance, or choosing not to eat food that does not appeal to them, or not feeling totally full even after eating lunch, even though the student consumes enough food

overall in their daily life. Another potential explanation for feeling hungry in school, based on the literature explored in chapter two, could be that students are getting enough (or more than enough) *calories*—but not enough *nutrients*—thus leaving them feeling malnourished, which they in turn describe as "hungry."

However, in at least some cases, feeling hungry at school is likely to be caused or exacerbated by chronic *food insecurity* at home. Indeed, teachers and administrators at all three schools, particularly at Chester where they regularly visited homes, told me about families that experience food insecurity on a regular basis. However, as this study was designed to look at food *at school*, and not in homes, it was not structured to conduct home visits or interview parents, nor did I ask students directly about food insecurity (though a few talked about it). Thus, it is impossible to say what the true incidence of food insecurity is for the students in my study, (though in the neighborhoods where this study was conducted, the estimated food insecurity rate was 33%). I want to be clear about the limitations of the findings in this regard; more research is clearly needed to fully understand the scope and ramifications of food insecurity.

What my data certainly *do* show is that based on their observations at school and visiting homes, teachers, staff, and administrators *believe* that too many of their students do not have enough to eat. In addition, and regardless of whether they suffered from chronic food insecurity at home, students across the sites reported *feeling hungry at school*—and that this physical experience detracted from their ability to concentrate fully in the classroom. Finally, TLS breakfasts and lunches left students still feeling hungry after finishing their meals, potentially revealing problems with school food policies that dictate nutrition requirements in schools.

Feeling "Hungry" at School

Students at all three sites reported sometimes feeling hungry at school. Below, I discuss data from before and after lunch, as some of the concerns are different, depending on the time of day. In order to help the reader follow the argument, I have included a chart that details which school had what food policies, practices, and beliefs.

Table 5.1 *Food Policies and Practices at Three Sites*

	Franklin	Washington	Chester
School-wide policies	Students not allowed to use the soda machine.	No food dyes allowed. Healthy snacks for birthdays and celebrations (eg, pretzels).	Backpack feeding program, daily as needed.
Breakfast	TLS served from 7:30-8:00 a.m. (F&H, Fri) * Students who arrive after 7:50am cannot eat school breakfast. However, the bus often arrives after 7:50.	TLS served from 7:30-8:00 a.m.	TLS served from 7:30-8:00 a.m. (supplemented with Trader Joes' fruit donations).
Morning snack	10:30am (students bring their own).	No snack provided, nor an official time for snack.	Anytime - Trader Joes' fruit, as needed
Lunch	5th graders had lunch from 12:15-12:45pm. TLS, Mon-Thurs Teachers sat at a separate table. F&H, Friday Lunch Teachers and administrators sat with students. Often special guests were included.	TLS only 4th-6th graders ate in their classrooms at 12:50-1:15pm (recess from 12:20-12:50). Aides walked around to help students. No teachers present during lunch.	F&H, Mon-Fri 5th graders had lunch from 12:00-12:30pm (recess followed). Teachers sat with students. On Wed: whole-school meals following Mass, often with special guests, at about 1:00pm.
Afternoon snack	N/A – only for students in the after-school program	N/A	TLS boxed dinners/"cold packs"

Here, you will notice that all three schools served breakfast and lunch at about the same time, though their snack practices were varied. Chester offered a TLS snack in the afternoons, as its regular school programming continued until 5:00pm.

Hungry in the Mornings. *Franklin.* Students at all three schools sometimes felt hungry in the morning, particularly if they skipped breakfast. Mr. Flynn,[4] a teacher at Franklin, explained they are not supposed to serve breakfast if the kids come in later than ten minutes before school starts at 8am. However, "it's not uncommon" for a student to come during those 10 minutes without having eaten breakfast at home. The result is that the only thing they might eat is a small snack, like animal crackers, and they will be really hungry by mid-morning (Interview, 6/3/14). Ms. Fisher, the fifth-grade teacher, was similarly concerned about children who ride the bus who don't arrive in time for the school breakfast. She expressed frustration that "so many kids don't eat breakfast. How can you skip breakfast, you know?" (Interview, 3/10/14). She was especially frustrated with parents who don't make sure their kids eat before getting on the bus. "So yeah, they can't concentrate," she went on to say how important the snack was because they just "can't pay attention" (Interview, 3/10/14). Similarly, Ms. Faith, a motherly African-American woman in her mid-fifties and the family coordinator at Franklin, was concerned about children who miss the bus and get to school too late to eat breakfast. She echoed Ms. Fisher's frustration that parents do not provide their kids with "even a quick bite to eat" if they are running late (Interview, 11/28/14).

[4] Note that all participant pseudonyms at Franklin begin with "F," at Washington they begin with "W," and at Chester, they being with "C."

To help address this problem, Ms. Faith told me that once a week or so, she gives students something to eat in the mornings, even though it is against the rules. She "slides" them something like a tangerine or a banana, if they tell her they are hungry:

> So it didn't matter what time a kid got here, I sneak them some skim milk and a piece of fruit. I'm going to give it to them. I made sure that they ate. And I do that this year. It just breaks my heart. "Ms. Faith, I'm hungry." You know? It's horrible. Because some of them, it looks like they didn't brush their teeth, their breath smells so bad it could make you puke, you know, so I have to feed them. And I know I shouldn't. I shouldn't but I'm going to continue. (Interview, 1/28/14)

Because the school gets reimbursed by the state, and TLS must keep track of everything in case they get audited, they must keep careful track of who ate, the child's name, whether they had milk, cereal, etc. This data then gets correlated with their inventory numbers, and if there is too much discrepancy, the state may not reimburse the school for these meals. So, when I asked her if Florence, the lunch manager, minded when she did this, she said she knows about it, but she doesn't ask her permission. She said defiantly that she doesn't regret breaking the rules: "Because you can't have my babies going to class without something. It's hard. I need for them to be able to focus, relax and know that I'm someplace that my brain is being nurtured as well as my body" (Interview, 1/28/14). For Ms. Faith, breaking the rules to give food to a hungry child was worth it, because it was the difference between them being able to focus in class, or not.

Students described being disengaged when they felt hungry. Consider the following exchange with Fatima, a fifth-grade girl, who told me she often forgets her snack, including on the day of the interview. I asked her how she felt when she forgot her snack, and she replied that, if she doesn't eat much in the morning, she feels "irritated and hungry." I followed up by asking,

"Are you able to participate in class the same way?" and she replied, "Not as much, a little still." In class that day, she said, "Yeah, I'm thinking about lunch (Interview, 5/16/14). Although the school breakfast fills him up, Freddy, another fifth-grader, also told me he feels "tired" on days when he skips breakfast (Interview, 5/14/14). Felesha, as well, said when she doesn't have breakfast, like that morning, she still feels hungry, "It's a little harder [to concentrate] because my stomach still hurts" (Interview, 5/14/14).

While it would be impossible to say for sure whether the behaviors I observed were due to hunger without additional information, I did see students become more disengaged as lunch approached. For instance, one day in early March, at around 11:30am, Ms. Fisher, a petite white woman in her late thirties who always walked with a purpose, rolled her office chair over to the board and talked through the "mental math" problems she had written on the board. Soon, her fifth-grade students, who were sitting in desks arranged in a U-shape facing the board, became fidgety. In the span of twenty minutes, one girl rubbed her temples, looking tired, a boy poked his cheeks with his fingers; a girl put a pencil in her ear; another appeared to be zoning out, with his head propped up on crossed arms. Another boy played with his hands, and whispered to a classmate. Ms. Fisher immediately said, "Shhh!" Directly after that, that same boy chose that moment to make a trip to the pencil sharpener, pushing his classmate's seat on his way back. Once seated, he began to throw his eraser back and forth, and rocked in his chair. Another boy kicked a girl under the table. Ms. Fisher continued to do mental math, drawing a picture of a pizza with slices on the board to demonstrate fractions. "This is making me really want pizza!" She said. When she realized several of the students still had not completed the problems, she reprimanded them. "Did you pay attention at all?" she asked. "No," they answered, looking unconcerned. Five minutes later, they packed their belongings and lined up for lunch (Field

notes, 3/6/14). Again, it would be impossible to correlate these behaviors with food or hunger without additional information from each child about what they ate and how they felt. However, they do lend support for teachers' observations regarding patterns of behavior throughout the school day.

Washington. Students at Washington also described being disengaged when hungry. Whitney, a fourth-grade student at Washington, explained that, "When I'm hungry, I can't pay attention. I can't focus on the work as much. When I'm not that hungry, I can pay attention. I can understand the work" (Interview, 3/10/15). She often gets very hungry before lunch, even though she eats the school breakfast. While Wynter said she usually likes the breakfast, she notices that other students "might be a little tired because they didn't eat breakfast because they don't like the breakfast that they gave us that day" (Interview, 3/10/15). According to Ms. Williams, one girl at Washington "gets very emotional when she is very hungry and wants breakfast, but she doesn't like what's for breakfast." The school has tried to accommodate her, but it is hard to do because it's free and "that's what you get" (Interview, 12/16/14).

Washington teachers also observed hungry students who struggled to stay on task in the mornings. Ms. Watts, a fashionable, twenty-something, white teacher whose class I observed over the course of several months, told me about students who felt hungry before lunch, which for her class, is not until almost 1:00, and there is no snack. At those times, she said, "I definitely notice a lack of engagement when they're hungry" (Interview, 12/16/14). During my observations of Ms. Watts' class, I, too, noticed students' declining engagement as lunch approached, with students complaining of being tired. I often noticed kids shifting in their sets, the noise level rising, kids looking bored, wondering aloud what was for lunch, all at around 11:30 or 11:45, a full hour or more before lunch time. For instance, as Ms. Watts led small group

discussions on a work of young adult fiction, *The Giver*, on a bright red rug in the front of the room, a boy laid down next to her. He complained about feeling sleepy, saying he had stayed up too late (Field notes, 12/16/14). On another occasion at around 11:45, when the students were supposed to be doing small group work in their test prep workbooks, many were shifting in their seats and the noise level rose. Ms. Watts had to reprimand them several times, telling them they would have a "rude awakening" and needed to prove they belonged in their group. She kept a tally on the board for students who were talking, and kept warning slips on her desk (Field notes, 12/9/14). Another time, Wakia, a small fourth-grader, asked me to help her with her test preparation workbook during group work time. As we sat, a boy at the same table seemed to be staring into space. She asked me what was for lunch, and when I told her it was chicken fingers, she said "Oooh." However, the boy scrunched up his face and told me he would be eating the Sour Patch kids candy that he brought from home instead (Field notes, 4/7/15). These periods of disruption as lunch approached stood out compared to the generally orderly atmosphere in Ms. Watts' classroom at other times of day.

Ms. Warner, the special education teacher at Washington, sought me out to share her experiences when she heard that I was researching food and hunger in schools. She told me she had received special permission from the principal for her special education students to receive a morning snack, because she had observed behavior problems as a result of feeling hungry. I asked her what she saw before and after lunch in terms of behavior, attention or academics. She replied that her 4th through 6th graders, who typically exhibit more behavior and attention problems than other students, are "legitimately starved" by 10:30 in the morning. "They're hungry to the point where it affects their learning," she told me. She sought permission to feed the students pretzels, "because literally like the one kid will be sitting in a reading lesson and all

of a sudden, the head goes down on the table and he's like, 'I'm really hungry.' The behaviors come out." She went on to say that the hour before lunch is "very hard to keep them focusing" due to hunger (Interview, 3/30/15).

While Ms. Warner mitigated these engagement problems by providing a snack for her small groups of special education students, the school did not provide snacks for all the children. When I asked Ms. Weinberg, "How do you think that hunger affects their attention span, their ability to learn?" she replied:

> I know for me and I know for my students that even just having a snack, even for us adults, something to nibble on or to have to just calm a hungry feeling can really take the edge off…I feel like if you're thinking about your hunger, then you're really not thinking about the lesson. (Interview 2/3/15)

While Washington did not provide a snack, or time for a snack, in the mornings, Ms. Weinberg wondered aloud whether it should, so that students would better focus in class.

Chester. Students at Chester also felt hungry when they skipped breakfast, either accidentally or because they didn't like the taste. Chester offers TLS breakfast every day, which usually consisted of a muffin or cereal, and milk. Caylee, a fifth-grader, said she usually doesn't eat breakfast because she doesn't like the taste of what is offered at school. However, when she doesn't eat enough in the morning, "throughout the day my stomach will hurt." (6/29/15). Sometimes she goes to a meeting room across the hall from her classroom, or she will put her head on the desk.

Often, however, students who *did* eat the school breakfast, *still* felt hungry in their morning classes. Mother Charity, a former Episcopal priest who now managed the breakfast program, estimated that about 50 percent of students "would be happy with a second breakfast,"

in addition to the one provided by the school (Interview, 6/12/15). A heavy-set woman who usually wore jeans and t-shirt because she was often off fixing appliances or doing yardwork, Mother Charity told me students rarely came out and said they were hungry. "They're not ever that direct," she said. She went on to describe a recent exchange with a sixth grader, who came back to her for a second box of cereal. However, she explained, "These kids don't come from food securities, so they have to have a story if they want seconds."

> I said, "Carl, just ask me. Let me answer the question, straightforward." He did. He said, "Mother Charity, can I have a second breakfast?" I said, "Carl, there are three students here willing to share; they've had breakfast at home. They're willing to share their breakfast so that you can have a second one and that's okay. Have your breakfast." (Interview, 6/12/15)

Mother Charity's anecdote reiterates both the silent nature of hunger, and the conflict created by school food policy. She sees that students who are food-insecure and need more food throughout the day are often reluctant to ask, instead talking about the problem in veiled terms, obscuring the real issue for the adults in the school. However, like Ms. Faith at Franklin, Mother Charity was not supposed to give an extra meal or even parts of a meal, such as an extra milk or box of cereal, to students who are still hungry, because it would create an accounting problem. Indeed, the year after I observed, Chester was actually dropped by TLS for these types of accounting discrepancies, since TLS was legitimately afraid of losing its reimbursement from the state, which amounted to a significant sum of money. Thus, Mother Charity's ability to care for her students in the ways in which she felt was necessary was in conflict with federal food policy, a point I will expand upon later in this chapter and in the conclusion.

Hungry in the Afternoons. ***Franklin.*** While it might be expected that students begin to feel hungry as lunch approaches, many students at Franklin said they still felt hungry *after* eating TLS lunches. Felicity, a fifth-grader, said after TLS lunches she is "still hungry." When I asked her whether she could still concentrate if she felt hungry, she said, "When I'm full, I'm concentrated. When I'm hungry, I'm kind of concentrating, but kind of not" (Interview 5/14/14). Here, Felicity indicates that she usually still feels hungry even after eating lunch, and sometimes that results in not being able to concentrate fully in class. Similarly, another fifth-grader, Farrah, also said of TLS lunch, "Sometimes I feel full. Other times I need something extra." Sometimes, she is able to take an extra apple with her, which helps her feel more full (Interview, 5/15/14). Similarly, Forest said that "I eat lunch at school and I'm still hungry," and when he is hungry, he feels "grumpy" in class (Interview, 5/6/14). He said he feels most full after lunch if he can also eat some fruit, such as raisins or an extra apple. While we might expect students to feel hungry as lunchtime approaches, these students indicate that they still feel hungry *even after* eating lunch. My observations confirmed that students almost always ate the protein portion of the meal (except for the baked beans), as well as the fruit, though sometimes they would save a piece of fruit for later. Even though they were not supposed to take food out of the lunchroom, usually the lunch aides would turn a blind eye.

Washington. At Washington, participants also described not feeling entirely full from TLS lunch. Whitney, a fourth-grader, said she feels hungry before lunch, and after lunch, she feels "Full. Well, not full, but I'm not hungry anymore" (Interview 3/10/15). When I asked Wakia, a fourth-grader, if the school lunch filled her up all of the way, she said only "sometimes." She went on, "[It] depends on how the food is. Like, today the pizza didn't fill me up." Later, she said, "We get three chicken nuggets. That doesn't fill me up" (Interview,

1/20/15). Since Wakia mentioned the specific amount of chicken nuggets, she seemed to imply that amount is not enough for her.

It is important to note, however, that some students *did* report liking and feeling full after TLS lunches. A group of fifth-grade girls I talked to told me they liked the Santa Fe chicken and felt that it filled them up (Field notes, 12/2/14). Although Ms. Crawford, a Latina lunch aide, had never tried the TLS lunches, she thought they were better quality than what she had when she was in school. "I always tell them, when I was in school, I didn't get any of this. It amazes me," she said. However, she said half-jokingly, that they "really need to add some meat to those beans" to make it more flavorful (Field notes, 12/2/14). On a different occasion, she told me the one thing she wished they would do is steam the vegetable to preserve the nutrients (Field notes, 1/3/15).

Chester. Like at the other sites, students at Chester described feeling hungry after eating TLS food (before the school implemented F&H, as well as other schools), and how it affected them in class. I asked Caydence, who had told me she didn't have a lot of food at home and who often felt hungry at school, how that affected her in school, and she replied, "I kept falling asleep and I wasn't learning and sometimes my mom had to pack me lunches a lot because they wasn't giving me lunches." She went on to say that feeling hungry "affected my learning because I wasn't getting the right food that I needed for me to stay awake" (Interview, 7/1/15). Caydence's comments echoed other students' who similarly described feeling sleepy, putting their head down on their desk, unable to pay attention in class.

Another effect of hunger, according to participants, was poor behavior. Caydence also told me that she was often mean to other people when she was hungry:

> But that old food, the lunches just made me feel terrible and it make me feel mad. That would affect me being a good Caydence because I couldn't eat the right food I was supposed to... Sometimes if people would say, "Go do something," I would say, "No, you go do something else." And be mean to them but I was just grumpy and mad because I hadn't eaten anything and I used to be mean to people saying, "Get away from me loser," and stuff like that. (Interview, 7/1/15)

Caydence's comments here imply that when she was hungry, or ate foods that made her feel "terrible," she became irritable and mean, sometimes inciting problems with other students. Her comments were echoed by several teachers, who indicated they had observed poor behavior as a result of hunger. Ms. Campbell, a lunch aide and mother of an eighth-grader, said that with TLS,

> ...it was more arguing and fussing and fighting because they stomachs wasn't [sic] full or because they didn't have the proper nourishment that they felt that they needed. (Interview, 6/11/15)

These stories remind us that some negative behaviors that students exhibit might be caused by hunger. When this underlying cause is overlooked, problems such as "fussing and fighting" might be misunderstood as willful disobedience.

In this section, I have demonstrated here that participants understood the effects of hunger to be prevalent and insidious in each of the three schools, negatively impacting students' ability to learn. Across the three sites, several themes emerged. Students described feeling tired, moody, having more frequent headaches and stomachaches as a result of feeling hungry. Whether due to food insecurity at home, choosing to skip breakfast at school, or the kind of hunger arising from a less-than-satisfying meal, hunger makes it difficult to pay attention.

Participants' Explanations for Feeling Hungry

Participants at three sites cited three main possible explanations—which are not necessarily mutually exclusive—for why students felt hungry at their schools. Given that all three schools were high-poverty schools, defined as 75% of the student population qualifying for free and reduced-price lunch, food insecurity was a main worry. Teachers and administrators believed food insecurity to be prevalent at all three schools. They also provided other, not necessarily mutually exclusive explanations: that the TLS portion sizes were too small for their students, and that highly processed foods caused blood sugar swings throughout the day, which manifested in part, as "hunger."

Food Insecurity. *Franklin.* Teachers and administrators at Franklin did not explicitly talk about food insecurity amongst their students' families, as least in the sense of not having enough food or calories to eat. Instead, their comments reflected a deep concern that students ate too many highly-processed foods at home. I will discuss this in the next section.

Washington. Ms. Weinberg, an upper-elementary teacher of Libyan heritage, shared with me her own experiences growing up with food insecurity. Her parents were immigrants and struggled to provide for her and her six siblings. She said, "I know my parents struggled to provide so I really learned to appreciate access to food, having access to healthy, simple food, that just became a very big deal in my home growing up as a kid" (Interview 2/3/15). She emphasized that "hunger is a huge issue" in schools today, and at Washington in particular. Nurse Wade, as well, confirmed that sometimes kids come to her after lunch, telling her they have a "stomach ache," but when she digs deeper, they reveal their real reason for visiting her, that they are anxious because they will be going home to a house without food.

> Sometimes you will see in some broken homes, so when it's about the time to go home, I see that. That they will come, "Miss, my stomach." I say, "You know what? Instead of me writing, 'You have a stomach ache, and you don't have, why can't we talk about what is going on?' Then some people will say, "I'm going to go to my grandma's house, and there is no food." To kids like that, I will give crackers before they go home. (Interview, 1/20/15)

Here, the nurse revealed the silent and often overlooked problem of food insecurity. Students do not readily reveal that there is food insecurity at home, sometimes obscuring the issue by complaining of a stomachache. She implied that students understandably become anxious before going home to a situation where they know there will be no food. She keeps extra crackers and ginger ale on hand just for this purpose. These comments underscore the ways in which the experience of hunger can pervade the school day, taking attention away from the tasks of learning.

Chester. As described in chapter four, Chester teachers and administrators often visited their students' homes. Hence, they seemed to have a greater awareness about the challenges their families faced, including food insecurity. Ms. Campbell, an African-American woman and teacher's aide whose daughter attended the school, personally knows many of the students' families, because they are her neighbors. At the beginning of the interview, I asked her to tell me her story – how her daughter, who was diagnosed with ADHD and was failing in her old school, ended up at Chester, and how she herself ended up working here. It was evident that she felt Chester had made a huge difference in their lives, in many ways. So when I asked, "What do you think is the difference here?" she said:

> I'm just grateful that [Chester's] kitchen and the programs they have in store with the food are in place because, I don't know, half these kids probably wouldn't eat. Some of the parents, let me say this, I was one. Too much pride, but a closed mouth don't get fed. If you don't ask, don't nobody know. (6/11/15)

She loves the Fresh & Healthy lunch program, "because a lot of kids don't eat," meaning that they consistently don't have enough to eat at home, and that because of both the lunch program and the backpack feeding, "I'm grateful because we're taking a bite out of hungriness, in other words" (Interview 6/11/15). Ms. Campbell's personal experience and comments here indicate the feelings of shame involved with being unable to feed oneself or one's child, underscoring the "silent" nature of this problem, and one that often goes overlooked in schools. They are also indicative of the pervasiveness of food insecurity in and around Chester.

Consider the following comments from Caydence, who also described lunch at her old school as "cold food" which didn't fill her up. I asked, "How did you feel after you eat that kind of lunch?" and Caydence said, "I didn't feel full so every time I got out of school, I went home and I would eat a meal and then I would feel full but there I wouldn't because we really didn't have a lot of food. We're just hungry. (Interview, 7/1/15). Here, Caydence indicates that although the school lunch did not fill her up, there was not a lot of food at home for her to eat either, indicating her household was food-insecure. She went on to tell me she felt hungry about "four times a week." Caydence's experience supports the observation of teachers and administrators at Chester, that the students suffer from food insecurity at a high rate.

As part of its charitable orientation, Chester intentionally fostered close relationships between homes and schools, and a significant effort was made to feed hungry families. As part of this effort, the staff works together to provide "share" bags, essentially a backpack feeding

program, to students who have come to their attention or whose parents or caregivers have reached out to ask for them. I, too, participated in bagging up leftovers, delivering the bags to teachers to distribute at the end of the day, and assembling bags of donated food at Thanksgiving. Ms. Campbell also said that they provide more food on Fridays in anticipation of the weekend, and even two bags for a long weekend (Interview, 6/11/15). However, Mother Charity felt the backpack feeding program was not enough to truly meet the needs of the community. To do so, she said, would take "a staff of seven," underscoring how the teachers viewed the enormity of the problem for their students' families and in the neighborhood.

TLS Portion Sizes and other Concerns. ***Franklin.*** Participants also believed that students' feelings of hunger could be due to the portion size and content of TLS meals. Some participants criticized the meals, saying that they were not large enough for students, particularly for the older grades.[5] Ms. Fuller, the enrollment director at Franklin, shared her concerns: "It doesn't seem like enough. I don't think pre-K kids and fifth graders should be eating the same size portions" (Interview, 5/21/14). As several teachers pointed out, fifth- graders received the same amount of food as kindergartners, though they were much bigger. In some cases, the student was almost the size of a full-grown adult. She also explained that the main reason she chose not to buy the TLS lunches for herself was because the portions were too small. Indeed, the TV-dinner size package did seem like a small amount of food to me also.

Students agreed. Forest, a fifth-grader at Franklin, lamented how little food was offered at lunch. He said, "It was like four meatballs and then we only allowed to get two packs of like, whatever there is, like salad. We only get to have two different packs of Ranch [dressing]." He

[5] Recall that portion sizes for each grade grouping is dictated by federal policy in the Healthy, Hunger-Free Kids Act, not by food service providers such as TLS. See the following link for more specific information on meal pattern guidelines and calorie ranges per age: https://www.fns.usda.gov/sites/default/files/dietaryspecs.pdf

seemed frustrated that the portions were so small. He told me he regularly eats two breakfasts—for instance, a Hot Pocket at home, and the school breakfast when he arrives, because, "the school lunch does not really fill me up so I have something at home and then I come here and I eat their breakfast so I'll be full" (Interview, 5/16/14). On one of my visits, I also observed Freddy, a fifth-grader at Franklin, asking his teacher if he could eat food from home, in addition to his TLS lunch (Field notes, 2/18/14).

Washington. Likewise, teachers at Washington also thought TLS portion sizes at breakfast and lunch were too small. I asked, "What do you think of the school lunches here?" Ms. Warner, the special education teacher, responded that students tell her "all the time that they're hungry" (Interview, 3/30/15). While she thinks the food at Washington is "better than what I see a lot of other kids eating for lunches," she shares students' concerns about portion size (Interview, 3/30/15). Ms. Weinberg, a Libyan-American woman who taught the upper grades, also thought the portions were too small: "I definitely, here, see very small portions." Later in the interview, she said, "I think it's not enough food for the size of the kids that are here," she said. "A bagel and just a packet of cream cheese to me, with a milk, for some of my growing kids, that doesn't even seem like enough" (Interview, 2/3/15). These students' and teachers' comments reiterate concerns at Franklin over the portion sizes and taste of the TLS lunches, and students' comments about TLS lunch leaving them "sometimes" full, "a little bit" full, "not full," or only full if there is fresh fruit available, reiterate comments at Franklin that TLS meals just do not quite satisfy their hunger.

Some students agreed. Wakia, a recent immigrant from Mali, described feeling full from her family's traditional foods, but not from the school food. She often eats bread and mayonnaise with coffee, a traditional breakfast in her culture, *before* she comes to school, and then *also* eats

the school breakfast. These two breakfasts fill her up for the morning (Interview, 1/20/15), but perhaps indicate that the portion size of the school breakfast is not enough for her by itself. These students' comments echo those at Franklin, that the TLS breakfast food is just not quite filling them up. While some students may be able to eat extra food at home to compensate, not all can.

I often observed students asking aides for more than one piece of fruit, especially apples. This was often the case when they chose not to eat another portion of their meal. Ms. Williams, the behavior specialist, would say, "Do not eat your apple first! Food first! Do I need to get the warnings!" Evidently, enough students would eat the apples first, then run out of time to eat their main course before it got cold. One time, however, Waylan, a fifth-grader in Ms. Watts' class, munched on his apple when Ms. Williams' back was turned. "I'm eatin' my apple!" he exclaimed, defiantly. Moments later, two other boys asked for second apples. The lunch aide told him to finish his food first, but he said, "I don't like this. It's nasty," he said. "I don't like school lunch!" (Field notes, 12/16/14). These observations open the possibility that at times, students complaining about portion size had to do with not liking the taste and foregoing parts of the meal altogether. Still, the result is the same: students feel hungry later in class, and sometimes this is problematic for their learning.

Chester. Chester served TLS lunch before implementing F&H about six months prior to my observations. Students there also conveyed other concerns about TLS, and other similar prepackaged foods at prior schools. For instance, Caylee, a fifth-grader, described feeling hungry at her old school, before coming to Chester: "I was hungry because the lunches that they had they were like really cold and often they served peas. I can't eat peas. I don't know why, they just make me sick. I don't eat peas. They had Salisbury steak that's kind of still frozen. I couldn't eat that" (Interview, 6/29/15). Charmaine also complained that at her old school "the pizza

[would] usually be undercooked or overcooked, so it will be burnt or cold, like freezing cold. They would take it out too early" (Interview, 7/1/15). Cynthia also described the lunches before F&H, in terms of temperature: "you know how you go to a public school, and they have summer camp and whatever at schools? They have the lunches, and they be cold and nasty? Those are kinda like it because we had the bread sticks...but the cheese was kind of cold" (Interview, 6/20/15). With the "snack boxes," as she called them, she said she is only full sometimes. These comments, again, raise the possibility of students feeling hungry because they did not like the taste of TLS and skipped parts of their meal.

Offer-Versus-Serve Model. Another perspective was offered by a TLS official, that perhaps the "offer-versus-serve" model (part of the NSLP model) was to blame for students not feeling full from the TLS meals. In this model, students choose the meal components they want to eat, and as long as they choose 3 of the 5, it is counted as a reimbursable meal. This model was intended to empower students with "choices," and to cut down on plate waste, since students would not be forced to take items they do not intend to eat. However, as the official pointed out, students may feel hungry later if they do not choose enough meal components to begin with, since they are not allowed to return and get more once they sit down at their table (Interview, 5/20/17).

Highly Processed Foods. Participants at all three sites were skeptical of highly-processed foods, and often observed blood sugar problems with students who ate them. While most of the participants' concerns about processed foods were not explicitly about "hunger," I include it here because feeling "hungry," irritable, and tired are symptoms commonly attributed to low blood sugar. While most of these concerns were directed toward very sugary items like

soda, candy, and donuts, which students ate or brought from home, at all three schools, participants also shared similar concerns about TLS food causing some of the same issues.

Franklin. At Franklin, participants expressed concern that students were "hyper" after eating foods such as Oodles of Noodles and Kraft Macaroni. Ms. Faith, an African-American woman and the family coordinator at Franklin, noticed a connection between what students ate for breakfast and their behavior at school. I asked her what kinds of foods she thought students ate at home, and she said, "I think they eat a lot of junk. I think they eat a lot of fried chicken wings. I think they eat potato chips. I think they eat a lot of garbage" like Oodles of Noodles and Kraft macaroni and cheese—foods with "artificial color" and salt (Interview, 11/28/14). I then asked, " And how do you think that affects the kids?" She replied:

> It makes them very hyper; it affects their learning...I think it severely affects their learning because if you had a hot dog for breakfast, and you're coming in and I'm saying good morning to you and you're like, "Good Morning, Miss Faith!" [here, she raised her voice and acted frenzied]. It's like, wow, okay. You're way up there. And maybe it's because you had sugary, sugary cereal and whole fat milk. Or a bag of potato chips. Or maybe you had a doughnut. See? That's what these kids eat, a lot of them. (Interview, 11/28/14)

Here, Ms. Faith identifies highly processed foods that she believes students commonly eat, such as fried chicken, potato chips, and noodles. My conversations with students confirmed that indeed, they regularly ate these items Ms. Faith identified. For instance, Fatima told me she had eaten a toaster strudel for breakfast, chips for snack, and a cheeseburger and fries for dinner (Interview, 5/16/14). Felesha told me that "Usually I have noodles like spaghetti or Mac and Cheese. Something with noodles in it" (Interview, 5/14/14). Forest told me the day before, he

had eaten a Hot Pocket for breakfast and Oodles of Noodles, shrimp flavored, for dinner (Interview, 5/16/14).

It was a common observation that sugary and highly-processed foods would result in a cycle of energy (or "hyperactivity"), followed by lethargy (or "crashing"). Ms. Foster, the school counselor at Franklin, expressed concerns about blood sugar swings. She said, "I see kids having periodic meltdowns that could be consistent with low blood sugar" (Interview, 6/3/14). One student, Felicity, shared Ms. Faith's observation that students who eat highly processed foods get "hyper". She told me what she noticed about her fellow students who bring candy for snack: "They start running around and around and then like five to fifteen minutes later they're slow and they don't want to do nothing...They'll just sit there and they'll do their work, but they just feel like sleepy" (Interview, 5/14/14). Another student told me during a casual conversation that cookie dough made him feel "hyper and gave him a stomach ache (Field notes, 3/10/14).

Washington. Ms. Watts, an upper elementary teacher, was similarly concerned with her students' behavior in the afternoons, especially students who fell asleep. Like at the other sites, she noticed a cycle of hyperactivity, followed by lethargy. She theorized in the interview that this was because of blood sugar highs and lows, since they had already eaten lunch. For example, in our interview, Ms. Watts mentioned sugar several times. When I asked her if she was concerned about the impact of sugar on students, she described a direct connection between sugary food and students' behavior:

> I think the sugar affects them, and I think that for a short bit of time, they'll get this burst of energy, but then they fall down from that. It also happens to be our silent, quiet reading time right after lunch, and depending on what you're eating, it can either energize you or it can make you tired. The lights go off, and so there are often times where someone is

> sleeping or falls asleep in the afternoon. I don't know if it is due to the food, but the afternoon always seems to be a more rowdy, kind of chaotic time in here. (Interview, 12/16/14)

Ms. Warner and other teachers also shared concerns about breakfast. In a discussion about what she notices in terms of behavior, attention, and academics before and after lunch, Ms. Warner said she thought the TLS breakfasts were "much higher in sugar than they should be." Consider Ms. Warner's comments:

> I look at breakfast, which is a giant muffin and fruit juice and maybe milk or not with sugar in it[6] and I'm looking at that saying you're going to fall asleep in an hour. That does concern me a little bit, because I know myself, even cereal and milk doesn't tide me over for more than an hour. I would love to see some kind of also healthy fruits or vegetables for a snack at 10:30 or 11:00, just because I don't think that's reasonable to go for 4 hours academically, including your special, which could be gym, running around without any food. I think that's too long. (Interview, 3/30/15)

Here, she expressed concerns with the portion size of breakfast, as well as the type of food, including sugary muffins, juice, and flavored milk. She argued these high-carbohydrate foods do not sustain students throughout the morning. Furthermore, she blamed the school for not providing a snack.

In the same vein, the principal, Ms. Winslow, a friendly but focused, petite, white woman in her forties, put a "no food dye" ban into place when she started at Washington. I asked her to tell me why she implemented that policy. She told me it came from her personal experience with

[6] The strawberry and chocolate milk that TLS provided listed sugar as the second ingredient, and artificial flavorings, food dyes, another additives were listed as ingredients as well.

her son, who was "irritable" a lot. Her pediatrician convinced her to try eliminating food coloring, and after a few weeks, she saw a huge difference in his behavior: "it took a while, but three weeks into that experiment, this little tiny boy, he could have been five, I was tucking him at night, and said to me, 'Thank you so much. I feel better'" (Interview, 1/13/15). Because she knew Washington would be judged on test scores, and because she knew that behavior would have an influence on those outcomes, she felt there was no real downside to the food dye ban. Ms. Walter, the African-American lunch aide, told me she does see a difference between the kids at Washington now, versus before the food dye ban was in place:

> The kids are not hyper. [Before,] the mothers were bringing all those cupcakes with all that icing and stuff on it and kids get out of hand. Teachers couldn't handle them. It's so nice [now]. The kids don't even miss it. They don't even ask for it now. They take what is. Kids are going to eat what they see. If you put it in front of them, they're going to eat it, so if you don't put it in front of them they're not going to eat it. Simple as that. (Interview, 1/20/15)

Here, Ms. Walter is referring to the rule that for birthdays, parents are no longer allowed to bring cupcakes with icing; they must bring carrots or pretzels instead. She believes the school should frame the choices that children are offered, and only offer healthy snacks. Ms. Winslow said that although some thought she was "crazy" at first, she still believed it improved students' overall well-being.

While most teachers I spoke with were supportive of the food dye ban, a few were critical. Recall that Ms. Weinberg had herself suffered from food insecurity as a child. She pointed out that for food-insecure children, processed food was what was available to them. "If you live here, you have to buy what's here and that's what here. What else are you going to

buy?" she asked. What she means is that while she shared Ms. Winslow's concerns about processed foods, if students could not afford higher quality or it was not available to them in their neighborhood, the food dye ban would just result in them feeling even hungrier. However, she also said that as a result of the rule, she has seen fewer students bringing Doritos and more bringing in "healthier" items like Nature Valley granola bars.

Ms. Warner, on the other hand, said her concerns about processed foods go "well beyond" food dyes, and include many "chemical additives" that she felt were even more detrimental to children than food dyes. She is particularly concerned about students she sees at Washington and other schools where she has worked, including some suburban schools, eat Fritos or potato chips for breakfast, instead of the school breakfast, which she described as "terrifying":

> I notice some of the kids that do that are some of the kids that have behavioral issues here, which makes sense to me. Because if somebody's packing them up Fritos for breakfast, it's a whole other issue. That concerns me. I do think there is a pattern in general with kids that are coming in and that kind of food is being packed for them to eat all day long, that there is focusing problems and, I think, impulsivity problems and agitation. That's a huge issue. (1/6/15)

Here, Ms. Warner expresses her observation that students who regularly ate processed foods—especially those who ate junk food instead of the school meals—exhibited problems with impulsivity, agitation, and focus during class.

Students, as well, told me they experienced negative effects from highly-processed food. After eating toaster graham cereal, Wekesa said, "I had too much energy because when I got home I couldn't fall asleep" (Interview 3/8/15). Here, "too much energy" echoed other students'

comments about junk food making them feel hyperactive. Whitney, a fourth grader, told me foods like McDonalds or sugary candy and sometimes dairy products make her stomach hurt (Interview, 3/10/15). Similarly, Wakia told me she thinks unhealthy food is junk food and candy, which is bad for your body, "blocking arteries." When I asked her how she felt when she ate those types of foods, she said, "My stomach hurts because I really don't eat junk food like that" (Interview, 1/20/15). These concerns echo similar ones at Franklin and Chester: that unhealthy, processed foods contributed to an inability to concentrate and negative behaviors in class, and are just not as healthy as fresh foods.

Another food concern that came up often during my interviews, as at the other sites, was milk intolerance. Some students told me they got stomachaches after eating dairy. Whitney, a fourth grader at Washington Charter, told me cheese makes her stomach hurt. Her stomach also hurts after sugary candy, or too many apples, as well as fast food (Interview 3/10/15). Waylan, also commented that "I really don't like to drink regular milk because it makes my stomach hurt, so at home I just drink almond milk" (Interview, 3/10/15). Sometimes students could choose not to eat dairy at school if they suffer this problem. After all, cafeteria aides at Washington did not require students to drink the milk (as they did at Franklin), but they still highly encouraged it. There was Lactaid milk available at each school, though it was not offered in the sweetened strawberry or chocolate flavors, so it was a much less popular choice. I wondered, though, whether students with milk intolerances felt pressure (or temptation) to drink it. Additionally, in some meals, like pizza, cheese was a considerable source of protein and fat, and if a child chose not to eat it due to an intolerance, it seemed likely they would be hungry.

Chester. Like at the two other schools, a main concern about processed food at Chester was the impact on blood sugar, and the resulting behavior in the classroom. Ms. Cummings, the

math teacher who had previously worked in the South Bronx, described the link she saw between junk food and behavior. While she has seen children eat "wonderful things" and have good and bad behavior, she has "never seen a child eat junk food, and sugar, and what I would call 'horrible' foods, and have a great day." Thus, she "strongly believes that food affects behavior," while acknowledging, of course, that other things do as well (Interview, 7/15/15). She told me about a former student who was having uncontrollable outbursts over several weeks. When she asked this student what she had been eating, she found out the student had been subsisting only on Skittles. After Ms. Colman worked with other teachers and the student's mom to ensure she ate full meals, the uncontrollable outbursts stopped (Field notes, 7/1/15). Here, Ms. Cummings also echoes the pattern that she and other teachers have observed, that junk foods, especially sugary foods, contribute to poor behavior, especially in the context of a diet based mostly on processed foods.

I asked Ms. Cullen, the assistant principal, to tell me what she observed about students throughout the day, in terms of behavior, mood, or emotions. She commented in the interview that after sugary, carb-heavy breakfasts, she would notice a pattern:

> I'd see them go from a two or a three to spiking with their energy, to the point where I knew when they would crash pretty soon afterward. Within forty-five minutes to an hour after I would see this lull of just irritability, annoyed, inattentive, just in a very lethargic way. Then they'd stay there until the next meal would come, and it was just high carbs, and they'd hit that spike again. About an hour after recess, it would be back down to this lull of just zombie-ish. (7/1/15)

Similarly, Ms. Cummings, a white math teacher in her early thirties, noticed that in the afternoons, she would see more tantrums and lethargy, which she also attributed to blood sugar fluctuations. Interestingly, several adult participants described similar experiences themselves.

Concerns about TLS Meals. *Franklin.* Mr. Ford, the mild-mannered African-American principal at Franklin, himself the parent of three young children, explained that while he knows the meals are "okay from a nutrition standpoint," he rarely eats TLS food himself. Similarly, Ms. Fuller, a friendly African-American administrator in her forties, described the TLS lunch as "full of starches," lots of ingredients, and joked that it looked "canned and frozen in time. It looks like a food-cicle" (Interview, 5/21/14). Ms. Fuller expressed her distaste for the highly-processed foods that TLS offers, and explained that this was a big reason why she brought her own lunch most days.

Students, too, described TLS food as processed. Felicity said she did not like to eat the cinnamon toast cereal, because "it's too sweet for my teeth." She went on to explain that her teeth hurt after eating too much sugar (Interview, 5/14/14). During an exchange with several fourth- and fifth-grade students over lunch, I asked, "What about [regular lunch]? Does it taste good?" Felix replied, "Not as good." When I asked why not, he said, "The way it's made. Like they throw it on fast. Like fast food." Another boy chimed in, "Regular lunch tastes really artificial and fake, like fast food" (3/10/14). He went on to say that it "sometimes it just doesn't taste right. It tastes really artificial. I don't like that. Sometimes it looks like they just worked on it for like five seconds, just threw it in" (3/10/14). Another student said he didn't like the small salad, because "Everything's bought. Probably bought. Like they got it from Wawa [a convenience store chain]" (Field notes, 5/15/14). For these students at Franklin, the taste of the TLS lunches was "fast food," artificial and fake, more like the food they might find at a

convenience store than food that their parents might make at home.

Ms. Fuller went on to describe a connection she has noticed between certain TLS offerings and student behavior, saying "When they eat chicken nuggets they lose it. I don't know what's in the chicken...I can tell when it's chicken nugget day." When I followed up by asking her "What do you see on chicken nugget day?" she replied, "Wigglier, they're less focused... When it's chicken nugget day they're wiggly. They're up, they're rolling around, they can't focus" (Interview, 5/21/14). She also pointed out that the "mysterious sauce" that is served with the chicken nuggets has a lot of ingredients. She blamed "the salt, the sugar, the fat" in the TLS lunches for this lack of focus in the afternoons. Similarly, in an informal conversation around the lunch table, Ms. Faber, a kindergarten teacher, said she wanted to know "why [do] the kids get so wiggly after lunch?" And she demonstrated what she meant by rolling her head around, then pointed to one of the girls sitting at a nearby table who was doing the same (field notes, 4/17/14). These examples support that participants understand highly-processed foods, especially sugar, as causing a cycle of hyperactivity and lethargy, and that many participants shared these concerns about at least some of the TLS offerings.

Washington. There was a general consensus at Washington that TLS meals were "decent," as the principal Ms. Winslow put it, or just "okay." Most were in agreement that the TLS food was more nutritious than what the kids might eat at home. Ms. Walter, an older African-American lunch aide who had been raised on a Southern farm, said, "It's good. I love every bit of it because they don't get it at home. They get Oodles of Noodles at home, I'm sure" (Interview, 1/20/15). Here she indicates that she believed TLS food to be much healthier than what she students ate at home. However, during the course of the conversation, she clearly expressed her concern about how food today contains additives and preservatives:

> They shoot it up and make it grow, and that's not good. That is very bad. Very unhealthy. If you take a tomato, the tomato doesn't even have juice in it. You go down south and get a tomato, you'll have juice running everywhere. That's the difference right there. You can tell the difference in the food...When you keep food at home three or four days, and it doesn't go bad, it's processed. All those little chemicals and stuff in your food. Even in the fertilizer and stuff. It's not good for our health. You buy apples now, it's all shiny. They done glaze it up to make it last. It's all mother nature down south. (Interview, 1/20/15)

While adamant and proud that the TLS lunches she served were "very" healthy, she also expressed skepticism about "all those little chemicals" in processed foods in general, and clearly preferred fresh food. Even shiny apples, she noted, have a "glaze" to preserve it, which is problematic for her.

Other participants at Washington also conveyed similar concerns. Ms. Watts, a young white teacher in her twenties, said that while she knows "they try to meet the different necessary food groups," she has never actually tried the lunches because they don't look appealing to her. She went on to say, "I think it's fairly healthy, but at the same time, I don't know what's in it. I don't know how it's being made, and to me, it looks kind of processed and not too healthy" (Interview, 12/16/14). Here, Ms. Watts seems to indicate that although she knows the school lunches complied with "healthy" requirements from the government, she felt concerned because she did not know what all the ingredients were. Ms. Warren, who ran the after-school cooking program, said she thought "there's probably a lot of salt" in the lunches. Wakia said the lunches were healthy when they included string beans, peas, carrots, and apple slices, but "not when they give us the pizza and the chicken nuggets" (Interview, 1/20/15). Others echoed her concern, and

wished that they could serve even more fresh fruits and vegetables. These examples illustrate that many participants did not always agree with what the NSLP deemed to be "healthy" foods in school lunches.

While Washington did not offer the F&H program so students could not make a direct comparison, many students said they preferred fresh food or food from home. A boy I spoke with in the hallway one day told me always brought his own lunch, because the school lunch had "too much bread" and he prefers "homecooked meals." He told me about his father making salmon, fruit salad, and lasagna at home (Field notes, 12/16/14). Other students echoed his sentiment. He liked his previous school's lunch better "because it was homemade" (Field notes, 1/25/15). Wakia, whose family emigrated from Mali, also preferred food from home to the food at school (Interview, 1/20/15).

Students at Washington also had concerns about the processed foods at breakfast. Recall Waylan, who no longer liked the TLS muffins because he couldn't taste real banana and apple cinnamon. He explains:

> A while before, we used to have these muffins that actually had what was on them. We had banana muffins and they actually had bits of bananas in there and they tasted very different from what type of muffins we eat today...And like, apple cinnamon. We used to have apple cinnamon in there, but there's only like two or three apple cinnamons inside a muffin. (Interview, 3/10/15)

Here, he reminisces about the old muffins which had actual fruit in them, rather than the more processed muffins that don't taste like fruit as he thinks it should taste.

Chester. The head of school, Mr. Chase, a slim white man in his late thirties who wore glasses, explained why he had concerns about the food prior to F&H. He said, "there was a

problem with our food when I wouldn't serve what we were serving our kids to the adults in the building, and that kept me up at night" (Interview, 6/29/15). When I asked him if it was because of the nutritional value he perceived, he replied:

> It's because of how the food is prepared. I think the government requirements are good but not excellent. I think the way in which it's interpreted still lends itself to a lot of processed food, to a lot of fun food that kids may enjoy but aren't necessarily...They're easy to produce, easy to manufacture in mass quantities, but just aren't healthy and nutritious. (Interview, 6/29/15)

Here, Mr. Chase reiterates a common theme, that school food is usually processed, and just not as healthy as it could be if it were fresh.

At Chester, TLS provided a mid-afternoon "snack," which came prepackaged in boxes. These are also called "cold suppers" elsewhere, and from what I observed, they usually included a juice, milk, fruit, and a processed item like a corn muffin, mozzarella cheese sticks, or French toast sticks. For the most part, however, these items were highly processed. Mother Charity described these as "a cookie and a juice, or chips and a juice." Cynthia, a fifth-grader at the school, shared that she did not really like the snack. She liked the fruit cup, tortilla chips, and milk, but didn't like the peanut butter and jelly "thing" or cinnamon cakes. Ms. Cummings was not impressed with the snack:

> Sometimes it's a little bit gross. It's like a slimy piece of cheese and some meat that I wouldn't want them to eat, so I don't push them if they don't eat it. There's this one thing that's this piece of toast that's like laden in syrup and they try to eat as many of them as they can and I limit it to one. Because it's supposed to be French toast, but I ate one

> before, and I was like, this is butter and sugar. We're all going to lose our minds. (Interview, 7/15/15)

She also complained about chicken nuggets "that are not real chicken" and that the "food coming from the government meals is low grade" compared to the foods donated by Trader Joe's. For instance, she described Trader Joe's apples as being bigger and nicer-looking than the small apples included in TLS lunches (Interview, 7/15/15). Like Ms. Cummings, Ms. Crawford said she personally wouldn't eat it, saying "I don't really eat ham. I don't know if it's ham actually, but it's a piece of processed turkey and a piece of processed cheese, or half frozen bread sticks. It's just stuff that seems very processed and salty" (Interview, 6/10/15).

At Chester, several staff members targeted the flavored milk as the object of their ire, and actively fought against serving it at the school. Mother Charity described the strawberry and chocolate flavored milk as "syrup milk" and like a "drug" that children cannot control themselves around. Here, she argues that because of all the other factors students at Chester must deal with, such as physical abuse and poverty, it was important to keep blood sugar slow and steady:

> These kids don't have it easy. To give them syrup milk? That's like throwing kerosene on the fire. You want to keep the fire burning low and steady. Low and steady. Feed the body and the mind not the craving... That's how I feel about that. I feel really strongly about that. (Interview, 6/12/15)

Mother Charity felt so strongly, that whenever strawberry or chocolate milk was delivered through TLS, she would either refuse it upon delivery, or store it and donate it later. She refused to serve anything but plain milk to the students. Ms. Cummings, a white math teacher at Chester, who had also taught for many years prior in the South Bronx, said "I was so happy when we

finally got rid of [the flavored milks] because that was definitely over-consumed" (Interview, 7/15/15). She explained that certain students would drink up to four strawberry milks at once, but when they switched to only offering plain, they now only drink half of one, and many now skip the milk altogether, which she thought was a good thing. She thought that sugar affected student behavior, and dairy, because it caused gas and stomach cramps in many students, was problematic and distracting in class. Once students stopped drinking so much of it, many of these problems abated.

Summary. In this section, I have demonstrated that students often felt hungry both before and after lunch, and those feelings distracted them from class. I also explored some of the explanations participants gave for those hungry feelings, including underlying food insecurity, the portion size of the school meals, as well as concerns that processed food in general, and TLS food as well, might contribute to those same concerns. For instance, many shared the opinion that TLS breakfasts were too sugary and carbohydrate-heavy, contributing to blood sugar swings, and possibly contributing to students' feelings of hunger in the morning. Participants expressed concerns about these types of foods affecting students' attention and behavior, for instance, with the food dye ban, "syrup milk" (meaning the sweetened and flavored milks), or the concerns about students eating Fritos or donuts for breakfast before coming to school. At each site, participants observed patterns of behavior consistent with blood sugar swings, such as being hyperactive then lethargic after eating processed foods, especially ones high in sugar. Other concerns about food included milk intolerance causing digestive issues that distracted from class. I demonstrated how participants almost unanimously understood "unhealthy" food to be highly processed, such as sugary and salty prepackaged foods. Finally, I have shown that for the most part, participants believed that TLS lunches complied with *governmental* standards for healthy

food. However, many drew from their own understanding of healthy food to dismiss the TLS meals as overly artificial and processed.

Feeling Full with Fresh Foods

Consistent with critical policy analysis' emphasis on questioning knowledge production and truth claims, I sought to understand how hegemonic discourses about food work to "define the parameters of possible alternatives" (Ozga, 2000, p.14). Therefore, I asked participants to tell me how *they* understood healthy and unhealthy eating, rather than impose my own definition, or those disseminated by those with power. With all of the conflicting advice about fad diets in the media, I was surprised that there was a general consensus among participants about what kinds of foods were healthy and unhealthy. Many of the foods they mentioned are indeed foods recommended by nutrition experts. However, participants' understandings differed in important ways from mainstream policy assumptions. For instance, not a single participant talked about calories, and very few talked about obesity. Instead, participants described *unhealthy* food as food that was *not* fresh—including processed food, "junk food," "fast food," "fake food," prepackaged foods that contained too much sugar, salt, fat, and that included too many ingredients, chemicals, additives, and preservatives. Sometimes these foods tasted good, but often they did not feel nourishing and sustaining, perhaps leading to feelings of hunger. Many also described physical reactions, such as headaches, toothaches, stomach aches, and blood sugar swings from these types of foods, and some were skeptical about what was in them or how they were made. As described in the previous section, most spoke about TLS meals in similar ways.

Both students and adults described *healthy* foods as fresh and colorful, including a variety of fruits and vegetables, nuts and beans, fresh meats, and importantly, were "homemade" or "home-cooked," emphasizing freshness. They also described healthy food in terms of how it felt

in their bodies, as food that made them feel good, filled them up, gave them the right kind of energy, and kept them in a good mood.

Understanding the Impact of the Fresh & Healthy Program

Consistent with participants' understandings about healthy and unhealthy foods across the three sites, at both Franklin and Chester, most students reported feeling more "full" after eating the Fresh & Healthy meals, compared to the TLS meals.

Franklin. Because the school offered F&H only once per week, and TLS the remaining days of the week, participants were able to make a direct comparison between the two lunch programs. Overall, teachers agreed that students liked the program, and ate healthier food as a result: "The kids seem to really like it from all ages. They love it. I have to say I notice that the kids eat the salads, the vegetables, all the things that they serve at the F&H lunch. I think that's because they're so tasty" (Interview, 6/6/14). Ms. Foster, the social worker, described the differences she saw: "It seems fresher to me. It is. It's prepared right there that morning. It hasn't been packaged how many days before or whatever" (Interview, 6/3/14). She went on to describe the "nice smells coming from the kitchen" as food is being prepared, which makes for a "multisensory experience" that is not there with the prepackaged meals. "It just seemed fresher and more appealing to me too, more nutritious," she explained (Interview, 6/3/14).

Students told me that the F&H lunches made them feel more full. Felicity, a fifth-grader at Franklin, said that TLS lunches left her "still hungry." But when I asked her, "Do you feel differently on Fridays after lunch?" to which she replied, "Yes." When I asked her to explain more, she said, "I feel full, like I don't need to eat anything [more]" (Interview 5/14/14). When I asked if she wished she had Fresh & Healthy meals every day, she said, yes, "Because then I don't feel as hungry" (Interview, 5/14/14). For Farrah, another Franklin student, the F&H food

makes her feel full. However, on TLS days, however, "Sometimes I feel full. Other times I need something extra (Interview, 5/15/14). Fatima, a fifth-grader, told me she usually still felt hungry after the TLS lunches during the week. However, on Fridays, she felt "kind of full" (Interview, 5/16/14). Here, Franklin students indicated that while TLS food often did not sustain them, the F&H food did.

In addition to feeling more full, students also told me they preferred the taste of the fresh meals. They praised the salads they were served every Friday during the Fresh & Healthy lunch: "They got salad that's *actually* dressed, uh, they have like baked chicken, and not just like chicken puffs," another boy said. A girl said on Fridays, "We get *real* lunch." When I asked her what that meant to her, she replied, "Like food we would cook at home" (Field notes, 5/15/14).

Participants at Franklin believed that filling, fresh food led to students being able to better focus in class. Mr. Ford, Franklin's African-American principal, also believed that "what a child puts into his or her body...impacts their readiness for school in general, and from day to day both the experience inside the classroom and outside the classroom" (Interview, 2/25/14). He went on to say that students are "in a better position for success" because they can focus in school when they're eating well. For him and his staff, he said, it was worth it to figure out the logistics.

Washington. Although Washington did not have the F&H program and could not provide a direct comparison, participants had similar understandings about healthy food to those at the other two sites—that healthy food was fresh and filling—and expressed skepticism about processed foods. Ms. Warner said that for her, "healthy food has now become things that are not processed. It's mostly vegetables. It's less red meat. It's less sugars and refined things, stuff like that. No sodas. Mostly water. More original packaging, like not processed" (Interview, 3/30/15). To Ms. Watts, healthy food was "salad and fish," as well as other kinds of protein, fruits and

vegetables (Interview, 12/16/14). Ms. Walters, the lunch aide who came from the South seemed nostalgic for a simpler time. She recounted how, growing up, they would just "shake the tree and get the apples out and the pears." When I asked how she felt after eating the types of foods she ate on the farm growing up, she said they were never sick, and never went to the doctor. She believed so strongly in the importance of fresh food that she cooks a meal for her church community every week, and continues to grow vegetables in a community garden.

Some at Washington wished that the TLS meals, particularly breakfasts, contained more filling foods, like protein and fresh fruits and vegetables. I asked Ms. Weinberg what kinds of food she would like to see in the breakfast program. Ms. Weinberg, who was firm in her mission to help her students who were food-insecure, said she wished the school would serve more protein for breakfast, as well as more fresh foods—because she considered these foods to be more filling:

> I would like to see eggs and maybe some type of a meat or protein. I'd like to see fresh vegetables or fresh fruit salad. Something healthy but maybe something *fulfilling*, maybe something warm—not every day but right now, for example, the breakfast during the week is usually a rotation of different cereals so, toasty o's, honey graham, and maybe a bagel with cream cheese on the side. They're not appealing to me in any way. Maybe a yogurt with some granola mixed in there and a fruit salad or a fruit cup... Then maybe adding something like a salad bar or something additional *fresh.* (Interview, 2/3/15)

Ms. Weinberg explained that additional protein might be added "to match the growth of the older kids" shared others' observations, that fresh, whole foods felt more sustaining than the more processed items offered by TLS for breakfast and lunch. Ms. Wagner, a teacher of the lower-grades, said whole foods are healthy, and that "I would love for kids to be able to take part in the

creation of it, and also to have it just be fresh and real food." She wished, too, wished that lunches could be cooked at the school, saying "the fresher, the more direct, the better" (Interview, 3/30/15).

Students agreed; they told me they prefer fresh foods and proteins, as opposed to more processed, carbohydrate-rich items. For instance, Whitney told me she doesn't like cereal for breakfast, preferring a bagel with eggs and cheese instead. Wyatt told me he feels really full from his mom's pancakes. He also feels full with fresh fruit: "Fruit gets me full. The types of fruits that I like that they serve would be the apples, the oranges, the clementines" (Interview, 3/10/15). Indeed, I heard from a great many students that the liked to eat fruit, and that fruit made them feel full, and I observed students eating fruit at each site. Wynter, a sixth-grader, said, "I like freshly made things like homemade" (Interview, 3/11/15). Students also believed that healthy foods were freshly made, and most preferred these foods to processed foods. It is also interesting to note that despite some teachers' views that the students primarily ate processed foods at home, students often talked about how much they liked and preferred their parents' cooking.

Chester. Teachers and administrators observed that students were less hungry and had more "steady energy" in the afternoons since the F&H program was implemented. Mr. Chase said the afternoons go better now, because "our students aren't as hungry." In fact, he has also noticed they are not eating as much of their afternoon snack as they used to, since the F&H program was implemented: "They used to just blow through it, and now it's more steady-paced because they're not as hungry because they had more food for lunch" (Interview, 6/29/15). Ms. Cullen also noticed a difference: "I see it in their skin color. I see it in their energy. I see it in their attitude," she said (Interview, 7/1/15).

Students agreed. Whereas unhealthy food, like candy, tires her out and "runs out her energy," Caydence said healthy food makes her feel "energized," happy, like she wants to play all the time. She said after eating healthy food, she feels "Good. I don't feel hungry after I eat it. I feel like I have a lot of energy, and I feel stronger." After the Fresh & Healthy program, she now feels good:

> I feel happy, I feel okay. I feel like I'm ready to learn new things and new exciting things that I haven't learned in my old school. I feel like I'm getting ready to learn and learn more algebra and how to do mathematics, do reading comprehension, do writing, take tests, be focused on what I'm supposed to learn. (6/10/15)

Additionally, students had fewer stomachaches. Ms. Campbell explained that when her daughter ate cold lunches (from TLS), she would "always complain" about her stomach bothering her. These complaints disappeared when she began to eat F&H lunches (Interview, 6/11/15).

Teachers also saw improvements in student behavior. Several of the teachers commented that one of the main changes they saw after beginning the Fresh & Healthy program was that students' blood sugar remained stable throughout the afternoon, and students could pay attention better in class. Prior to this, they noticed blood sugar lows mid-afternoon, where students would appear lethargic and often ask for snacks. Mr. Chase, too, observed fewer highs and lows in the afternoon: "Behavior has improved in the afternoon. We're not seeing as many outbursts, not as much highs and lows in the afternoon... I attribute that to just more stability in the blood and the brain and just chemically" (Interview, 6/29/15). Ms. Cummings, the math teacher, described several "extreme violence instances" that occurred in prior years (before F&H), such as plants being thrown down the hallway, bulletin boards ripped, doors slammed, desks knocked over, and once, a lamp thrown that accidentally broke someone's foot. While the school had implemented

several new behavioral strategies, she attributed the majority of changes in behavior to an absence of blood sugar spikes and drops. Her afternoon classes are now easier, more in control, and students are more focused. Chef Charles, a sweet but savvy African-American woman in her fifties, agreed. When I asked her what changes she saw before and after F&H was implemented mid-year, she replied,

> Behavior. Their behavior has changed tremendously. When I first started here, I noticed all of the teachers, they would have to talk to them and they was never listening. It was just like, are they okay or whatever? They was acting out. I mean they was all unhealthy and puffy. They were talking back. It was crazy. These are teachers, I know that it's not my place, but I think I would have had to have a little more discipline for them. I didn't know how they was disciplining them, but once this program started, this lunch program, it's a totally different thing. (Interview, 6/11/15)

Chef Charles' comments indicate that students' behavior during lunch had improved dramatically. She went on to explain that the reason for the behavior changes, in her opinion, had to do with eating whole versus processed foods. She believes there are "additives" in processed food that negatively impact behavior, a belief she shares with several other teachers and staff across the three sites.

Student comments reinforced this observation. Caydence, the fifth-grader who indicated she often felt hungry at home, said: "We couldn't eat like we're supposed to eat until I came here and then they gave us hot lunches. I was doing better at school, I got my grades up, I got good behavior, I wasn't bad anymore" (Interview, 7/1/15). Here, she describes improved behavior and grades after eating the Fresh & Healthy meals.

Furthermore, it was not just students who benefited from the Fresh & Healthy program. Teachers, too, felt more energy from eating fresh foods. Mr. Chase, the head of school, described how he feels after eating healthy foods: "I have more energy. I have more clarity. I'm happier, not sluggish. I have a better afternoon. Not as moody and not as hungry" (Interview, 6/29/15). Ms. Cummings observed that teachers' performance improved after regularly eating healthier lunches. While before, they too ate "a lot of junk food, a lot of quick microwave meals" and other things you can make and eat standing up, now that she eats the F&H meals, she's noticed her old tension headaches have disappeared (Interview, 7/15/15). Sometimes, she told me, she gets so full that "I'm often not even hungry for dinner. I've had such a sustaining noon meal" (Interview, 7/15/15). Ms. Craig, the principal, has also noticed the improvement in energy and mood in the teachers. She has observed an increase in "...the amount of energy the staff have after sitting down eating, drinking two glasses of water and having a lunch, they have for the rest of the day, the mood" (Interview, 7/29/15). Speaking for herself, she said, "it has changed my job completely; the way I act, my irritability in the afternoon is gone, my clothes fit better. I have less stress" (Interview, 7/29/15). Their observations were consistent with teachers' and students' observations across all three sites—that healthy foods, freshly prepared and eaten in good company, had a major impact on behavior, moods, and feeling nourished, sustaining them throughout the day.

Participants at Chester also saw that the Fresh & Healthy lunch program helped to address the effects of a major food insecurity problem among their student population. Mr. Chase commented that since the program was implemented about seven months prior to our interview, he had observed major changes: "I think our students are healthier, so I don't see as many bones as I used to in the face. We have some obese kids, there's some overweight kids, we have a few

obese kids, but nothing like before" (Interview, 6/29/15). Here, Mr. Chase believed that fresh, healthy food—which he described as food that was fresh, not frozen, colorful, without salt and sugar—improved both hunger *and* obesity.

Summary

One of the most salient findings in this study is that hunger and malnutrition are prevalent concerns affecting the daily experiences of low-income students at school. Regardless of whether they were hungry because they skipped breakfast, chose not to eat the school breakfast, or weren't satisfied after eating the school food, students told me it was hard to pay attention in class when they felt hungry. Participants gave several explanations for feeling hungry at school, including underlying food insecurity at home, the portion size of TLS food, and blood sugar swings associated with highly-processed foods. Furthermore, participants believed that addressing the physical feelings associated with feeling "hungry" at all three schools was important to creating a learning environment conducive to student engagement. Students cannot learn while experiencing the effects, which manifest in ways that can easily go unrecognized, such as lethargy, headaches, stomach aches, hyperactivity, and behavioral problems. These findings are consistent with prior research that has shown that children who are food-insecure have higher rates of illness, headaches, fatigue, hospitalization, stomachaches, iron-deficiency anemia, as well as developmental delays, cognitive delays, and behavior problems, which in turn can lead to significantly lower performance in school (Alaimo et al., 2001; Brown, 1996; CDF, 2014; CDF Ohio, 2016; Taras, 2005).

Secondly, participants' observations about the differences between the two lunch programs were consistent with an almost unanimous agreement about what "healthy" and "unhealthy" foods are, how they feel after eating them, and how they impact students' ability to

learn. Importantly, participants talked about the pre-made and reheated TLS lunches in the same ways as they described *unhealthy* foods— as processed food and "fast food" —which left them feeling hungry and unsatisfied, despite the fact that these meals complied with NSLP nutritional requirements. The Fresh & Healthy program, in contrast, with its freshly prepared food, was consistently described as healthier, more "filling," and providing a more sustained "energy" during the school day.

Conclusion

The National School Lunch Program (NSLP) was originally implemented to alleviate the negative effects of food insecurity in schools (Levine, 2008; Poppendieck, 2010). However, as the federal program evolved, concern about obesity became the priority, resulting in calorie restrictions. As a result, some students might not be eating enough. For example, students who receive free and reduced lunch are not allowed to take seconds of certain items, even if they are still hungry. This was problematic for many students in this study, who had difficulty paying attention in class when they felt hungry, often complaining of lethargy, headaches, and stomachaches.

In her book on school lunch in the United States, sociologist Poppendieck (2010) questions the boundaries of who gets categorized as "hungry." She argues that while some children are clearly hungry in the chronically food-insecure sense and are objectively undernourished, others may get enough energy but lack specific nutrients, and may be better characterized as "malnourished" rather than hungry. She further points to scenarios in which a child's "hunger" may be problematic, even if they do not clearly fit into the undernourished or even malnourished categories:

> What about a child who has filled up on soda and donuts on the way to school? She may not be "hungry" if we use the term in the everyday sense of the annoying sensation by which the body signals its need for more fuel, and if this is a rare or occasional behavior, and she eats healthy meals most of the time, she may not be malnourished either. Nevertheless, her food intake can be a problem for the school if rapidly fluctuating blood sugar levels interfere with her mastery of the multiplication table. (Poppendieck, 2010, p. 167)

This study's findings suggest that even students who may not be "food-insecure" according to official definitions, still *do* feel hungry in school for a variety of reasons, and it is problematic for the learning process. Teachers and administrators believed food insecurity, and the reliance on highly processed foods that characterize "food deserts," were significant problems in and around their schools. Students and educators alike understood blood sugar problems from eating highly processed foods negatively affected students' ability to pay attention in class. Lunch offerings that are also highly processed may in fact compound the problem.

Taken together, these results suggest that students, teachers, and staff think very differently about healthy food than do policymakers. Unfortunately, the qualities that participants identified as important to their concept of healthy food, such as fullness and freshness, as well as the impact these foods have on students' ability to learn, are considerations that are completely absent from current school food policies, including the Healthy Hunger Free Kids Act (HHFKA), the National School Lunch Program (NSLP), and the USDA's *Dietary Guidelines for Americans*. These policies instead focus on calories, nutrients, and obesity, but do not specify preparation methods, whole versus processed ingredients, or mode of delivery (family-style eating versus lunch line). While the Healthy, Hunger-Free Kids Act, enacted into law in 2012,

required offering fruits and vegetables every day, there is no requirement that they be *fresh* fruits and vegetables. These standards emphasize whole grain-rich foods, but do not require them to be prepared on-site; thus, most baked goods contain a long list of preservatives and additives, which many participants found problematic. The standards reduced the amount of saturated fat and sodium, but do not require these foods to be freshly prepared in tasty ways, leading many students to skip the meals altogether when they find the food unpalatable compared to other easily-accessible food such as chips and soda.

Furthermore, the latest changes to the NSLP through the Healthy Hunger Free Kids Act (HHFKA) and the USDA's *Dietary Guidelines for Americans*, prioritize obesity prevention by limiting calories to "ensure proper portion size" (Food and Nutrition Service, 2015). However, the findings of this study suggest that the portions of "filling" foods such as fresh produce, protein, and healthy fats may be too small, leaving many children still hungry. The students and teachers in this study very clearly understood that feeling hungry at school made it harder to pay attention in class. They felt more tired and lethargic, had more headaches and stomachaches, and—importantly—sometimes acted out in ways that were especially problematic for the overall learning environment, such as being irritable, fidgety, or even picking fights with other students.

On the other hand, students reported having a steady energy that enabled them to pay better attention in class when they ate fresh foods. My data on the schools using the Fresh and Healthy program show that fresh and whole foods were more appealing to students, more filling, perhaps due to the increased fiber and nutrient density, and made students feel better throughout the day. Thus, the ways in which participants understood healthy food in terms of *freshness* and *fullness* should be considered in school food policies and practices.

CHAPTER 6:

FEELING CONNECTION AND CARE:

THE EMOTIONAL IMPACT OF SCHOOL LUNCH

In the previous chapter, I analyzed how participants at the three sites understood the differences between the two lunch programs, Traditional Lunch Services (TLS) and the Fresh & Healthy program (F&H). I argued that participants described the highly-processed TLS lunches as similar to "fast food," which left them still feeling hungry. On the other hand, they felt more full and nourished after eating the Fresh & Healthy lunches. In turn, students reported that this sense of fullness made it easier for them to concentrate, and the teachers I spoke to agreed. I provided a critique of the National School Lunch Program (NSLP) guidelines based on these results, arguing that the underlying assumptions in the NSLP about healthy food and why it matters differ significantly from participants' understandings of healthy food as fresh and filling.

In this chapter, I explore another overlooked component in national school food policy and practice—the emotional impact. Here, again, I demonstrate that what was important to participants about school lunch was very different from policymakers' assumptions, which often rest on quantitative measures such as nutritional content and cost efficiency. I demonstrate that eating family-style fresh meals led to a stronger sense of community and an improved school climate overall at both Chester and Franklin. While TLS lunchtime was associated with a punitive, disciplinary atmosphere, F&H had a positive, communal and celebratory feeling. The F&H shared meals brought people together at Franklin and Chester, led to closer relationships between students and teachers, and opened many opportunities for conversations that would be unlikely to occur at any other time during the school day.

Drawing on the work of Critical Policy researchers (Ball, 1994; Ozga, 2000; Lipman, 2004), I argue here that power relationships were disrupted in some ways by the F&H program, leading to a more communal atmosphere based on mutual respect and care. Eating together allowed educators to interact with students in a more egalitarian way, by reducing the perceived need for tight control in the lunchroom and the attendant antagonistic relationships, and by creating opportunities for teachers to relate to their students on a human level. In other ways, however, the emphasis on "etiquette" and "manners" during F&H lunches reinforced existing societal power relationships, and a few participants expressed reservations or discomfort with that aspect of the program. However, most saw these lunchtime meals as opportunities to model turn-taking, conversation skills, and conflict mediation—as well as to increase students' cultural capital (Bourdieu, 1984; 1990), preparing them for entry and success in the area's more selective private and charter schools.

Finally, students felt more "cared for" when their basic physical and emotional needs were met, particularly at Chester. There is a large and growing body of research in education on the importance of positive student-teacher relationships and "teacher caring" on educational outcomes (Baker, Grant, & Morlock, 2008; O'Connor et al., 2011; Perez, 2000; Stipek, 2006), and for high poverty students, in particular (Garza, 2009; Garza, R., Ryser, G., & Lee, 2010). However, this literature does not look at food or acknowledge the impact meals have on climate. Because "food is an act and a symbol of care" (Sandler, 2011, p. 43), I argue that teachers and administrators believe they, too, demonstrate "care" through feeding their students, improving their relationships with students and the climate overall.

Consider the findings of Thapa et al. (2013), who, in their overview of the school climate literature, concluded there is overwhelming evidence that a positive school climate can improve

educational outcomes, including engagement and graduation rates, and potentially mitigating the impact of low socioeconomic status. In the context of this research, a more community-oriented lunchroom climate, which fosters positive relationships between students and teachers and one where students feel cared for, could potentially have an impact on student learning. The key, as in the last chapter's findings, was that educators took part in the meals themselves. However, teachers are unlikely to eat meals that are unappetizing to them, as participants stated TLS meals were. Thus, the quality of food—as defined by participants, not policymakers—was essential to the positive tone of the lunchroom, the sense of community, and students' feeling that their teachers cared about them.

Lunchtime at Washington Charter School (TLS)

Washington Charter School was housed in a brick building too small for its needs. The kitchen itself, not capable of preparing anything fresh, only had room for an industrial freezer, refrigerator, a warmer, and a small sink. No more than two people could comfortably work at a time without bumping into each other. It was so loud from the constant whirring of the appliances that it was difficult to talk to each other inside, as I discovered attempting to conduct interviews in there. The kitchen was located on the first floor, while the "multi-purpose" room—which was used as the lunchroom and the auditorium, as well as the art and music room—was located on the second floor. This required the lunch aides to make frequent trips up and down the stairs, carrying crate after crate of milk, packages of warmed food, salads in tiny Styrofoam containers or little bags of baby carrots, and hardy fruit such as apples or oranges. They assembled these meal components on a folding table in the hallway outside of the multi-purpose room, a hallway just large enough to accommodate the table and one line of students. That month's menu was posted on the wall over the milk cooler, next to a poster that read "Dark green

veggies in the house tonight!" picturing a woman, in a superhero-style of graphic art, made from spinach, kale, and swiss chard. "Eat your greens—they're nature's rock stars!" I found this poster ironic since TLS never actually served these foods.

Ms. Wallace, the African-American lunch manager with a gentle disposition, was responsible for ordering and keeping track of inventory. She would sit at one end of this folding table with her laptop, keeping track of each student who went through the line and what they took. The younger grades then proceeded into the multi-purpose room, while the older grades went back to their classrooms to eat.

In general, the atmosphere during lunchtime was highly controlled, with clear procedures for obtaining meal components through the lunch line, assigned seats in rows, often by grade and by gender, and "silent lunch" rules once students were seated. Teachers and administrators were not present during lunch time at all. Instead, a group of three or four lunch aides would circulate around each table, helping students unwrap their meal components, attempting to keep order, and sweeping up the trash from all of the packaging that inevitably collected on the floor. In charge was Ms. Williams, a no-nonsense African-American woman in her fifties whose official title was "positive behavior specialist." She would often reprimand students in line, raising her eyebrows and her voice: "Excuse me! This is a quiet zone!" During one visit, she positioned herself at the beginning of the line, crossed her arms, and prevented the children from taking their lunches, saying sternly that they were not moving until they "got it together" (Field notes, 12/16/14).

Ms. Williams used several strategies to keep order in the lunchroom for the younger grades (kindergarten through third). A "10 minutes of silence" rule was in effect for the first portion of lunchtime. "Your 10 minutes of silence begins now!" she would say. "Ms. Winslow [the principal] asks that you enjoy your food for 10 minutes. After that, you can talk" (Field

notes, 12/2/14). She also carried warning sheets, forms she filled out when students violated her rules. She made various attempts at being making it positive for students. For instance, after students sat down with their trays of food, she would come in energetically and get their attention before praying: "Wave your hands in the air! I don't see them. Freeze! Put them down." She continued in a quieter voice, mimicking a prayer, "Thank you for the earth, thank you for the birds, thank you for the trees, and thank you for our food. Let's eat!" (Field notes, 1/25/15). She often turned silent lunch into a game, where the boys and the girls would compete for who was the quietest. Ms. Williams would say, "Oh, another point for the boys!" when a girl talked, as she wrote tally the chalkboard. "Alright, who's good at the quiet game?" She often praised them as a group for being quiet: ""Wow! You guys got super quiet. This is the best class!" (Field notes, 1/13/15).

Despite Ms. Williams' efforts to keep the tone upbeat and lively, students would repeatedly whisper, talk, and fidget. This caused a fair amount of consternation amongst the lunch aides, who would often sigh with frustration, visibly relieved when lunchtime was over. At times she would separate the "talkers" by moving one to another table. As the children began to eat, two or three lunch aides would put on disposable gloves and help open milks or other items, answer questions, and remove trash. They would also reprimand students for talking, saying things like, "Excuse me. I asked you to be quiet!" (Field notes, 12/2/14). Students would generally comply for a few minutes, but then the noise level would gradually rise again.

On one visit on a cold January day, the students became particularly unruly. When they were generally done eating, Ms. Wallace, the mild-mannered lunch manager, collected set aside all the unopened food. When several girls and boys got out of their seats and began to run around the lunchroom, Ms. Wallace became agitated. "What's everybody doin?" she asked, in an

uncharacteristically alarmed way. “Wardell, have a seat!” she said. They were wiggling, shouting, and singing. Some ate their oranges, while others kept theirs on the table. One boy lay across the bench, resting. Another ripped apart his empty chocolate milk container, letting the pieces fall on the floor. The volume in the room rose to a deafening level. When Ms. Williams, the strict “behavior specialist,” came back in, she yelled, “Y’all gettin’ too loud!” She covered her mouth with her pointer finger and raised her other hand in a peace sign. About half of the kids raised their hands in a peace sign, but not all were quiet immediately. The low rumble of whispers and talking continued until their teachers appeared at the door to take them back to class.

Overall, it was a constant struggle for the lunch aides to keep the students sitting quietly in their seats; at times, they were barely able to maintain order. At best, the tone was utilitarian, with students quietly choosing lunch components and taking their seats, reluctant but compliant. At worst, conflict simmered just below the surface, ready to bubble over at any moment one of the aides failed to remain on high alert. For instance, one day there was a scuffle amongst the girls at one of the tables. Wanda, a small African-American third-grader, brought her lunch from home. Waniya, a taller girl, came barreling in with her tray from the lunch line, moving Wanda’s bag to the crack between the two tables. “Yo, move your tray over!” Wanda yelled in her face, angrily. She then slid her plastic container of a neon-pink and green cereal to where she wanted to sit. One of the lunch aides, Ms. Wayne, a heavy-set Latina woman with long black hair who wore jeans and a sweatshirt and was missing several of her front teeth, came over to mediate. Since there wasn’t enough room on the girls’ side of the table, she wanted Wanda to move to the boy’s side. Another teacher walked in from the hall and said, “They’re doing benchmarks in there!” clearly upset with the noise. Ms. Wayne, looking flustered, said, “Chill. Breathe,” but

Wanda began to cry anyway, moving her seat reluctantly. However, as soon as Ms. Wayne's attention was diverted moments later, Waniya and Wanda began shouting at each other again, from across the table, the conflict clearly unresolved. Ms. Wayne, ignoring the two girls, yelled, "Alright! Your 10 minutes has started. Don't get caught talkin'!" When the kids were quiet, the only sound was that of crunching plastic wrappers. A low hum of whispers began to ramp up, and then the aides would say, yet again, "Shhh!" (Field notes, 1/13/15).

Even for the older students, who ate in their respective classrooms, lunch was highly structured. While it was a little more casual for them—students could generally sit where they wanted—the lunch still began with the 10 minutes of silence. Sometimes, it felt as if the students were barely tolerating these efforts to keep order. For example, during one visit in early December, on a day when chicken nuggets were on the menu, Ms. Watts' class was particularly rambunctious. The students really liked the honey mustard, so the lunch aide, Ms. Wayne, made several trips back to the cafeteria to get more. Some students had three or four packets on their plates, and I even observed several eating it straight from the packet. When they had finished their 10 minutes of silence and their meal, some students dispersed to the computer area to play games, when one girl hit a boy hard on his back, laughing. As mittens were tossed across the room, a student whined, "Winston hit me on the back for no reason!" Winston was a short, lanky kid with stained paints, frizzy hair, and somewhat wild eyes, who ran around the room before sneaking out without Ms. Wayne noticing. Ms. Wayne told them all to "keep it down!" several times, and looked annoyed when bored students complained about the lack of computers (Field notes, 12/9/14).

Students had varying opinions about the tone at lunch. Some students thought that the silent lunch policy was useful and necessary. After describing lunch as a "messy time," Wekesa,

a particularly observant fifth-grade student, defended the 10 minutes of silence policy, saying,

> I agree with it because you cannot talk with your mouth full. Nobody wants to know what's in your mouth... I agree with it because sometimes it takes 10 minutes for somebody to eat so there, and when you're almost done eating, that's when the 10 minutes are up because that's usually the time when children are done eating, you're almost done eating. (Interview, 3/8/15)

She told me too much noise at lunch gives her migraines. However, she acknowledged that other students didn't like it sometimes because they want to talk to their friends, and recess was only fifteen or twenty minutes long, and often, especially in the winter, was held indoors. "Indoor recess" basically amounted to free time in the classroom, where students played board games, read, talked, and clustered around students playing computer games. Another sixth-grader, Wyatt, whose parents were from Liberia, did like the rule, because "it gives us more time to eat our food, so then that we're done we could actually talk to who we want to talk" (Interview, 3/10/15). Wesley, a smart-talking sixth-grader who wore glasses, said he understands the need for the rule because "usually some people, they talk too much." However, he doesn't like it himself "because I always really talk a lot." He was looking forward to going to a "good" middle school "so I don't have to get in trouble" as much (Interview, 1/20/15). While the students were certainly eager to eat by 1:00pm, they generally bemoaned that they could not relax and enjoy time with their friends without getting into trouble.

Mr. Willis, a board member at Washington Charter and an educational consultant for many area charter schools, observed a link between the quality of food and discipline issues at lunch. He thinks that discipline issues actually *arose from* the poor quality of food, which students don't like to eat. Compounding the issue, he explained, was that students rarely get

enough exercise due to shrinking amounts of recess and gym time, so they have pent-up energy to burn. Thus, he thinks the typical lunchroom becomes a "prison lunchroom situation," which devolves into "kids against lunch ladies." He drew a direct connection between food quality, exercise, and student behavior, describing a pattern he had seen at a number of schools:

> The other thing was if kids don't like the food, if they're not interested in it, they might eat some part of it but be done with eating in like five minutes. If you have a 25-minute lunch period, or 30 minute or 40 minutes, what do the kids do after that five minutes? They run around. They throw things. They get up, and so more than half of what your lunch people are doing is telling the kids to be quiet and sit down. This is in a school where the kids don't get any exercise, which is most schools these days, so of course the kids want to take that time, which is basically free time after you're done with lunch, to get up, run around, and be active, whatever. They can't, because then the prison lunchroom situation, which is what most lunch rooms are, then you don't have much space and you have to be in that room for a certain amount of time. It becomes kids versus lunch ladies, to a certain extent. (Interview, 4/8/15)

Here, he describes a set of related problems that ultimately results in an antagonistic and punitive atmosphere: uninteresting, processed food that gets eaten or discarded very quickly; few opportunities for exercise; nothing else to occupy them when they're done; and only one or two aides to supervise many children. The situation quickly becomes one that needs constant management, so it doesn't turn into "bullying power-hour," as Mr. Willis called it. His comments certainly resonate with the situation at Washington.

Lunchtime at the Franklin School

The Franklin School's cafeteria was located in the basement of the building the school

shared with a learning center. The kitchen area comprised several rooms, one for the storage of dry goods, one that housed the industrial freezers, warmers, stoves, and ovens. There was a separate food preparation area that also had a sink and a small dishwasher. The lunchroom was just down the hall. Two rectangular folding tables were set up near the entry door, with a round ice bin, filled with milk cartons, black and white splotches all over the side, meant to evoke a cow. About eight large round tables filled the rest of the space, with eight chairs each, though at a normal lunch, only four or five table were used at a time. There also were extra chairs piled up in the back. It was bright and cheerful, despite the lack of natural light, with friendly posters adding a splash of color the walls, reminding students to "eat the rainbow" and "reach for the stars." Student artwork was prominently displayed as well, as the cafeteria doubled as the art room in the periods it was not being used to feed the children (Field notes, 12/18/13).

TLS Lunches

TLS lunches were served at Franklin Monday through Thursday. Students would enter the cafeteria, choosing their meal components from the folding tables, while the lunch manager, Florence, a quiet but stern African-American woman in her forties, tallied their names on her computer. Faye, an African-American woman in her mid-twenties, was a lunch aide, who also had two small children of her own at home and was often short on patience. Tasked with maintaining order during TLS lunches, she had instituted a "10 Minutes of Silence" rule at the beginning of lunch, much like at Washington. She described her reasoning this way:

> If they are too rowdy and stuff like that or if it is a certain food that we really just want them to eat because we already know they are not going to eat if they keep talking, we will have them just be quiet and eat their food. After they are finished eating their food, then they are able to go ahead and talk. (Interview, 5/13/14)

She told me the "10 Minutes of Silence" rule was intended to ensure that students finished eating their food before talking and becoming distracted. Her primary goal was to ensure that students got enough to eat, in the limited amount of time they were allotted, only about 25 minutes.

Talking instead of eating lunch seemed to be less of a problem for the older grades, who seemed to eat faster. Yet, Faye also demanded silence of them when she wanted to punish groups of students for being too loud or not following her directions. She was quick to reprimand them, even when it didn't seem related to the goal of finishing their food. For instance, on one day toward the end of the school year, when students were too loud after most had taken their meals and sat down, she raised her voice and told them to line up again. A few were confused and brought their trays of food to the line. Abruptly, Faye yelled to "Get out!" and told them they were being disrespectful. Why'd you bring your tray? What is the problem today?" Everyone was surprised and confused, including volunteers from a college, and myself. After several minutes of absolute silence, she told them they could talk again, with no explanation (Field notes, 3/10/14). Another time when students were finished eating, Faye needed to enter the tallies of who ate lunch that day, since Florence was absent. She yelled, "Go sit down!" And even though the students were, by my own standards, pretty quiet the entire time she put the information in the system, with her back turned, she yelled, "Don't make mean face expressions. Talking through your hands is talking too!!!" The students became even quieter. One student burped. "Say excuse me!" she yelled. The assistant went on, "Keep it up, and tomorrow, no recess. I'll give y'all a whole buncha work!" (Field notes, 2/25/14). Both of these are examples of situations where students were already done eating, but Faye imposed silence as a punishment.

Another time, again fairly abruptly, she raised her voice to one of the tables of children, "Why y'all still talking? Just eat!" When one of the students complained that the chicken nuggets

weren't warm enough, she yelled:

> It's not that cold! Stop acting like I just took it out the freezer! Either eat it or shut your mouth and get out. That's how easy it's gon' be. Now you still got a problem with it? Yes or no? Who else were you discussing it with? Hasim? Hasim, do you have a problem with it? Joe, you got a problem with it? Okay, then eat your food! (Field notes, 5/15/14)

The lunchroom became silent once she began to raise her voice. The students she addressed said, "no" very quietly. When she was finished, the students went to their tables. One fifth grade boy grumbled to another boy at his table. He mumbled under his breath, "See? This is why I want to go to a charter school." He told me everybody had already told her the food was cold, but she told them she wasn't warming it up anymore. He seemed exasperated by her response.

Many at the school found her strict approach to be at odds with the kind of atmosphere they thought should exist during lunchtime. Ms. Fuller, a friendly African-American administrator, said that in other private schools where she had previously worked, each school had its own building and lunch space, so "lunch could take up whatever time you needed it to take." However, Franklin shared the building with a community center, which often needed to rent out the space. The result is that lunch feels rushed: "We're trying to get it in and get them out." She feels this pressure despite her own belief that it was "not the best way to help kids enjoy their food and frankly I think their little stomachs get all roiled up"—especially when the adults in charge of lunch are stressed and impatient, she added, implicitly critiquing Faye's disciplinary approach (Interview, 5/21/14). A TLS official agreed that lunch at many of their schools felt rushed, and the lunch managers often complain to her about how rushed they feel themselves. Some, like Florence and Faye, are expected not only to warm up the food, keep track of the inventory, and encourage children to eat, but also to manage behavior, quite a daunting set

of tasks. She pointed out that it is up to each school to set the schedule and properly staff the cafeteria (Interview, 5/20/17).

Others at the school, particularly the fifth-grade teacher, Ms. Fisher, also expressed misgivings about the "quiet lunch" approach. Ms. Fisher was a petite white woman in her early forties, with short, dark brown hair, who always walked with a purpose. She usually had a serious expression on her face, but lit up and became animated when speaking about something she felt strongly about, in this case the tone of the lunchroom. She reiterated several times to me over the course of my time at Franklin how much the tone at lunch bothered her. "You cannot impose silence; it doesn't work," she said. In addition, she felt that Faye's approach was inconsistent and unclear to students. She complained that "...a lot of times they'll be asked to be quiet, and I don't even know what they've done to get in trouble" (Interview, 3/10/14). To Ms. Fisher, lunch should be a time to socialize and relax, "because they're usually not being naughty, they're just being loud." It wasn't like they were throwing food or fighting. "It shouldn't look like class," she believed. But, instead, the "imposed" silence "makes the rest of the day miserable" (Field notes, 5/13/14). Part of the issue, she surmised, "comes from not really wanting to watch the kids, and then getting frustrated because, of course, you're not watching them and then they're going to get a little cuckoo and then you react" (Interview, 3/10/14). However, as much as Ms. Fisher wished that Faye would take a different approach, she also admitted that she hated doing lunch duty herself, because it gets "a little crazy," perhaps tacitly acknowledging how difficult it really is to maintain order in the lunchroom, especially when children are often not all that interested in eating the school lunch, or eat it quickly and then become bored.

Franklin students generally agreed that lunch most days was were loud and chaotic, and

bemoaned the lack of friendly interaction. Felesha said, "It's really loud. It's hard to hear the people at your table because everybody's yelling across the room" (Interview, 5/14/14). Still, there were mixed opinions about the silent lunch rules. Farrah, a fifth-grade girl, liked the silent lunch and assigned seats, saying, "It's okay with me 'cause it don't be noisy." She didn't like it when everybody talked at once, since she was a quiet person (Interview, 5/15/14). However, Fatima didn't like the silent lunch policy because she is a "talkative person" and wanted to talk to her friends. Felesha felt the same way, that she liked to talk at lunch. She felt that the adults "think we should be quiet because *they* like peace and quiet," not because the students prefer it (Interview, 5/14/14). Forest, another fifth-grader, agreed with Ms. Fisher, that lunchtime *should* be a time to socialize: "It's not really that fair. That's like the only time we can talk, like the whole group or classroom. They just want us to be quiet and eat our food" (Interview, 5/16/14).

Fatima also did not like the assigned seats. She said, "I don't like having assigned seats because I can't really talk to the people I want to talk to" (Interview, 5/16/14). She thought the lunchroom sounded just as loud, even after seats were assigned. Freddy did not like assigned seats either, especially since they weren't enforced consistently. He especially didn't like it when kids moved their chairs to where their friends were sitting, because it was too chaotic and made a "mess": "They usually do that. Their table's over here and they slide their chair all the way over to where their friends are at. The food is still there and then they have to keep going back and get their food" (Interview, 5/14/14). What is clear from these students' comments is that they did not especially look forward to lunchtime, nor did they view lunchtime as a time to unwind or connect to others. At times, there was even an antagonistic atmosphere between the lunch workers and the students.

Summary of TLS Lunchtime at Washington and Franklin

Overall, during TLS lunch at Franklin—similar to Washington—cafeteria duty consisted of lunch aides circulating or standing over the children, rather than participating or sharing in the meal. Instead of conversing or building relationships, the adults spent most of the lunch period repeatedly cajoling or demanding students to be quiet, sometimes in antagonistic ways. They also had to manage the abundance of trash from all the disposable packaging, making sure it did not end up on the floor. Once students finished their lunches, behavior had to be managed even more closely, with a number of disciplinary techniques including games, warning slips, verbal admonitions, seat changes, and the threat of losing recess. It generally felt like a chore, and was a dissatisfying experience for teachers and students alike.

Friday F&H Lunches at Franklin

Interestingly, on Fridays, there was no "10 minutes of silence" during the Fresh & Healthy lunches. This might have been due to the "intentionality" of the meal, as one teacher put it, or simply due to the higher ratio of adults to students, with an adult sitting at most tables with students. Theoretically, schools could ask or require teachers to sit with students, no matter what food was offered. However, I argue here that the quality of food was essential to drawing adults into the lunchroom to share the meal with their students, contributing to that "family" feel. Because they all ate a filling and satisfying meal together, the atmosphere was one of *sharing* and *community,* rather than of rules and punishment.

Many participants noted the extra excitement throughout Friday morning in anticipation, that was not present with TLS meals. Ms. Faith thought that Friday lunches had a different, "restaurant atmosphere," where they get to serve others. She told me, that "…their attitudes are certainly great. Because it's exciting…I think it just makes them happy to know that they're

going to get a meal that is, you know, good food" (Interview, 1/28/14). She herself felt "happy" seeing the "plethora" of colors of the foods, such as orange carrots, greens, and reds, so she thinks it must affect students too (Interview, 1/28/14). Other teachers and staff members agreed, especially in comparison to the "regular" TLS lunches. Mr. Ford, the principal, said that while he doesn't hear a lot of complaints about TLS food, "there's not the level of excitement about what we're going to have on the menu on a Friday" (Interview, 2/25/14). Ms. Faber, a kindergarten teacher, said: "As we're walking down the hall and the older kids are like, 'What are we having? What are we having?'" There is an "excitement" in the air (Interview, 6/6/14). Mr Flynn said, "There's a buzz about it" (Interview, 6/3/14).

Because students were excited and more satisfied with the meal, they seemed more cooperative and readily joined in with tasks such as setting tables, serving food, and cleanup. On Fridays, select students took turns being "table captains," leaving class a bit early to help set up for the meal. Wearing white "chef jackets," they passed out hard plastic plates, a clear pitcher of water, silverware, red serving spoons, clear plastic cups, and paper napkins to each table. Florence helped students remember where each piece of silverware went. She asked them to raise their left hand, and then explained that the napkins go on that side, with the fork on top of the napkin. She praised them, saying, "Y'all did wonderful. You guys did really good" (Field notes, 1/10/14). Students would begin to trickle in and take their seats. In order to keep track of "countable" meals for the NSLP, students took a popsicle stick on the way in. Students were supposed to invite teachers and adults to sit with them, and there were generally no more than one or two adults at each table (Field notes, 1/10/14).

Before the meal began, Chef Frances came out, welcomed the students, and described the menu for the day. On one cold day in early January, she served baked ziti with a homemade

tomato sauce garnished with fresh basil, a mixed green salad with shredded carrots and a dark balsamic dressing, roasted zucchini, baked carrots with a glaze, and grapes and clementine slices with fresh strawberry whipped cream for dessert, to which some students exclaimed, "Yes!" She brought out chives to pass around, explaining they were part of the onion family, and a whole zucchini before it was cut. Students passed around these items, smelling and feeling them in their whole forms. When she was finished with her explanation, she said, "Table captains, come on up!" When the table captains returned, students passed the communal dish around and served themselves and each other with a red ladle.

For the younger kids, especially, family-style meals helped them to eat enough to feel full. On Fridays since teachers sit at the table, Ms. Faber has noticed that her kindergartners get less distracted than they do on TLS days. They can encourage students to eat more and finish their food, or even try new foods. She explained,

> In your teacherly way, you're going, "How's that vegetable? Have you tried that? Take a bite of that." It doesn't really register that you're encouraging eating more. Because it is family-style I think those are the things that naturally happen. When we're all at another table you don't always, you can't always monitor who has opened up their hot dog and who hasn't. (Interview, 6/6/14)

Here, she indicated that sometimes students actually eat more food on Fridays because teachers are sitting right there and can encourage children to try new foods they might not otherwise try.

Another explanation was that students were more engaged, because they were excited about what they are eating. Ms. Fuller, the African-American enrollment director, told me she had observed that the kids talk about the food on Fridays, but not during the week. "It's just the climate is different," she said. During TLS lunches, "kids don't love the food, they don't love the

lunch period. Of course, they show up because they're growing and they're hungry but they don't sit back in their chairs, they don't ask what it is. They don't ask you to help cut it up. Rarely do they describe it." So while TLS lunches were just "utilitarian," during Friday lunches, students said things like, "This tastes smooth," and "This one's creamy," and "This one's salty," and "What's this leaf in there?" (Interview, 5/21/14).

Teachers described the conversation as being "different," "calmer," and "cozier" during F&H lunches. "It's not just always about the food," Faye, the no-nonsense lunch aide, said. "It's about the outlook of the environment too" (Interview, 5/13/14). Ms. Fisher, the fifth-grade teacher, said thought that because the process of serving each other is slower, so "there's more conversation," especially between teachers and students, contributing to a "calmer" and more relaxed atmosphere. There were more tasks to do, like passing the food, instead of just ripping open a package. "They *have* to learn how to share" because of the nature of family-style dining, so "the conversation's nicer. They're usually talking to each other at the table" (Interview, 3/10/14). Ms. Fuller explained that it is because the kids don't gobble down the food in five minutes and look around like, 'What am I going to do with the next 20? I'll get into something maybe I shouldn't.'" Instead, she went on, "When we have F&H Lunch they sit and we eat and we talk and we share and somebody always wants to find the recipe. It's a whole different experience" (Interview, 5/21/14). Ms. Foster noticed that on "regular" (TLS) days, the conversation is more "competition to be heard." In comparison, on Fridays, there was more "turn taking and maybe more common focus on the topic" (Interview, 6/3/14).

My own observations of the F&H lunches certainly supported the teachers' remarks, that F&H had a more celebratory atmosphere, with more students engaged in friendly conversation. In visiting the school on Fridays, I was consistently struck by how friendly and excited the

students were not only to eat the food, but also help with tasks such as setting the table and serving each other. For example, one Friday in January, I observed children help each other pour water into the glasses. A boy at Ms. Farrell's table accidentally scooped lettuce into his water while serving salad to the girl next to him. The table laughed, but Ms. Farrell said, "That's okay," while another student at the table went to get him a new cup (Field notes, 1/10/14). The atmosphere was friendly and supportive, in stark contrast to the sometimes hostile feeling during TLS lunchtime.

Another time I sat with a group of girls during the second- and third-graders' lunch, and made small talk, asking how they liked each type of lunch. One told me that regular lunch was "nasty." "I like F&H the best," agreed a second girl, and a third said, "I wish we had F&H every day." The fourth said that they only thing she didn't like about Friday lunch was being rushed to finish her ziti in time to get dessert. Bigger and taller than the others, the first girl dominated both the food and the conversation. Finally, another interrupted and said, "You greedy!" to protest how much ziti she took. I stepped in and asked her to pass the dish to others so that others could get seconds too. At the end of lunch, the girls invited me to go to gym class with them (Field notes, 1/10/14). Even considering the girl who needed encouragement in sharing the food, the experience at the table was pleasant and the conversation was friendly. The contrast with the atmosphere during TLS lunches was remarkable.

Teachers at Franklin believed that the Fresh & Healthy program allowed children to see how much they care about them. For example, in describing the differences between TLS lunch and the Fresh & Healthy program, Mr. Flynn, a kindergarten teacher, first described the food as fresh, higher quality. But he went on to say that "the experience of lunch is a little bit nicer, too." Here the program facilitated an environment where students can learn "about table manners, and

sharing food, and just how nice it can be to enjoy really nice food with a group of people, your friends, people you care about who will care about you" (Interview, 6/3/14). To him, a sense of caring was a central to the appeal of the Fresh & Healthy lunches.

Indeed, several teachers told me that they thought F&H meals met an emotional need that, for some of their students, was not being met at home. According to these teachers, the students' lives were lacking in an important regard. Mr. Ford noted that he knows their students are not eating "quality food," nor are they eating with caregivers on a consistent basis, because of other work and childcare demands. Instead, he told me, they eat "corner store, packaged stuff" (Interview, 2/25/14). The school counselor, Ms. Foster, a white woman in her forties, said students tell her they mostly eat by themselves or in front of the TV. She called family mealtimes "very grounding," and a "source of ritual predictability and connection," and opportunity for parents to check in with their child about the good and difficult things. "When that's not there, there's probably more fragmentation." She went on to say that "the experience of fullness is more than just a physical experience too. There's a psychological emotional component" (Interview, 6/3/14). Thus, she believed that sharing meals with adults at school could meet an emotional need for connection that some students might lack at home, offering a broader perspective of what students might mean when they say they feel "full" from F&H meals. She called F&H a "meal as vehicle for a community and connection" (Interview, 6/3/14).

However, while students unanimously preferred the quality of food on Fridays, their opinions varied more on whether they actually liked having their teachers sit at their tables. For instance, Freddy likes Friday lunches because "there's a lot of leftovers, so the teachers can eat with us" (Interview, 5/14/16). While Fatima said she liked talking to her teachers and looks forward to Friday lunch, sometimes when they had "something really good," she hoped the

teachers did *not* sit at her table, so they could have extra food (Interview, 5/16/14). Here, Fatima and others expressed that they actually didn't like teachers sitting with them because they were hoping for more food for themselves. Fatima's comment reinforces how important it was to students to feel full, perhaps even reflecting some level of food insecurity at home.

Additionally, opinions about the emphasis on table manners and etiquette varied. Students described the F&H mealtime experience as "classy." During a discussion with several students over lunch one day, a precocious African-American girl named Frankie who towered above her peers, described the Friday lunch. She told she "loves them." She went on, "we like it, it's like a home-cooked meal, that's like really good… We're all classed up" (Field notes, 3/6/14). When I asked her what she meant by "classed up," she replied, "I don't like classy. I'm a messy person. When it comes to classy stuff, I can act like it for a moment, but once I leave…" At that moment, we were interrupted by Faye, who yelled for Frankie to "Stop jumpin' in grown people's conversations!" (Field notes, 3/6/14), so unfortunately, I could not ask a follow up question. However, I took Frankie's comment to mean that although she loves the food during the F&H lunches, she was not entirely comfortable "code-switching" or taking on the identity of someone "classier." While she could "act like it" here and there, she did not necessarily want to become "classy" all the time. Similarly lukewarm about the emphasis on manners, Forest told me that "It's not that bad really, it's not *that* mannery. It's okay." When I asked him what he meant by "mannery," he explained, "Because we got to always use manners, but pass the food around like a family, but it's not that bad" (Interview, 5/16/14). Here, he seems to indicate that he likes the F&H meals *despite* the emphasis on manners, much like Frankie.

On the other hand, other students told me they appreciated the emphasis on etiquette. For instance, when I asked Felicity what she thought about F&H lunch, she said, "it's nice because

then they're teaching some kids in the school how to use manners and stuff," the benefit in her mind being that "the lunch room wouldn't be so messy on the regular days" (Interview, 5/14/14).

Providing students with these types of skills was consistent with Franklin's emphasis on preparing students for the area's most elite and selective private and charter schools. Faye, the no-nonsense lunch aide, told me that on Fridays, they are learning what they are "supposed to learn"—what to do and how to do it, what to say and how to say it. According to her, it is important because,

> They always have to keep up with their manners and table etiquette, just so it's resourceful for them when they do go out in the world when they get older. I am sitting at a table, and my elbows shouldn't be on the table. I should be sitting up right so I can eat my food like that. I should be using my salad fork and that kind of stuff like that. (Interview, 5/13/14)

She sees these skills, such as saying please and thank you, sitting up, and using the right silverware as necessary skills they need to know for later in life. While Mr. Ford, the African-American principal, believed it was important to not come at this issue from a "deficit mindset," at the same time he thought that it was important that their students learn manners and etiquette in order to have access to elite spaces. He explained,

> We want them to be able to move in different circles beyond the four walls of [Franklin] and be comfortable, be at home wherever I am. Whether a formal setting or at a picnic with a group of family members, folks who look like me and talk like me. And then others, who maybe I go to a school where it's predominately white, and it's predominately well-off. I need to be able to navigate all those spaces...I even think that

> the F&H program broadened the part of our mission that talks about readiness for all that life has to offer, about accessing opportunity. (Interview, 2/25/14)

Ms. Fuller, the enrollment director, pointed out that it was the "social curriculum" that "trips up" their students more often than the "academic curriculum," especially for those who do go on to attend the area's most exclusive, majority white private schools. She recounted a story about a former student who had entered a private school after leaving Franklin. While she saw the other kids at her new school using forks, knives, and putting napkins in her lap, "she said, 'I would take my cheeseburger and just take a big giant bite. Now I'm remembering I'm supposed to cut it in half.'" Ms. Fuller's point was that the F&H program, and the emphasis on teaching manners, "changed what she ate, but it also changed the *way* she ate," making it easier for her to fit into her new school (Interview, 5/21/14). She firmly believed that explicitly teaching those social skills—and she saw the F&H program as an integral part of that—was important for students' long-term success.

However, not all the teachers were convinced that it was the school's place to teach manners. Ms. Faber told me that as a staff, they had not yet "come to a consensus" about what those manners even "should be." Some teachers, she said, believed that "manners are determined by families and it feels like we're over-stepping to say this is what good table manners should look like" (Interview, 6/6/14). Ms. Faber's comments echo the critique of alternative food programs, including some farmers' markets and school gardening programs, as "spaces of white privilege" that elevate certain tastes and ways of eating (Alkon & McCullen, 2010, p. 14). The participants at Franklin were clearly making a conscious effort to ensure that their students would have the cultural capital (Bourdieu, 1984; 1990) necessary to "fit in" to white, middle

class dining norms. However, some participants, both students and teachers, felt uncomfortable with such an agenda.

Despite the reservations about the emphasis on manners and etiquette, the overwhelming majority of participants said they enjoyed both the quality of food and the overall atmosphere of the F&H program, and that it contributed to a stronger sense of community and a more positive school climate. The F&H lunch program brought people together in other ways as well. One Friday morning in the kitchen, as I was cutting pineapple and melon into cubes for the F&H dessert with Ms. Farrell, a young African-American woman who was the "partnership coordinator," we chatted about her work. She told me that Friday lunches were really useful in recruiting volunteers for the school, who could immediately be put to work, as I had, helping to prep the meal, set the table, and do cleanup tasks, like washing dishes. It was also a strategy she used to attract potential donors. She always tried to schedule tours on Fridays, so they could see and partake in the F&H lunches. She said, "Everyone is always impressed." Just last week, she told me, they had some local businesses take a tour of the school, one of which just wrote a big check and offered to teach a financial literacy class for students and families. F&H, she said, "really brings the community together" (Field notes, 3/14/14).

For Mr. Ford, the principal, the "most compelling evidence and feedback" is that the staff looked forward with excitement to eating the meals every Friday, even though it was not mandatory. He pointed out that Monday through Thursday, most teachers brought their own lunches, but "on Friday everybody is eating what's been prepared in the kitchen downstairs. And our students, our staff, love it. (Interview, 2/25/14). Indeed, all of the students and staff with whom I spoke, viewed the program highly overall, and I did not see any teachers who opted out of participating in the Friday meal, unless a scheduling conflict prevented them from doing so.

Almost everyone I spoke with described the "buzz," the excitement in the air, the specialness of the shared meal on Fridays, and its positive impact on the community. Educators also saw the program as a way to teach and model social skills necessary for their students' success.

Lunchtime at Chester Episcopal

Chester Episcopal's Head of School, Mr. Chase, was a serious-looking white man in his late thirties who wore glasses, and wore a suit and tie. Mr. Chase lived and breathed Chester's daily rhythms. He resided in the old parsonage across the street with his partner, and worshipped in the chapel next to the graveyard on Sundays. He greeted each student by name as they came through the dining hall for their breakfast each morning, and for their lunch in the afternoon.

Chester's kitchen was a bustling place. Chef Charles, a sweet and loving African-American woman in her fifties, was always busy, cutting vegetables or standing over the stove, tasting her recipes, never wasting a moment. She often danced to hip hop songs on the radio as she went about her work, and chatted happily with whomever else happened to be in the kitchen, putting them to work with small tasks if they stayed too long. The kitchen was also home to Mother Charity, a stocky white woman in her fifties. A former Episcopal priest (hence, the "Mother" in front of her name), she was both sexton and lunch manager at Chester. She often wore jeans, sneakers, and a t-shirt, reflecting her work fixing the central air conditioning system, doing yardwork, or running around the building delivering boxed snacks to the classrooms, a job for which she often recruited my help. She was a hard woman to say no to; she just assumed that if you were there, you were offering to help in the running of the school, and she refused to hear any excuses. Her "office" was in a corner of the storage room off the back of the kitchen, marked by a wall on one side, and shelving on the other. Her desk was covered with paperwork: a clipboard she used to mark off the names of students who took the TLS snack, inventory lists,

ordering forms, and other spreadsheets. Ms. Campbell, the lunch aide, was often seen in the kitchen as well, helping Chef prepare the meal, loading or unloading the dishes from the dishwasher, or gathering the tablecloths to run a load of laundry. An African-American woman in her late thirties, she was the mother of an eighth-grade girl at the school, and lived in the neighborhood. She was warm and loving, but also had the worn look of someone who had been through hardships of her own. One or two teachers were also usually milling about in the kitchen, often hanging out in the back room, grabbing a snack on their way up the back staircase or on their way to meeting another staff member in the dining hall.

Mr. Chase described the kitchen as the "heart of the home," and appreciated the savory aromas that emanated throughout the school as Chef prepared the meal from scratch.

> To smell garlic and spices and that between 6:30 and 8:00 in the morning, I think it's psychologically, and maybe even through senses, I think students, it relaxes them knowing that there's something really good coming for lunch. The smells have been a wonderful addition to our morning routine. (Interview, 6/29/15)

For Mr. Chase, the delicious smells of scratch cooking wafting through the school, was directly connected to the sense that Chester was one big loving family. He explained that communal meals were an important tradition in Episcopal schools—teachers, staff, and students together eating healthy food, "food that is cared for, loved," and that it was important for the school culture for "everyone stopping in the school to eat together" (Interview, 6/29/15). Additionally, Dr. Evelyn Carter, a well-known physician before her retirement, was a co-founder and board member at Chester. She, too, understood the work of the school in terms of what she called her "total care" philosophy. Drawing from her decades of experience as a pioneering oncologist, she believed that comprehensive services result in better outcomes for patients. As a board member

at Chester, she has similarly promoted, and sought funding for, comprehensive services to care for students, arguing that they too, result in better academic outcomes (Interview, 12/15/15). For Mr. Chase, Dr. Carter, and the others who worked at Chester, providing warm, healthy meals felt like an important way to care about and connect with their students, while providing opportunities to practice conversation skills and etiquette, skills they saw as necessary for future academic success.

The Prior TLS Lunchtime Culture

The kitchen looked very different just six months prior to my arrival. Before, the school building, an old Episcopal church, had just one tiny, deteriorating and non-functional kitchen. It had not passed the health inspections, so the staff had not been allowed to prepare food in it; regardless, it had been too small to cook on the scale necessary provide food to their student population every day. Ms. Craig, the principal who had helped open the school with Mr. Chase, told me that although food quality had always been important to the two of them, it took them a long time to figure out how to serve it under the circumstances. They tried paying a nearby private school to make them extra meals, and someone picked those meals up in a van each day, but that became enormously expensive. They settled on offering TLS lunches and warming them in a microwave. Ms. Craig, herself a nursing mother of two young children whom she fed organic foods, really hated how "overly processed" the TLS lunches were. "I'd read all the ingredients. There's more TVP [textured vegetable protein] than there is meat in the beef…there was over eighty ingredients in most of the food that was coming through," she told me (Interview, 7/29/15). Because of the kitchen situation, however, TLS was the best they could do at the time. She consoled herself by finding ways to source enough in donations to offer extra,

"unlimited" fruit to students as a supplement, to make sure they felt full, especially in the mornings.

Teachers described the atmosphere at lunchtime back then as hostile, with lots of fighting and bullying, which required a disciplinary response from teachers. Before, there were "dour faces" where students sat quietly in a row (Interview, 6/10/15). There were "silent lunch" policies in place, which, like those at Franklin and Washington, felt punishing. As Mr. Clark, who over saw lunch at one point, said, silent lunch "was a punishment we did. Sometimes the kids would just be sitting down here, silent, eating their crappy food…not really getting anything out of it. Not really, there wasn't any lesson to be learned" (Interview, 6/10/15). Ms. Craig concurred: "I used to be the lunchroom monitor. I was just disciplining a bunch of kids that were screaming at each other and saying inappropriate things" (Interview, 7/29/15). Ms. Cullen, the assistant principal, said lunch felt "rushed," because the kids would be done in five to seven minutes. It was not enjoyable, there was no "social experience," and the conversations were "limited" (Interview, 7/1/15). Much like at the other two sites, her role in the cafeteria was that of disciplinarian, standing over unruly students.

Mr. Chase was an outspoken critic of what he called "institutional eating" and "government food." In fact, he described a time when he had angered officials at TLS with his critique. Noting that many of Chester's students have parents and relatives in prison, he said that the "government food" served at Chester and other urban schools where he's worked wasn't much different from that prison food, and in fact, "inmates were eating healthier and better than our kids," He went on that, "Even just heating food instead of cooking it, packing, the presentation, it's just not very appetizing" (Interview, 6/29/15). In large part, he believed this due to how the food was served, in a very "institutional way," that demoralized students. His

comment encapsulates how the teachers and administrators viewed the more typical, disciplinary and impersonal way of eating that TLS seemed to engender, where students would walk through a lunch line, choosing meal "components," getting checked off the computer as a "reimbursable" meal, and sitting in assigned seats, with silence imposed upon them while they picked at their prepackaged food. Both students, teachers, and administrators greatly disliked lunchtime under that system. This disciplinary and punitive feel—along with their concerns about the quality of food—ultimately led them to pursue the funding and donations necessary to put the F&H program into place at Chester.

The Implementation of F&H Meals

After extensive renovation of their kitchen in the previous year, and after hiring Chef Charles full-time, Chester implemented the F&H program five days per week. For participants at Chester, the F&H meals represented a remarkable change for the better. Father Cross described the change as "huge" and told me now there is a "much more positive time" because teachers eat with students, moderating the discussion, and there are fewer "unkind words" as a result. Now with these changes, "meals are eaten with joy" (Interview, 6/10/15). Ms. Crawford, the English teacher, agreed. Now that they had F&H every day, "there is a healthy food culture," where there was not one before (Interview, 6/10/14).

During F&H lunches, just like at Franklin, students volunteered to be "table captains," and wore white chef jackets, that when not in use, hung from a rolling coat rack near the refrigerators. They helped set tables, serve the food, and return used dishes so Ms. Campbell could put them in the dishwasher. Chester also usually had adult volunteers from various churches and organizations that also helped with these tasks, particularly for their whole-school meal on Wednesdays.

Mealtime at Chester was a bit more ritualized and formal than at Franklin. Once the students and staff had taken their seats, Mr. Chase would stand and wait for silence. One of the teachers would hold up two fingers, indicating the peace sign, and a chorus of "shhh" would come over the crowd. Mr. Chase would say, "Good afternoon, Chester!" To which the students replied in unison, "Good afternoon, Mr. Chase!" He would then lead the school in a prayer and give thanks for the meal. Chef Charles would announce the menu, for instance, coconut fish sticks, rice pilaf, black bean and corn salsa, romaine salad, and pineapple for dessert (Field notes, 5/27/15). As at Franklin, popular items would elicit cheers, with some kids exclaiming, "Yes!" when they heard about a particular dish. At each table, six or seven students would sit with one or two adults, passing food and making small talk. The teachers explicitly taught students to put their cloth napkins in their laps—which students sometimes resisted—and facilitated the conversation, while also reminding students to use "manners" and "etiquette."

Across the board, teachers and staff believed the F&H program improved students' behavior and the tone of lunchtime overall. Chef Charles agreed. When I asked about the changes she has noticed over the year that Fresh & Healthy was implemented at Chester, Chef Charles replied that student behavior had improved "tremendously." Before, students acted out, talked back to teachers, and needed more discipline, in her opinion. After they started the Fresh & Healthy program, however, "It's a totally different thing…Now with the F&H program going on, their manners are beautiful. They sit and they pass around. They sit there, they talk, and everything is low. Nobody's sitting up here beating on the chairs and table. It's wonderful" (Interview, 6/11/15). Whereas before the lunchroom could get hostile and rowdy, by all accounts, with F&H, students were more relaxed and well-behaved.

Ms. Craig, the principal, told me she felt that it was important for the kids to socialize, to

experience “the socialness of eating” (Interview, 7/29/15), a time for kids to talk and for adults to model appropriate and respectful ways of speaking to each other. Throughout the many meals I shared with students and staff at Chester, I did observe teachers routinely talking with students in a casual and relaxed manner, and modeling conversation skills. For instance, on one of my visits, I sat with Ms. Crawford, an English teacher, and an older African-American woman who was a guest that day, who turned out to be the mother of the mayoral candidate who had come to the school to speak. While we munched on our lemon chicken, brown rice, and carrot salad, two boys at our table began to argue about something that had happened in class. Ms. Crawford quickly stepped in, asking them to resolve it later. Without this adult supervision and guidance, these types of conflicts could have quickly escalated. Throughout the conversation, Ms. Crawford facilitated the conversation, asking me about my dissertation project, and the other guest about her son, the mayoral candidate. Students asked questions, as well (Field notes, 5/6/15).

In another instance, I sat at a table with the reading teacher, Ms. Colman, a blonde woman in her twenties, who encouraged her students to share about their days. When conversation lagged, and one of her students simply said “super,” she encouraged them to use “more than one word.” One boy recounted a conflict on the schoolyard, and she praised him for being “mature” and staying calm. And when a student offered her “lucky bracelet” to someone at the table for good luck, Ms. Colman encouraged another student to take it, saying, “It really works!” She also told them about a murder mystery she was reading, and asked them about their favorite books (Field notes, 6/12/15). Even these small moments of interaction between teachers and students contributed to the positive tone of the dining hall, and offered spaces for informal and personal connections that were unlikely to occur at any other time of day. The principal, Ms.

Craig, believed that the relationships between students and teachers that are formed when they eat lunch together are carried over to the classroom. She explained:

> There is value there because now you have a connection with a child outside of the typical classroom setting. Now you can use it as leverage in the classroom when the child doesn't want to do their work, you already have a relationship with them. Granted you hope that would happen in many different venues, but it's something that happens naturally in a lunch venue. And kids can tell you how excited they are about something they've done in class. There's an advantage to that as well. (Interview, 7/29/15).

Here, she indicates that these kinds of connections "happen naturally" over lunch, when teachers and students share food together.

In some ways, eating with students has shifted student-teacher relationships during the lunch period. Before, teachers would observe students eating; now, they are "really joining students for meals, eating the same thing, so that's an equitable thing," according to Father Cross (Interview, 6/10/15). For example, one day in late May, I sat at a table with three seventh-grade girls, who eyed me suspiciously, Ms. Cullen, the assistant principal, and Ms. Chan, the science teacher. The menu that day included coconut fish sticks, rice pilaf, black bean and corn salsa, romaine salad, and pineapple for dessert. As we passed the dishes, Ms. Cullen explained that she was allergic to coconut, so had opted for a veggie burger instead. The girls were intrigued, and asked her all sorts of questions about what happens to her when she eats coconut. While I tried to engage the girls about how they liked food at their previous school (a grimace from one, and "It's nasty" from was all I got from them), they were more interested in chatting to each other about boy trouble. One of the girls asked Ms. Cullen whether she would stay with their husbands if they cheated. She responded, a bit uncomfortably, that "he would never do that," which

seemed like an unsatisfying answer, so they asked Ms. Chan the same question. Ms. Chan joked that she would leave her husband if she could stay friends with her mother-in-law (Field notes, 5/27/15). The conversation led to issues of trust, resolving conflict, and how hard it is to forgive someone when they do something that hurts you—all personal topics that would be unlikely to arise within a classroom context.

While most teachers at Chester saw the Fresh and Healthy lunches as creating unique opportunities for modeling the kinds of conversations and behavior they wanted students to exhibit, there was evidence of some resistance amongst the students to the overt attempts to impose certain ideas about manners, just as there had been at Franklin. For instance, one day an 8th grader was asked by the assistant principal, Ms. Cullen, to put his napkin in his lap, and he refused her repeated requests with a defiant attitude (Field notes, 6/10/15). Later, I asked Ms. Crowley, who worked in the development office, whether she had ever noticed that kind of resistance. She recounted a story of a boy who said no to her request because he had already wiped his hands on the napkin. For some students, she said, it seems like a "bizarre custom," because if they are used to eating with their fingers, it seems odd to place a dirty napkin on your clean clothes (Interview, 7/29/15). Ms. Colman, the reading teacher, recounted that she has "a fight" with one particular student every day because he tries to eat with his fingers. "But he knows when he needs to switch it" (Interview, 7/10/15). These anecdotes, along with my own observations, indicate that students are not as receptive to their teachers' ideas about *how* to eat their food, as they are about actually eating the fresh meals.

However, most teachers did support the idea of explicitly teaching "etiquette" and "code-switching." Ms. Colman was a vocal supporter because students need to develop "the social intelligence to know how they need to convey themselves in different settings" (Interview,

7/10/15). Mr. Chase explained that,

> The etiquette program allows students to I think gain some social capital, and I have a feeling that we don't know what the ripple effect is yet, but I'm pretty confident that the families are seeing some interesting etiquette attributes in their homes. I could imagine that even if some of our students go out to KFC for dinner or something with their family, or lunch or something, and they're sitting down and there's a napkin, I have a feeling some of them are putting their napkins in their lap and then the mom's like, "What are you doing?" "Well, mom, put your napkin on your lap." "Okay." (Interview, 6/29/15)

While Mr. Chase's use of the term "social capital" is really more closely aligned with Bourdieu's idea of "cultural capital," here he reveals that for Chester's staff, teaching etiquette during the F&H lunches is very much about transmitting specific ways of eating and interacting that are usually associated with the white, middle- and upper-classes—such as placing a napkin in your lap, or speaking in Standard English—and not simply about the quality of food or connecting with students. He also assumed that these practices were not already the norm in students' homes, and if families adopted them, it would be a welcome and beneficial shift.

While most teachers were on board with these efforts, there was one dissenting teacher. Ms. Crawford expressed discomfort about requiring students to "code-switch," or use Standard English instead of students' home vernaculars, during class and in conversations, especially with guests, during lunch. She said she was "torn" about it, because she "would much rather have them *engaged* than feel uncomfortable," since often they would prefer to use slang or dialect (Interview, 6/10/15). Her reservations about students' discomfort resonated with my own findings that, while they loved the food, some students did not like eating with their teachers at lunch. During one visit, after the meal was over and Mr. Clark, a white man in his late twenties,

had left the table, I asked an eighth-grade girl if she liked sitting with their teachers for lunch. She rolled her eyes and said no, and the other students at the table shook their heads as well. I found discussion at the table that day to be quite guarded, with little meaningful conversation. These tensions resonate with Alkon & McCullen's (2010) critique that alternative food programs too often become "spaces of white privilege" because of an over-emphasis on classed ideas about *how* to eat (p. 14).

Indeed, the goal of connecting with students on equal footing over a healthy meal, a priority of the F&H program, conflicted to some extent with the heavy and explicit focus on "etiquette" and "manners." These efforts clearly advantaged the norms of the privileged classes, and advocated the "politics of respectability." Often framed as an "emancipatory strategy," this type of discourse focuses on "correcting the 'bad' traits of the black poor," and ignores larger discussions about "structural forces that hinder the mobility of the black poor and working class." The respectability discourse effectively "stands in" for policy solutions that might address existing societal injustices (Harris, 2014). While my data do not reach as far as that, they do show that many educators at the school believed the F&H program was a vehicle through which they could improve students' cultural capital.

This critique did not seem to be an issue for most of the staff, who agreed that the Fresh & Healthy lunch was a beneficial change and participated voluntarily, sitting with the children during their own lunch break so they could receive the free meal themselves. Perhaps not coincidentally, given her reservations about forcing students to code-switch, Ms. Crawford was an exception. She declined to participate in the lunches most of the time, explaining, "I like bringing my own food, and eating by myself," and preferring to make use of her lunch break to prepare for class or grade papers (Interview, 6/10/15).

Most teachers, however, appreciated not having to think about packing a lunch, instead just receiving a "balanced meal." Ms. Cullen, the assistant principal, said she thought that "it brought up morale. It brought up their attitudes. They really enjoyed it. They looked forward to it" (Interview, 7/1/15). Originally, since participation was voluntary for teachers, she created a sign-up sheet. However, within the first few days, it became unnecessary, as almost everyone signed up each day. Indeed on the days I was at Chester, I observed most of the teaching staff sitting with students and eating the lunch. As at Franklin, the buy-in from the teaching staff, who almost unanimously participated in the lunch program, was seen by administrators as an important indicator of the success of the program.

Teachers believed that in addition to better behavior and the opportunity to teach and model conversation skills and manners, another benefit was that students are more willing to try new foods. Father Cross theorized that students might actually eat more (and thus even feel more full) when there is a positive atmosphere. "Well, on a very just, like, mechanical level the kids eat what's on their plate if there's a positive atmosphere there" (Interview, 6/10/15). He went on to admire how Chef Charles is "...a miracle worker," who "can get this really nutritious, balanced, whole grain, low sodium food to be eaten by these kids." Indeed, students told me how much they loved Chef's cooking. Charmaine told me that the kale salad was her favorite food that Chef Charles makes: "I like kale, and I always eat salad. This is my first year eating kale, and that's why I like it, because this is my first time eating a vegetable. I usually don't eat vegetables, but how she made it, it tastes good" (Interview, 6/29/15). On one occasion that I witnessed, there was hardly any kale salad left at the end of lunch (Field notes, 6/11/15). But it was not only Chef Charles' cooking that facilitated this—the teachers who sat with students during the meal often encouraged students to try new foods. During one meal, an eighth-grade

girl said the black bean salsa looked "nasty" and another girl at the table refused to try the coconut-crusted fish. Ms. Chan, sitting at the table with them, assured her that she didn't even like coconut, but this dish was really good. Both girls ended up eating the meal (Field notes, 5/27/15).

As mentioned earlier, educators at Chester shared the belief that it was important to care for students' physical and emotional needs. Ms. Campbell, the lunch aide, told me she believed that it is important that "kids feel as though someone cares about them," and would "do whatever it takes so kids feel at home" (Field notes, 5/20/15). While staff at Chester cared for students in many ways—providing books, laundering clothing, filling water bottles, even giving out shoelaces when needed—the shared meal, however, was central to students' feelings that the teachers and staff at Chester cared about them.

Students at Chester felt this sense of care. Consider Cynthia's comments, a fifth-grader at Chester. She said that before F&H lunches, they got cold boxed lunches. But, with the F&H program, she liked the food better: "Everybody like the food now, and when people come and visit they be like, they say stuff like, 'We didn't have delicious that y'all got. Y'all have it good,' and stuff like that..." She went on to say, "It makes me feel like I am really taken care of" (Interview, 6/20/15). Here, Cynthia explains that that when the school provided delicious, warm food, she feels taken care of, in contrast to students from other schools that have the regular processed lunches. Recall that Ms. Campbell's eighth-grade daughter attends Chester. Beaming with pride as she spoke about her daughter, she told me her daughter has blossomed at Chester, allowing her to gain entry into one of the most selective high schools in the city. However, her daughter was unsuccessful at previous schools—failing classes, skipping school, often getting into fights, even seeing a psychiatrist for her behavior at one point. Her daughter would often get

headaches and stomachaches that would cause her to be in the bathroom for hours. Now, Ms. Campbell believes she is now thriving at Chester because the classes are smaller, she is eating better food, "and they really care. It's a big difference…It's a good family," she said (Interview, 6/11/15).

Another fifth-grader, Caylee, told me she felt cared for by Chef Charles, who caters to the students' needs and tastes. When students ask her to make something, she does, which did not happen at her old school. I asked Caylee about the differences between the food at her previous school and the food at Chester. After telling me about the food at her old school, which tasted like "fast food," she said, here it's different because Chef Charles tailors the food for their needs. And indeed, when the F&H recipe called for whole chickpeas, Chef knew her students wouldn't like them, so she blended them into a sauce instead (Field notes, 5/6/15). Caylee went on to say that Chef "knows what to feed us and what not to feed us. Certain people have different types of stomachs. Not everybody is the same unless you're a twin… She makes it so that everybody can eat it." When I asked her to explain further, she replied, "She makes it so everybody is one big community or family can eat it at once and they can feel good about it," eat healthy, and reduce their chances of getting diseases (Interview, 6/29/15). By knowing what to feed them and taking individual differences, such as digestive difficulties and taste, into account. In making healthy food for the students, Caylee says Chef Charles reduces the chances of students suffering from diseases, such as diabetes. In these ways, Caylee feels that Chef Charles takes care of the students.

Students also felt cared for at Chester through the backpack feeding program, which they call the "Share" program. Ms. Campbell, whom I often saw bagging up leftover portions of the Fresh & Healthy meals or donated foods for families, told me "the names come in the morning,"

meaning families will email or call if they need food, and the school will send home a bag with the student at the end of the day. Once, I saw her hug an older African American woman, presumably a parent or guardian of one of Chester's students, and handing over a bag of extra bagels and raisin packets for her to take home for her children (Field notes, 5/20/15).

A fifth-grader, Charmaine, told me she thinks the share program is good, because some people "don't have a lot of money left for food." Through Chester's share program, "They can eat healthy foods and good foods at the same time" (Interview, 7/1/15). Another student, Caylee, told me that Chester was a "really good school," because "they help out a lot… If a student didn't have enough to eat at home, they can just tell a teacher in private, and the school will send bags home. If that's not enough food they'll send, like, boxes of food to your house," she said (Interview, 6/29/15). Caydence, another fifth grader at Chester, said about the school: "It's a good place…They help people with problems and they make sure they're okay. They make sure that nothing will happen to them, they watch them, it's just a really good school." She went on to say, "If it wasn't for Chester, I would've been at another school getting bullied and getting pushed around" (Interview, 7/1/15). Thus, caring for students' basic physical and emotional needs led to a stronger sense of community—one described like the home of a loving and caring family.

Summary of the Fresh & Healthy Program at Franklin and Chester

Participants at both Franklin and Chester believed the Fresh & Healthy program benefited the overall lunchroom climate and broader school community. Notably, everyone I interviewed commented about how the lunchroom had a more positive and warm atmosphere after the Fresh & Healthy program was implemented, and students in general felt more cared for as a result of their physical and emotional needs being met. Despite some reservations about the emphasis on

etiquette, most educators believed the program opened spaces for explicitly teaching social skills, conversation, turn-taking, and manners, which they believed were important cultural capital for their students to acquire before entering the more selective private and charter schools in the city. Part of the positive impact of the program was undoubtedly due to teachers eating with students, "family-style," which was described as a more intimate, "restaurant" atmosphere. But I also argue here that the food quality, as understood by participants, was also essential as well.

Conclusion

In this chapter, I have demonstrated that in addition to the differences in the quality of food, the freshness of ingredients, and the preparation methods, the *ways* in which students ate their meals mattered to participants. At all three sites, TLS lunchtime was described as having a disciplinary and punitive feel, where the adults would stand over the children, monitoring behavior and enforcing rules, such as the "silent lunch" policies. In contrast, because of the family-style food delivery model, and because many more teachers and staff participated in eating the Fresh & Healthy meals, these lunches felt much more communal and celebratory. Sharing a fresh, tasty meal with teachers, staff, and peers created a sense of "family" at each school, contributing to a more positive lunchroom tone overall.

Educators at both Franklin and Chester believed that Fresh & Healthy program's benefits extend well beyond the benefits of eating fresh food. At both schools, the adults saw the Fresh and Healthy meals as a way of caring for students. At Franklin, educators believed that the family-style eating through the F&H program helped fill an emotional need for connection. By fostering strong relationships, adults at Franklin could improve a child's "state of mind," relax them, and therefore help with their behavior in school as well, especially for children who lacked that emotional connection at home. Students at Franklin felt excited and looked forward to the

fresh meals, telling me the school overall felt like a "family." Students at Chester told me that they felt more cared for when their basic needs were addressed, for example, by a piece of fruit when hungry in the morning, and teachers at Chester said they felt more confidence in their roles when they were better able to meet basic physical needs, like hunger. In sum, participants believed that care was demonstrated through school feeding. Taken together with the literature on the importance of teacher caring for low-income students (Garza, 2009; Garza, R., Ryser, G., & Lee, 2010), this is a powerful finding that can potentially impact student-teacher relationships and students' experiences at school in many positive ways.

For many of the adults at Chester and Franklin who had reflected on the changes they saw before and after the Fresh & Healthy program, feeding students became a moral imperative, integral to students' well-being and the culture of the school. Participants routinely described feeding students healthful food as an act of care. As Ms. Fuller, the Director of Enrollment at Franklin explained, because of her experiences at Franklin and other schools, she strongly believes that there is a connection between food and student's ability to learn: "...the quality of food makes a huge impact on classroom engagement. Actually it's incumbent upon us if we have kids that are food-insecure to try to provide the healthiest food we can…Our kids deserve it" (Interview, 5/21/14). Other staff members saw that their ability to care for students' basic needs was directly related to their students' ability to learn. In these ways, educators challenge the "taken-for-granted assumptions" (Lipman, 2004, p. 14) that legitimize dehumanizing modes of discipline and control in high-poverty schools. Rather, these educators insist on "rewriting" (p. 15) school food policy by caring for students' basic needs and connecting with them on a human level.

CHAPTER 7: CONCLUSION

This study examined the experiences of students, teachers, and administrators with two different lunch programs in three high-poverty urban schools. Using a critical policy approach, this study provides nuance and context to the ongoing debate about school nutrition policies and the role of school lunch programs within schools. It demonstrates the importance of school food as an educational concern that relates directly to students' ability to learn and to the climate of schools overall. Importantly, it also uncovers the central experience of hunger in many students' experiences at school, and highlighted new ways that schools can better address food insecurity and malnutrition to meet students' basic physical and emotional needs. The primary aim of this study was to understand the meanings participants ascribe to their experiences with different approaches to school food, as well as the role of school food policy and practices in the learning environment and climate of the school. Here, I summarize the findings and provide conclusions and policy recommendations. I also identify directions for future research.

Data for this study were collected through participant observation at three high-poverty schools over a two-year period and through 59 interviews with students, teachers, aides, school administrators, and lunch program managers and administrators. I found that participants' understandings of healthy food and its role in their schools differed significantly from that of many policymakers. Whereas school food policy emphasizes calories, nutrients, and obesity prevention, overwhelmingly, my participants defined healthy food as fresh and filling, food that provides the right kind of energy to sustain them throughout their day. They understood that the Fresh & Healthy program provided such food, and observed positive changes to student engagement, the learning environment, the climate in the lunchrooms, and throughout the school overall as a result of its implementation. While there were some tensions about the explicit

emphasis on “etiquette” and “manners,” overall, participants saw that eating fresh meals together strengthened the connections between teachers and students, contributing to a more positive tone in the lunchroom and a stronger sense of community.

Different Approaches to School Lunch

There were important differences between the lunches provided by Traditional Lunch Services and the Fresh & Healthy program, in terms of the type of food offered, the preparation methods, modes of delivery, and the experiences of participants. TLS is a non-profit agency that sees itself as an anti-hunger organization, rather than a food service provider. It provides meals to 7000 children each day, in 100 Catholic, charter, and independent schools in Southampton. Given the parameters it has to work with, such as limited budgets, national school food policies, and educational priorities that distract from its mission in schools, TLS is quite successful in getting inexpensive food efficiently to students who need it. The F&H program, run by a local chef’s non-profit foundation, assists schools in acquiring equipment, training, and menus that comply with NSLP requirements for schools to provide freshly-prepared meals on site. The benefits of fresh food to students and schools are striking. My findings clearly show that greater investment in high-quality school lunches will have multiple pay-offs.

Differences in types of food and preparation

The types of foods offered by each program were strikingly different. TLS offered primarily prepackaged and processed foods. All of the food was prepared at a central location by contracted vendors, then collected and distributed from a warehouse outside the city; there was no direct delivery of foods from the source to schools. Thus, there were significant challenges in ensuring fresh produce would not go bad before delivery, and certain fresh foods were not served at all as a result. Typically, breakfast foods would include dry cereals, muffins, bagels, fruit such

as bananas or apples, milk, and juice. Lunches would include such items as spaghetti and meatballs, chicken nuggets, fajitas, hot dogs, or pizza. Often, apples, oranges, or small salads were served on the side, with packets of dressing available. Most meals were packaged in small black plastic containers sealed with clear wrapping. These arrived frozen from a central distribution warehouse, then warmed in an industrial warmer at the school. During these lunches, the sound of plastic wrapping being crinkled was commonplace, as was the enormous amount of trash generated by a single meal.

The Fresh & Healthy program, however, prepared meals from scratch. The Fresh and Healthy Foundation initially provided menus, training, and equipment, while the school itself hired the chef. Importantly, this program required the school to have a full industrial kitchen, and enough space to consistently make dozens or hundreds of meals per day. The chef and lunch managers at the school ordered foods directly from vendors, and prepared the meals on-site. The list of typical meals included baked ziti with a homemade sauce, baked chicken wings, baked fish, various types of stews and casseroles, sweet potato fries, green salads, and fresh fruit with whipped cream for dessert. They contained a colorful array of fruits and vegetables, and were served family-style in large serving bowls, giving the impression of a feast. The smell of fresh cooking was ever-present, with the aroma of herbs and spices wafting through the school, especially as lunch approached.

Differences in modes of delivery

While each program complied with the same nutritional requirements of the NSLP, the modes of delivery differed. At the two sites that I observed TLS lunches in action, both used the "offer versus serve" model, in which lunch workers would display meal components (a main dish, a side vegetable, a fruit, a milk, and one other item like "Soy Nutz"). Students needed to

take at least three items in order for their meal to be reimbursable as a complete meal. This model offered choices to students, and cut down on plate waste. However, as one TLS administrator pointed out, it is possible that some students would not take enough items initially, and once they sit down, they cannot return for more items, and it might mean that a student is hungry later. All three schools used a "share" table, where students could place unopened items for others to take if they were still hungry. This was one way the schools were able to reduce the number of hungry students.

On the other hand, F&H program served the food "family style." Each table of about 8 students received a serving dish of food for the main meal, a large green salad, and a side dish. Students and adults passed these serving dishes, taking food for themselves and sometimes serving each other. In this model, some students could take more, and some less, depending on their individual appetites. The experience was intended to mimic a family dining experience, with adults sitting at round tables with groups of 6-8 students. The tone was celebratory and communal, with children and adults alike happily chatting as they passed the food, and served each other. This method required more adult supervision, however. Teachers at Franklin and Chester typically sat with students during these meals, and both relied on a steady stream of volunteers to help prepare and clean up.

Increasing Engagement by Addressing Hunger and Basic Needs

In speaking with students and teachers from the Franklin School, Washington Charter, and Chester Episcopal about their experiences with the two different lunch programs, several themes quickly became apparent. Most participants agreed that the TLS meals were healthier than what students might eat at home or what was available in their neighborhoods. While there were some students who did not like particular items, the majority said the meals were "good" or

at least "okay." However, the prepackaged and processed TLS food often left them feeling hungry. Overwhelmingly, however, participants believed F&H food to be even healthier. They described it as fresh and filling, providing the right kind of energy for the rest of the school day.

One common theme at all three sites was that students often felt hungry before *and* after TLS lunch, and those feelings made it harder for them to concentrate in class. For some, food insecurity at home may have been to blame. My data suggest that many of the children faced food insecurity with some regularity. For this reason, faculty and staff at all schools were concerned about the quantity and quality of the food the students ate. In addition, other students, while perhaps not meeting the official definitions of "food-insecure," as in a chronic lack of calories, nonetheless still experienced hunger throughout the day. Participants across all three sites were concerned that the TLS portion sizes for both breakfast and lunch were not big enough for the needs of growing pre-adolescents, and that these meals were overly processed, perhaps contributing to blood sugar swings throughout the day.

Snack policies and practices were varied. At Franklin, students brought their own snacks, which were often highly processed or sugary. At Washington, there was no snack at all, except for one special education class, where the teacher advocated for them to receive a snack in order to help their behavior. At Chester, in contrast, students were allowed to eat fresh fruit (obtained through free weekly donations from Trader Joe's) anytime they felt hungry. Teachers reported this helped to avoid the blood sugar highs and lows they saw before implementing this practice. This was one way that Chester was able to mitigate hunger for their students without increasing the cost of their meals.

For whatever reason that students felt hungry in school, the result was similar: they had trouble concentrating in class, and it impacted their ability to learn. They described feeling

lethargic, sometimes putting their heads down in class. Others described blood sugar swings, especially after very sugary items—feeling "hyper" and then "crashing." Some complained that headaches and stomachaches related to hunger and digestive issues kept them from fully concentrating in class. And finally, some reported that their moods and behavior declined when they were hungry or had eaten highly processed foods, which made them less cooperative and kind to others. On the other hand, fresh foods, especially protein and fruit, made them feel more full, energetic, and ready to learn.

It was clear from my interviews that many participants had similar views about healthy and unhealthy foods, across all three sites—even at the site that did not participate in the Fresh & Healthy program. I was very careful in wording my questions about these topics in open-ended and non-judgmental ways, asking participants to explain what "healthy" and "unhealthy" food meant *for them*, and to describe how they felt after eating the foods they identified. I asked teachers and administrators what they thought about their school's lunch, to describe patterns they observed before and after lunch, and what concerns they had about the school food and food in general. Participants overwhelmingly agreed that "healthy" food was freshly prepared, from whole ingredients, with an abundance of fruits and vegetables. These types of foods made them feel nourished and ready to learn, with a sustained energy throughout the day.

"Unhealthy" food, on the other hand, was described as highly processed food, sugary and salty food, fast food, and junk food, and while they sometimes enjoyed the taste, ultimately this type of food left participants feeling hungry and unsatisfied. Participants expressed a set of concerns about unhealthy, processed foods, that in some ways might be seen as related. Some were more concerned about food additives causing attention problems, and others more concerned about blood sugar swings inducing a cycle of hyperactivity followed by lethargy, as

well as mood changes and irritability. Another concern for some was that food intolerances (especially dairy) caused digestive problems that distracted from students' ability to pay attention in class.

For the students in this study, whether they felt "full" after eating was an important measure of the quality of food and affected their ability to learn. Participants described the Fresh & Healthy lunches, full of foods participants described as "healthy," such as fresh fruits and vegetables, as being more filling and satisfying to participants, providing more sustained energy, and making them feel more ready to learn. In contrast, while always acknowledging that TLS lunches were "healthier" than other options students might eat, such as Oodles of Noodles or macaroni and cheese, many participants talked about the TLS meals in the same ways as they talked about "unhealthy food." Some even described TLS food explicitly as "fast food," and indeed, these meals looked, smelled, and tasted like frozen TV dinners.

Cultivating a More Caring and Community-Oriented Mealtime

F&H meals were associated with a communal, celebratory tone, and participants noted the "excitement" and "joy." Participants at Franklin described a "buzz" on Fridays, as students anticipated and talked about what might be served at lunch, often asking each other or their teachers throughout the morning what the meal would be. At Chester, participants appreciated the savory aromas emanating throughout the school as Chef Charles cooked their meal. Students liked how Chef Charles was able to customize meals according to their tastes and preferences, sometimes even cooking their favorite foods. Student volunteers participated in setting tables and cleaning up, taking ownership of the experience. Students and adults sat at round tables, with tablecloths, real plates and silverware, passing and serving food "family style." Because adults ate with students, they were better able to guide conversation. I observed teachers modeling

respectful ways of interacting, mediating conflicts, and connecting with students in informal ways that helped build their relationships.

Teachers were also able to teach and model "manners" and "etiquette," including turn-taking, offering food to others, and sometimes asking students to place their napkins in their laps. They practiced conversation skills, and at Chester, some teachers required students to use Standard English, especially when speaking to guests. A few felt uncomfortable with such an explicit emphasis on promoting behaviors associated with middle and upper class ways of eating, arguing that it was not the school's place to teach these things, and that students may not feel as comfortable as they would if they were allowed to interact in ways that felt more natural to them. For most, however, F&H meals served as an opportunity for students to acquire cultural capital, which was seen as necessary for entry into "good" middle and high schools, as well as college and beyond.

Overwhelmingly, participants experienced the tone of the lunchroom during Fresh & Healthy meals as having a more positive, community-oriented, and calmer atmosphere, with more conversation and less conflict. I explored many possible explanations for this finding. F&H mealtime was a time where students and teachers could connect to each other on a more personal and equitable level. Teachers encouraged students to try new foods and were able to mediate conflicts that may have escalated without an adult presence. I argue that the quality of food (defined as fresh, filling, and tasty) really mattered to getting the adults to sit with students, as they would be unlikely to spend their lunchtime voluntarily sharing a meal with students if the food was not appealing and satisfying to them. Students, especially at Chester, also expressed that they felt more "cared for" when their basic physical and emotional needs were met.

Lunchtime when TLS lunches were served, on the other hand, felt more punitive and disciplinary. Students stood in line, took their meal components, and sat down in assigned seats. At the two sites where I observed TLS, as well as at Chester before F&H, staff required students to sit in silence during a portion of their meal, to keep order and ensure students ate in a timely fashion. For some students and teachers, this felt punitive and degrading—the opposite of the relaxing, social time they thought lunchtime *should* be. Mr. Chase, the head of school at Chester, described it as a more "institutional style" of eating, one that is impersonal, rushed, and often punitive.

Taken together, these results show that by implementing the Fresh and Healthy program, schools were able to address their students' basic needs for nourishment *and* connection. They also improved both the climate and tone of the lunchroom as a result. Teachers spent time connecting and bonding with students in informal ways over shared meals, modeling conversation skills, and mediating conflict, all of which strengthened the sense of community. Given the literature on the importance of school climate to students' educational outcomes, including engagement and graduation rates, paying attention to school lunch could especially improve the experiences of students in high poverty schools.

Implications

Education researchers, policymakers, and practitioners can no longer afford to ignore the impact that food has on students. The results of this study show the potential for fresh and filling foods to transform schools that struggle with engagement, climate, and discipline. Teachers sharing meals with students can be a powerful catalyst for strengthening the school community and addressing complex issues that arise from poverty.

Food insecurity is a major and persistent aspect of poverty that schools may be able to help ameliorate through lunch policies and backpack feeding programs. However, significant challenges remain. Recall that Chester's principal, Ms. Craig, shared an anecdote about creating a "peanut butter-and-jelly bar" for their food-insecure students. What seemed like an inexpensive yet filling way to address the need for basic sustenance amongst their students turned out to be problematic. Some students simply could not stop eating, going through six or seven sandwiches per sitting. It became "astronomically expensive" and they had to stop the effort (Interview, 7/29/15). Other efforts to address food insecurity were similarly ineffective, such as sending home vegetables like eggplant, which ended up being used as footballs (Interview, 6/29/15). These and other anecdotes underscore the need for continual research in this area. They serve as a reminder that despite the good intentions of educators and policymakers, not all efforts to solve a problem are useful to recipients, or sustainable over the long-term. However, as long as schools, principals, and teachers are held accountable for student learning, schools would be wise to ensure that they are meeting their students' physical and emotional needs for food that is fresh and filling, truly nourishing their bodies as well as their minds.

National Food Policy

This study shows that there is a mismatch between the intentions of the nutrition requirements in the National School Lunch Program, and participants' understandings of healthy food and its role in their schools. Participants overwhelmingly understood healthy food to mean freshly prepared from whole, nutrient-dense ingredients, whereas the NSLP's recommendations for healthy food are measured in calories and nutrients, without regard for how fresh a food is when it is served, or how full students feel from eating it. The NSLP also overlooks the emotional dimension of food, and its impact on relationships. Participants at Chester, in

particular, described feeling more "cared for" when their physical and emotional needs for nourishment and connection were met. While educators at Franklin did not use the same language, they too felt that they were better able to meet their students' emotional needs by eating fresh meals together.

Furthermore, the latest changes to the NSLP through the Healthy Hunger Free Kids Act (HHFKA) prioritize obesity prevention by limiting calories. This makes it more difficult for food-insecure children to get enough nourishment throughout the school day, which is clearly problematic. According to participants, when they felt hungry, it harder to pay attention in class. Students described feeling more tired and lethargic, experienced more headaches and stomachaches, and—importantly—sometimes acted out in ways that were especially problematic for the overall learning environment, such as being irritable, overly emotional, fidgety, hyperactive, and aggressive, even picking fights with other students because they felt so miserable. On the other hand, when students felt fully nourished, they reported having a steady energy that enabled them to pay better attention in class. Educators need to lead the way in asking whether the NSLP recommendations truly address the nutritional, physical, and emotional needs of our students, and how these policies impact students' ability to learn. By incorporating students' and educators' understandings of healthy food into the NSLP, we can better address both obesity and hunger, as well as improve the climate and learning environment of schools overall.

Specifically, we should raise or eliminate calorie maximums for high-poverty schools. Furthermore, we must prioritize national and state funding in order to provide fresh food in schools. One relatively easy measure would be to expand the NSLP's "Fruit and Vegetable" program–already successful in many schools–to *all* schools that would like to participate. This

would ensure that schools could offer fresh fruits and vegetables as snacks throughout the school day. Breakfast should also include more filling foods, such as fresh fruit and protein items, so students are starting their day feeling full. Additional funding could be offered for schools to provide a salad bar. Grants could be given to make the upgrades to kitchens necessary to prepare fresh foods. We should examine "offer versus serve" delivery models to ensure that students are, in fact, getting the intended amount of nutrition. Finally, the nutrition requirements should be streamlined. When it is too complicated to comply, schools will resort to offering prepackaged items. One way to incentivize fresh food and scratch-cooking programs might be to offer waivers to some of the meal pattern guidelines to schools that are making these efforts. This would allow schools to invest the time and resources to experiment with innovative ways of providing freshly-prepared foods to their students without fearing that they will lose NSLP reimbursement.

School and District Policy

I argue that food and food policy should be viewed, researched, and evaluated, as an *education* issue—schools *should* be concerned with the quantity and quality of food they offer, as well as the atmosphere in their cafeterias. After all, it is school district administrators, principals, and teachers who ultimately make the decisions that impact school food and cafeteria culture—not food management companies or providers. District officials, and sometimes even school-level administrators, decide on budget priorities that reflect the quality of food they offer in their cafeterias. Principals are usually in charge of hiring and supervising lunch managers and assistants. Principals and other administrators set the school's schedule, and decide the timing and length of lunch, whether recess will come before or after, and whether to allow students to eat in classrooms. School leaders decide how lunch will be managed, by whom, and what

discipline policies will be put into place. Principals also play an important role in encouraging student participation in the free breakfast and lunch programs.

Furthermore, principals can decide to provide time and incentives to teachers to spend their lunchtime with students. This study has suggested that teachers eating with students could have a positive impact in both the lunchroom and the classroom. However, I do not argue here that planning time or much-needed breaks should be taken away from teachers. Instead, spending time informally with students should be built in as a respected part of teachers' schedule, for which teachers should be compensated in some way, at least with a free meal. These are all decisions that *educators* make that might improve student engagement and behavior in classrooms, the lunchroom tone, the school climate. These decisions may even have a significant impact on student outcomes.

Theory

This study utilizes critical policy analysis, asking fundamentally different questions about school food and its role in the culture and process of learning than most other studies on the subject. In this study, I asked participants to define what healthy food is, and how they experienced food in their daily lives at school, and how they understood the impact of different food policies and practices. In contrast, most other studies on school nutrition have instead used pre-defined ideas about healthy food. The bottom-up approach to research used in this study was able to expose ways in which everyday understandings of participants contrast with those of policymakers, who may carry their own biases into their policymaking. For instance, they may themselves have never suffered food insecurity, so they may not be sensitive to the importance of a filling meal. These findings support the need for more critical research in areas where

traditional approaches may have overlooked such important issues as cultural or contextual factors, emotional needs or responses, social relations, or power dynamics.

Directions for Future Research

This study has opened up many questions for future research. There is an urgent need for cross-disciplinary research into the impacts of food—the quantity and quality, as well as the climate in lunchrooms and the culture of school food—on the learning environment. First and foremost, we must understand the impact of food insecurity on our most vulnerable students, especially in high-poverty schools, and in all schools as well. We need to better understand the true rate of food insecurity in schools and its impact on the learning process. Qualitative and quantitative studies of food insecurity in the homes and neighborhoods of schoolchildren would shed light on the prevalence and severity, as well as obstacles and solutions. We also need to better understand the educational impact of food insecurity. A study could be designed, for example, that tracked test scores or other learning outcomes amongst food-secure and food-insecure children.

We should further explore and evaluate innovative new ways of offering foods in schools to address food insecurity and malnutrition. We need to evaluate the impact of the many new and innovative approaches that schools are *already* implementing to address food insecurity and to get more fresh produce to students, such as backpack feeding programs, community gardens, and whole foods lunch programs. Likewise, we should assess attempts to change and improve lunchroom culture and climate by bringing the school community together over healthy meals, to see if these result in healthier nutritional choices, a more positive school culture overall, and/or improvements in educational outcomes.

This study found that many participants see a connection between food and behavior. Future research could uncover if, how, and why this link exists. We should investigate the impact that processed foods (including sugar, food dyes, preservatives, and other additives) potentially have on behavior in schools, and if evidence warrants it, prohibit these items from being provided in schools. Many of these items are suspected by parents and teachers as having detrimental effects on student behavior and health. More ethnographic and qualitative data could be collected to better understand what educators, students, and parents see happening. We might then design quantitative studies that measure the effects on learning, to better understand if these fears, perceptions, and hunches are warranted. We must look across disciplines for evidence from other fields, including medicine and public health, which suggests a link between these types of foods and problems in the learning environment. Given the troubling increases in ADHD and other learning disabilities, we should absolutely ensure that the foods we are making available to students in schools are not detrimental to students' ability to learn.

Another important, yet under-researched area in the literature is about the role that lunch managers, assistants, and aides play in the educational processes of students. Educators should respect their work and include them in important school decisions, ensuring that they are all in agreement about what kind of climate they want their lunchrooms to have and how to work together to achieve it. Their work must be viewed as integral to the education of students. They should not be viewed imply as implementers of routine tasks; instead, their training, supervision, and compensation should reflect the important educational role they play. Yet, very little research exists on their experiences, perspectives, and efficacy toward the goal of improving the school lunch experience.

Given the stated importance of fresh, whole foods to participants' experiences in their learning environments, further research can contribute to a better understanding of the national and local policy changes needed to ensure that low-income students receive healthy and filling meals at school. As Robert & Hightower (2011) argue, school feeding is an integral part of education, and we ignore it to our own detriment.

> A deep, critical look at school food policy tells us much about the education schools provide. It shows how little we genuinely want children to focus and learn when we do not feed them nutritious food to fortify them throughout the school day. It shows how much a society cares about children's long-term growth beyond the school day, across years. Healthier meals help schools do what they should be focused on: educating during the school year and cultivating lifelong learning. (Robert & Hightower, 2011, p. 206)

It is a question of investment. Shifting resources to address students' basic needs may very well save money in other ways, such as reducing the need for discipline and remediation. Further research in these areas could illuminate the full range of possibilities.

We would be wise to remember Ms. Campbell's words. Recall that as a parent and resident of the neighborhood, she had herself experienced food insecurity: "I just like that everything is centered around food because in the mornings, half of these kids don't eat, and you wonder why a child is grumpy and why they misbehaving because their stomach is empty" (Interview, 6/11/15). By "centering" the school around the nourishment of children's bodies, we can create an atmosphere in schools that respects their humanity first and foremost. By caring for students' basic needs, both physical and emotional, we can shift their focus back to what they came to school for in the first place—learning.

REFERENCES

A Different Kind of School Lunch: Pure Facts. (2002, October). Available: http://www.feingold.org/PF/wisconsin1.html

Alaimo, K., Olson, C., & Frongillo, E. (2001). Food insufficiency, family income, and health in U.S. preschool and school-age children. *American Journal of Public Health* 91(5), 781-786.

Alkon, A. H. & Agyeman, J. (eds) (2011). *Cultivating food justice: Race, class, and sustainability*. MIT Press.

Alkon, A. H. & McCullen, C. G. (2010). Whiteness and farmers markets: Performances, perpetuations...contestations? *Antipode*, 1-23.

Allen, P. and Guthman, J. (2006). From 'oldschool' to 'farm-to-school': Neoliberalization from the ground up. *Agriculture and Human Values*(23), 401-415.

Allen, W. (2012). *The Good Food Revolution*. New York: Penguin Books.

Alvaro, C. et al. (2010). Moving Canadian governmental policies beyond a focus on individual lifestyle: some insights from complexity and critical theories. *Health Promotion International* 26(1), 91-99.

Anderson, M., Gallagher, J. and Ritchie, E. (2017). School lunch quality and academic performance. Working paper. Available: https://are.berkeley.edu/~mlanderson/pdf/school_lunch.pdf

Anyon, J. (1997). *Ghetto schooling: A political economy of urban educational reform*. New York: Teachers College Press.

Anyon, J. (2005a). *Radical possibilities: Public policy, urban edcuation, and a new social movement*. New York: Routledge.

Anyon, J. (2005b). What "counts" as educational policy? Notes toward a new paradigm. *Harvard Educational Review, 75*(1), 65-88.

Anyon, J. (2011). Education policy and the needs of urban communities. *Journal of Curriculum and Pedagogy*, 3(1), 54-57.

Atkinson, P. & Hammersley, M. (1994). Ethnography and Participant Observation. In Denzin, N. & Lincoln, Y. (Eds.). *Handbook of Qualitative Research*. Eds.. Thousand Oaks: Sage.

Baker, J. Grant, S., & Morlock, L.(2008). The teacher–student relationship as a developmental context for children with internalizing or externalizing behavior problems. *School Psychology Quarterly* 23(1), 3-15.

Ball, S. (1994). *Education reform: A critical and post-structural approach*. Buckingham: Open University Press.

Ball, S. J. (1997). Policy sociology and critical social research: A personal review of recent education policy and policy research. *British Educational Research Journal* 23(3), Reflexive Accounts of Education Reform, 257-274.

Basch, C. (2011). Healthier students are better learners: A missing link in school reforms to close the achievement gap. *Journal of School Health* 81(10), 593-598.

Bassey, M. (1999). *Case study research in educational settings*. Maidenhead: Open University Press.

Bateman, B. et al. (2004). The effects of a double blind, placebo controlled, artificial food colourings and benzoate preservative challenge on hyperactivity in a general population sample of preschool children. *Archives of Disease in Childhood* 89(6), 506-511.

Beaulac, J., Kristjanssonn, E., and Cummins, S. (2009). A systematic review of food deserts, 1996-2007. *Preventing Chronic Disease: Public Health Research, Practice and Policy* 6(3), 1-10.

Bidgood, J. (2012). 'Pink slime' is vanishing from school cafeterias. *The New York Times*.

Block, K. et al. (2012). Growing community: The impact of the Stephanie Alexander kitchen garden program on the social and learning environment in primary schools. *Health Education & Behavior* 39(4), 419-432.

Bourdieu, P. (1984). *Distinction: A social critique of the judgment of taste*. Trans. Richard Nice. Cambridge: Harvard University Press.

Bourdieu, P. & Passeron, J. C. (1977). *Reproduction in education, society, and culture*. 2nd Edition. Trans. Richard Nice. Los Angeles: Sage.

Braun, A., Maguire, M., & Ball, S. J. (2010). Policy enactments in the UK secondary school: examining policy, practice and school positioning. *Journal of Education Policy* 25(4), 547-560.

Bridle-Fitzpatrick, S. (2015). Food deserts or food swamps?: A mixed-methods study of local food environments in a Mexican city. *Social Science & Medicine* 142, 202-213.

Broader, Bolder Approach. Website. Available: http://www.boldapproach.org/

"A Broader, Bolder Education Policy Framework." (18 Feb 2016).The Broader, Bolder Approach. Website. Available: http://www.boldapproach.org/app/uploads/2015/12/Mission-Statement-Full-Final.pdf

Breifel, R. et al. (2009). School food environments and practices affect dietary behaviors of U.S. public school children. *Journal of American Dietetic Association* 109(Suppl 1), S91-S107.

Brown, J. L. & Pollitt, E. (1996). Malnutrition, poverty, and intellectual development. *Scientific American* 274(2), 38-43.

Campos, P. (2004). *The obesity myth: Why America's obsession with weight is hazardous to your health.* Gotham.

Cannuscio, C., Weiss, E., & Asch, D. (2010). The contribution of urban foodways to health disparities. *Journal of Urban Health: Bulletin of the New York Academy of Medicine* (87.3), 381-393.

Cannuscio, C., Hillier, A., Karpyn, A., & Glanz, K. (2014). The social dynamics of healthy food shopping and store choice in an urban environment. *Social Science & Medicine* 122, 13-20.

Center on Hunger, Poverty, and Nutrition Policy. (1998). The links between nutrition and cognitive development. Nutrition-Cognition Initiative. Medford: Tufts University of School of Nutrition.

Children's Defense Fund. (2014). The state of America's children. Report. Available: http://www.childrensdefense.org/library/state-of-americas-children/2014-soac.pdf

Children's Defense Fund--Ohio. (2016, January). The early childhood hunger imperative.

Children's Food Trust. (2016). Scheffield, UK. Website: http://www.childrensfoodtrust.org.uk/

Cohen, J. (2009). Transforming school climate: Educational and psychoanalytic perspectives: Introduction. *Schools: Studies in Education* 6(1), 99-103.

Cook, Frank, Leveson, Neault, Heeren, Black...& Chilton. (2006). Child food insecurity increases risks posed by household food insecurity to young children's health. *Journal of Nutrition* 136, 1073-1076.

Cooper, A. & Holmes, L. (2006). *Lunch Lessons: Changing the Way We Feed Our Children.* New York: HarperCollins Publishers.

Creswell, J. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches.* Los Angeles: Sage.

Dotter, D. (2014). Breakfast at the desk: The impact of universal breakfast programs on academic performance. Association for Public Policy Analysis and Management Online Paper Collection, 2014.

Diem, S., Young, M., Welton, A., Mansfield, L, Cumings, K, & Pei-Ling, L. (2014). The intellectual landscape of critical policy analysis. *International Journal of Qualitative Studies in Education, 27*(9), 1068-1090.

Edelman, M. (2016). Hungry Children in Rich America. *The Huffington Post.* Available: http://www.huffingtonpost.com/marian-wright-edelman/hungry-children-in-rich-a_b_9116292.html

Eicher-Miller, Mason, Weaver, McCabe, & Boushey. (2009). Food insecurity is associated with iron deficiency anemia in US adolescents. *American Journal of Clinical Nutrition,* 90, 1358-1371.

Eigenmann, P. & Haenggeli, C. (2007). Food colourings, preservatives, and hyperactivity. *The Lancet* 370(9598), 1524-1525.

Evans, B. & Colls, R. (2009). Measuring fatness, governing bodies: The spatialities of the body mass index (BMI) in anti-obesity politics. *Antipode* 41(5), 1051-1083.

Figlio, D. & Winicki, J. (2005). Food for thought: The effects of school accountability plans on school nutrition. Journal of Public Economics, 89, 381-394.

Finkelstein, D. et al. (2008). School Food Environments and Policies in US Public Schools. *Pediatrics* 122(1), 251-259.

Frisvold, D. (2015). Nutrition and cognitive achievement: An evaluation of the school breakfast program. *Journal of Public Economics*, 124, 91-104.

Flyvbjerg, B. (2006). Five Misunderstandings About Case-Study Research. *Qualitative Inquiry* 12(219).

Food Research and Action Center (FRAC). (2015, April). How hungry is America? FRAC's national, state and local index of food hardship." Report.

Food Research and Action Center (FRAC). (2009). FRAC Facts: National School Lunch Program. Available: http://frac.org/wp-content/uploads/2009/09/cnnslp.pdf

Foster, G. et al. (2008). A Policy-Based School Intervention to Prevent Overweight and Obesity. *Pediatrics* 121, 794-802.

Freedman, D. A. & Bell, A. (2009). Access to healthful foods among an urban food insecure population: Perceptions versus reality. *Journal of Urban Health: Bulletin of the New York Academy of Medicine* 86(6), 825-838.

Garza, R., Ryser, G., & Lee, K. (2010). Illuminating adolescent voices: Identifying high school students' perceptions of teacher caring. *Empirical Research* 7(4).

Guthman, J. (2006). Neoliberalism and the making of food politics in California. *Geoforum* 39, 1171-1183.

Guthman, J. (2007, Summer). Can't stomach it: How Michael Pollan et al. made me want to eat Cheetos. *Gastronomica*, 75-79.

Guthman, J. (2008a). Bringing good food to others: Investigating the subjects of alternative food practice. *Cultural Geographies* 15, 431-447.

Guthman, J. (2008b). 'If they only knew': Color blindness and universalism in California alternative food institutions. *The Professional Geographer* 60(3), 387-397.

Guthman, J. (2011). *Weighing in: Obesity, food Justice, and the limits of capitalism*. Berkeley: University of California Press.

Harris, F. (2014). The rise of respectability politics. *Dissent Magazine*. Available: https://www.dissentmagazine.org/article/the-rise-of-respectability-politics

Hayes-Conroy, J. (2014). *Savoring alternative food: School gardens, healthy eating and visceral difference.* New York: Routledge.

Hesse-Biber, S. & Leavy, P. (2006). *The practice of qualitative research.* Thousand Oaks: Sage Publications.

Heynan, N. (2009). Bending the bars of empire from every ghetto for survival: The black panther party's radical antihunger politics of social reproduction and scale. *Annals of the Association of American Geographers* 99(2), 406-422.

Hillier, A., Cannuscio, C., Karpyn, A., McLaughlin, J., Chilton, M., & Glantz, K. (2011). How far do low-income parents travel to ship for food? Empirical evidence from two urban neighborhoods. *Urban Geography* 32(5), 712-729.

Hinrichs, P. (2010). The effects of the National School Lunch Program on education and health. *Journal of Policy Analysis and Management* 29(3), 479-505.

Huang, J. (2010). Does food insecurity affect parental characteristics and child behavior? Testing mediation effects. *Social Science Review*, September, 381-401.

Humerman, A. M. & Miles, M. (1994). Data management and analysis methods. In Denzin, N. & Lincoln, Y. (Eds.). (1994). *Handbook of Qualitative Research*. Thousand Oaks: Sage.

Imberman, S. & Kugler, A. (2014). The effect of providing breakfast on student performance. *Journal of Policy Analysis and Management*, 33, 669-699.

Jimenez, J., Pasztor, E. M., Chambers, R., & Fujii, C. P. (2014). *Social policy and social change: Toward the creation of social and economic justice*. (2nd Edition). Los Angeles: Sage Publications.

Kalafa, A. (2011). *Lunch wars: How to start a school food revolution and win the battle for our children's health*. New York: Penguin Group.

Kemp, A. (2008). Food additives and hyperactivity: Evidence supports a trial period of eliminating colourings and preservatives from the diet. *British Medical Journal* 336(7654), 1144.

Kirkpatrick, McIntyre, & Potestio. (2010). Child hunger and long-term adverse consequences for health. *Archive of Pediatric Adolescent Medicine,* 164(8), 754-762.

Kvale, S. & Brinkmann, S. (2009). *Interviews: Learning the craft of qualitative research interviewing.* (2nd ed.). Los Angeles: Sage.

Larson, N. & Story, M. (2010). Are 'competitive foods' sold at school making our children fat? *Health Affairs* 29(3), 430-435.

Larson, N. & Story, M. (2006). Nutrition at school. Chapter in Frumkin, H. et al (eds.), *Safe and healthy school environments*. Oxford: Oxford University Press.

Larson, N. & Story, M. (2009). A review of environmental influences on food choices. *The Society of Behavioral Medicine*, S56-S69.

Levine, S. (2008). *School lunch politics: The surprising history of America's favorite welfare program.* Princeton: Princeton University Press.

Lincoln, Y.S. & Guba, E.G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage Publications.

Lipman, P. (2004). *High stakes education: Inequality, globalization, and urban school reform*. New York: Routledge.

Lucan, S., Karpyn, A., & Sherman, S. (2010). Storing empty calories and chronic disease risk: Snack-food products, nutritive content, and manufactures in Philadelphia corner stores. *Journal of Urban Health: Bulletin of the New York Academy of Medicine* 87(3), 394-404.

MacLachlan, M. & Garrett, J. (2008). Nutrition change strategies: The new frontier. *Public Health Nutrition* 11(10), 1063-1075.

Mari Gallagher Research & Consulting Group. (2006). *Good food: Examining the impact of food deserts on public health in Chicago.* Chicago: Research Report.

McAleese, J. & Rankin, L. (2007). Garden-based nutrition education affects fruit and vegetable consumption in sixth-grade adolescents. *Journal of the American Dietetic Association* 107(4), 662-665.

McCann D., Barrett A., & Cooper, A. (2007). Food additives and hyperactive behaviour in 3-year-old and 8/9-year-old children in the community: A randomized, double-blinded, placebo-controlled trial. *The Lancet* 370(9598), 1560-7.

McCaughtry, N., et al. (2012). Urban health educators' perspectives and practices regarding school nutrition education policies. *Health Education Research* 27(1), 69-80.

Merriam, S. (2009). *Qualitative research: A guide to design and implementation*. San Francisco: Jossey-Bass.

Morgan, K. & Sonnino, R. (2010). *The school food revolution: Public food and the challenge of sustainable development*. New York: Taylor and Francis.

Murphy, Wehler, Pagano, Little, Kleinman, & Jellinek. (1998). Relationship between hunger and psychosocial functioning in low-income American children. *Journal of American Academy of Child and Adolescent Psychiatry* 37(2), 163-170.

Nestle, M. (2007). *Food politics: How the food industry influences nutrition and health*. Berkeley: University of California Press.

Nestle, M. (2011). School Food, Public Policy, and Strategies for Change. In Robert, S.A. & Weaver-Hightower, M.B. (2011). *School food politics: The complex ecology of hunger and feeding in schools around the world.* Washington, D.C.: Peter Lang.

Nieto, S. (1996). *Affirming diversity: The socipolitical context of multicultural education* (2d Ed.). New York: Longman.

Noguera, P. (2003). *City schools and the American dream: Reclaiming the promise of public education*. New York: Teachers College Press.

Noguera, P. (2011). A broader and bolder approach uses education to break the cycle of poverty. *The Phi Delta Kappan* 93(3), 8-14.

Nowak, A. et al. (2012). "Building food literacy and positive relationships with healthy food in children through school gardens. *Childhood Obesity* 8(4), 392-395.

Nyardi, A., Li, J., Hickling, S., Foster, J., & Oddy, W. (2013). The role of nutrition in children's neurocognitive development, from pregnancy through childhood. *Human Neuroscience* 7(97).

O'Brien, R. (2010). *The unhealthy truth: One mother's shocking investigations into the dangers of America's food supply--and what every family can do to protect itself*. New York: Broadway Books.

O'Connor, E. E., Dearing, E., & Collins, B. A. (2011). Teacher-child relationship and behavior problem trajectories in elementary school. *American Educational Research Journal* 48(1), 120-162.

O'Reilly, K. (2009). *Key concepts in ethnography*. Los Angeles: Sage Publications.

Osterman, K. (2000). Students' need for belonging in the school community. *Review of Educational Research* 70(3), 323-367.

Ozga, J. (1990). Policy research and policy theory: A comment on Fitz and Halpin. *Journal of Educational Policy* 5(4), 359-362.

Ozga, J. (2000). *Policy research in educational settings: Contested terrain*. Buckingham: Open University Press.

Perez-Escamilla et al. (2002). Assessment of nutrition education needs in an urban school district in Connecticut: Establishing priorities through research. *Journal of the American Dietetic Association* 102(4), 559-562.

Perez-Rodrigo, C. & Aranceta, J. (2001). School-based nutrition education: Lessons learned and new perspectives. *Public Health Nutrition* 4(1), 131-140.

Perez, S. A. (2000). An ethic of caring in teaching culturally diverse students. *Education* 121(1), 102-105.

Pollan, M. (2009). *In defense of food.* New York: Penguin Books.

Poppendieck, J. (2010). *Free for all: Fixing school food in America*. Berkeley: University of California Press.

Prunty, J. J. (1985). Signposts for a critical educational policy analysis. *Australian Journal of Education* 29, 133-140.

Pudup, M. B. (2008). It takes a garden: Cultivating citizen-subjects in organized garden projects. *Geoforum* 39, 1228-1240.

Rebell, M. A. (2012). The right to comprehensive educational opportunity. *Harvard Civil Rights-Civil Liberties Law Review, 47.* Retrieved from http://harvardcrcl.org/wp-content/uploads/2012/03/Rebell.pdf

Rich, M. (2015, January 16). Percentage of poor students in public schools rises. *The New York Times*. Retrieved from http://www.nytimes.com.

Rist, R. (1994). Influencing the policy process with qualitative research. In Denzin & Lincoln (Eds.), *Handbook of qualitative research* (pp. 545-557). Thousand Oaks, CA: Sage.

Ritzer, G. (2008). *The McDonaldization of society.* Thousand Oaks: Sage Publications.

Robert, S.A. & Weaver-Hightower, M. (Eds.). (2011). *School food politics: The Complex ecology of hunger and feeding in schools around the world.* Washington, D.C.: Peter Lang.

Roos, G. (2010). Our bodies are made of pizza--food and embodiment among children in Kentucky. *Ecology of Food and Nutrition* 41, 1-19.

Saldana, J. (2016). *The coding manual for qualitative researchers*. London: Sage.

Sandler, J. (2011). Reframing the politics of urban feeding in U.S. public Schools: Parents, programs, activists, and the state. In Robert, S.A. & Weaver-Hightower, M. (Eds.). (2011). *School food politics: The Complex ecology of hunger and feeding in schools around the world.* Washington, D.C.: Peter Lang.

Scrinis, G. (2012). Nutritionism and functional foods. In Kaplan, D. (Ed.) (2012). *The philosophy of food*. Berkeley: University of California Press.

Schwartz, M. et al. (2015). New school meal regulations increase fruit consumption and do not increase total plate waste. *Childhood Obesity* 11(3), 242-247.

Simons, H. (2009). *Case study research in practice*. London: Sage Publications.

Share Our Strength. (2015). Hunger in our schools. The No Kid Hungry Campaign Report. Washington, DC.

Slack and Yoo. (2005). Food hardship and child behavior problems among low-income children. *Social Service Review 75*, 511–536.

Slocum, R. (2011). Race in the study of food. *Progress in Human Geography* 35(3), 303-327.

Slopen, N., Fitzmaurice, G., Williams, D.R., & Gilman, S.E. (2010). Poverty, food insecurity, and the behavior of childhood internalizing and externalizing disorders. *Journal of the American Academy of Child and Adolescent Psychiatry 49*, 444-452.

Skalicky, Meyers, Adams, Yang, Cook, & Frank. (2006). Child food insecurity and iron deficiency anemia in low-income infants and toddlers in the United States. *Maternal and Child Health Journal* 10(2), 177-185.

Stake, R. (1995). *The art of case study research*. Thousand Oaks: Sage Publications.

Stipek, D. (2006). Relationships matter. *Educational Leadership* 46(1), 46-49.

Stone, D. (2011). Policy paradox: The art of political decision making. W.W. Norton & Company.

Story, M. (2009). The third school nutrition dietary assessment study: Findings and policy implications for improving the health of U.S. children. Supplement to *the Journal of the American Dietetic Association*.

Story, M, et al. (2009). Creating healthy food and eating environments: Policy and environmental approaches. *The Annual Review of Public Health*, 253-72.

Story, M. and Orleans, C. T. (2006). Building evidence for environmental and policy solutions to prevent childhood obesity: The healthy eating research program. *American Journal of Preventive Medicine* 30(1), 96-97.

Taras, H. (2005). Nutrition and student performance at school. *Journal of School Health* 75(6), 199-213.

Thapa, A. et al. (2013). A review of school climate research. *Review of Educational Research* 83, 357.

Treuhaft, S. & Karpyn, A. (2010). *The grocery gap: Who has access to healthy food and why it matters.* Oakland: A report of the food trust and PolicyLink.

USDA Food and Nutrition Service. (2013). National School Lunch Program fact sheet. Available: http://www.fns.usda.gov/sites/default/files/NSLPFactSheet.pdf

USDA Office of Communications. (2015). Food and Nutrition Service. USDA unveils historic improvements to meals served in America's schools. Release No. 0023.12.

Valencia, R. (Ed.). (1997). *The evolution of deficit thinking: Educational thought and practice.* Milton Park: RoutledgeFalmer.

Waters, A. (2008). *Edible schoolyard: A universal idea*. San Francisco: Chronicle Books.

Weaver-Hightower, M. (2008). An ecology metaphor for educational policy analysis: A call to complexity. *Educational Researcher* 37(3), 153-167.

Weaver-Hightower, M. (2011a). Why education researchers should take school food seriously. *Educational Researcher 40*(1), 15-21.

Weaver-Hightower, M. (2011b). Fixing up lunch ladies, dinner ladies, and canteen managers: Cases of school food reform in England, the United States, and Australia. In Robert, S.A.

& Weaver-Hightower, M. (Eds.). (2011). *School food politics: The Complex ecology of hunger and feeding in schools around the world.* Washington, D.C.: Peter Lang.

Weiss, E. and Melville, K. (2014, 12 April). No excuse for hungry students. Bill Moyers website. Available: http://billmoyers.com/2014/04/12/no-excuse-for-hungry-students/

Whelan, A., Wrigley, N., Warm, D., & Cannings, E. (2002). Life in a 'food desert.' *Urban Studies* 39(11), 2083-2100.

Whitaker, R., Phillips, S. and Orzol, S. (2006). Food insecurity and the risks of depression and anxiety in mothers and behavior problems in their preschool-aged children. *Pediatrics* 118(3), e859-68.

Whole Child Approach to Education. Website. Available: http://www.wholechildeducation.org/about

Wu, A (2011). *Fed up with lunch: How one anonymous teacher revealed the truth about school lunches—and how we can change them!* San Francisco: Chronicle Books, LLC.

Yee, V. (2012, 5 October). No appetite for food-for-you school lunches. *The New York Times.* Available: http://www.nytimes.com/2012/10/06/nyregion/healthier-school-lunches-face-student-rejection.html?pagewanted=all&_r=0

Yin, R. (2008). *Case study research: Design and methods*. (4th Ed.). Thousand Oaks: Sage Publications.

APPENDIX A: STUDENT INTERVIEW PROTOCOL

BACKGROUND AND VIEWS ON FOOD

1. What did you eat yesterday for breakfast, lunch, snack, and dinner?
2. What is "healthy food" to you?
3. What kinds of foods are "healthy"?
4. How do you feel when you eat those foods?
5. Do you like healthy food? Why/why not?
6. What is "unhealthy food" to you?
7. What kinds of foods are "unhealthy"?
8. How do you feel when you eat those foods?
9. Do you like unhealthy food? Why/why not?
10. What are your concerns about food?
11. Is there anything else you'd like me to know?

SCHOOL LUNCH/FOOD AND CULTURE

1. How do you like this school?
2. Do you feel good/safe/belong here? Tell me about…?
3. How do you like lunchtime?
4. What is your opinion about (lunchtime policies, such as assigned seats, silent lunch, etc.)?
5. How do you like the food here?
6. What kinds of foods do you bring from home, for breakfast, snack, or lunch?
7. Why?
8. (If alternate food policy/program) When/how did this program begin?
9. What changes did you notice?
10. How do you feel before lunch?
11. How do you feel after lunch?
12. Tell me about food at your previous school.
13. Did you like the food there?
14. Why/why not?
15. How do you like learning about manners/etiquette?
16. Is there anything else you'd like me to know about food at this school?

FOOD AT HOME

1. Who prepares your meals?
2. Who do you eat with?
3. What's your favorite meal that your mom/dad/etc. make for you?
4. How do you feel when you eat [special food] with [special person]?
5. Is it important to you/your family to eat "healthy"? Why/why not?
6. Is there anything else you'd like me to know about food at home?

APPENDIX B: TEACHER & STAFF INTERVIEW PROTOCOL

BACKGROUND AND VIEWS ON FOOD

1. Tell me about yourself. How did you end up working here?
2. What is "healthy food" to you?
3. What kinds of foods are "healthy"?
4. How do you feel when you eat those foods?
5. What is "unhealthy food" to you?
6. What kinds of foods are "unhealthy"?
7. How do you feel when you eat those foods?
8. What kinds of foods do you like to eat? Not like to eat? Why?
9. What are your concerns about food?
10. (If they have children) What kinds of foods do you feed your own children?
11. What connections, if any, do you see between what your students eat overall and their academic achievement?

SCHOOL/LUNCHROOM CULTURE

1. How would you describe the school's culture overall?
2. How would you describe the climate/culture in the lunchroom?
3. How would you describe students' attitudes and behavior before and after lunch?
4. What messages do you think students get about food at this school? Where do they come from?
5. What is similar/different about food and lunchtime here, compared to other schools you've worked in?
6. Is there anything else you'd like me to know about the culture here?

SCHOOL LUNCH PROGRAM/POLICIES

1. Can you describe your school breakfast and lunch program(s)?
2. What kinds of foods do you see kids bringing in from outside?
3. Do you see any trends or differences throughout the day, in terms of behavior, attention, complaints, or attitudes? How do you explain those differences?
4. (If alternate food policy/program) When/how did this program begin?
5. What changes did you notice? What was the impact?
6. What is different about school lunch/food here, compared to other schools you've worked in?
7. What connections, if any, do you see between school food and academic achievement?
8. What kinds of changes to the school's lunch program would you like to see, if you could wave a magic wand?
9. What obstacles are standing in the way?
10. Is there anything else you'd like me to know about school food at your school?

FOOD AT HOME

1. What kinds of foods do you think students eat outside of school? At home?
2. What messages from home do you think students get about food?
3. What are your concerns about how students eat outside of school?
4. Is there anything else you'd like me to know about food at home?

APPENDIX C: ADMINISTRATOR & BOARD MEMBER INTERVIEW PROTOCOL

BACKGROUND AND VIEWS ON FOOD

1. Tell me about yourself. How did you end up working here?
2. What is "healthy food" to you?
3. What kinds of foods are "healthy"?
4. How do you feel when you eat those foods?
5. What is "unhealthy food" to you?
6. What kinds of foods are "unhealthy"?
7. How do you feel when you eat those foods?
8. What kinds of foods do you like to eat? Not like to eat? Why?
9. What are your concerns about food?
10. (If they have children) What kinds of foods do you feed your own children?
11. What connections, if any, do you see between what your students eat overall and their academic achievement?

SCHOOL/LUNCHROOM CULTURE

1. How would you describe the school's culture overall?
2. How would you describe the climate/culture in the lunchroom?
3. How would you describe students' attitudes and behavior before and after lunch?
4. What messages do you think students get about food at this school? Where do they come from?
5. What is similar/different about food and lunchtime here, compared to other schools you've worked in?
6. Is there anything else you'd like me to know about the culture here?

SCHOOL LUNCH PROGRAM/POLICIES

1. Can you describe your school breakfast and lunch program(s)?
2. What kinds of foods do you see kids bringing in from outside?
3. Do you see any trends or differences throughout the day, in terms of behavior, attention, complaints, or attitudes? How do you explain those differences?
4. (If alternate food policy/program) When/how did this program begin?
5. Describe the decision-making process. What led you/your staff/board members to pursue this change?
6. What changes did you notice? What was the impact?
7. What is different about school lunch/food here, compared to other schools you've worked in?
8. What connections, if any, do you see between school food and academic achievement?
9. What kinds of changes to the school's lunch program would you like to see, if you could wave a magic wand?
10. What obstacles are standing in the way?
11. Is there anything else you'd like me to know about school food at your school?

FOOD AT HOME

1. What kinds of foods do you think students eat outside of school? At home?
2. What messages from home do you think students get about food?
3. What are your concerns about how students eat outside of school?
4. Is there anything else you'd like me to know about food at home?

APPENDIX D: PROGRAM OFFICIAL INTERVIEW PROTOCOL

BACKGROUND AND VIEWS ON FOOD

1. Tell me about yourself. How did you end up working here?
2. What is "healthy food" to you? What kinds of foods are "healthy"?
3. How do you feel when you eat those foods?
4. What is "unhealthy food" to you? What kinds of foods are "unhealthy"?
5. How do you feel when you eat those foods?
6. What kinds of foods do you like to eat? Not like to eat? Why?
7. What are your concerns about food?
8. (If they have children) What kinds of foods do you feed your own children?
9. What connections, if any, do you see between what your students eat overall and their academic achievement?

PROGRAM

1. How would you describe the program? Mission? Vision?
2. What problem is the program trying to solve?
3. How did the organization come to into being?
4. Describe the types of food your program offers.
5. How is it better/different from what other programs offer?
6. Describe the costs of your food.
7. What obstacles do schools have in implementing your program?
8. What challenges do you face in working with schools, other programs?
9. Is there anything else you'd like me to know about the program, generally?

IMPACT

1. What do participating schools tell you about the impact of the program?
2. What do participating schools tell you about the impact of the program on student behavior? On learning? On culture/climate?
3. What do participating schools tell you about the impact of the program on solving hunger, and meeting communities' needs?
4. What changes do participating schools notice?
5. What was the impact?
6. What is the importance of manners/etiquette?
7. Why does the program emphasize those aspects?
8. What have participating schools told you about how your program has influenced kids' eating at home?
9. What connections, if any, do you see between school food and academic achievement?
10. What kinds of changes to the program would you like to see, if you could wave a magic wand?
11. What obstacles are standing in the way?
12. Is there anything else you'd like me to know about your program?

FEDERAL POLICY

1. What do you think about the federal nutrition guidelines?
2. What challenges do you have in meeting the federal nutrition guidelines?
3. Is there anything else you'd like me to know about state or federal policies that impact what you do?

APPENDIX E: CODEBOOK

MAIN CODES

1. Traditional Lunch Services
2. Fresh & Healthy
3. Food
4. Problems/obstacles
5. Physical/bodily responses to food
6. Nutrition education
7. Sense of community
8. Identity/habitus
9. Policies and procedures
10. Methodology

SUB-CODES

1. Traditional Lunch Services

TLS: pertaining to the Traditional Lunch Services program, opinions about, impact
Food: menus, recipes, descriptions of what was served
lunchroom ambiance: the "feel" during mealtimes, the "buzz"
costs: money, resources, personnel, time
benefits
consequences
Students' experiences
Educators' experiences

2. Fresh & Healthy

F&H: pertaining to the Fresh & Healthy program, opinions about, impact
Food: menus, descriptions of what was served
lunchroom ambiance: the "feel" during mealtimes, the "buzz"
costs: money, resources, personnel, time
benefits
consequences
Students' experience
Educators' experience
other school lunch: comparisons to a different/previous school

3. Food

At Home: what they eat at home, how prepared, etc., according to students or teachers
Cooking: how much, skills/knowledge, at home, importance/non-importance of
Fast food: chain restaurants where highly-processed meals are served, eg. McDonalds
Food events: at school, birthday celebrations, assemblies, etc.
Freshness
Food choices
From Home: Bringing lunch foods from home, what they bring, why

Healthy/Unhealthy: participant definitions/understandings of, including examples or inferences
Homemade: made on-site or at home
Junk food: highly processed food with little/no nutrition, eg. chips, candy, soda
Packaging: plastic, cardboard, concerns about
Portion size
Processed food: packaged, made elsewhere, contains many ingredients, preservatives
Whole food: single, unprocessed foods or ingredients
Preparation methods
Taste
Teachers' lunches/food: what they brought, ate, when/where
Temperature: of food, hot or cold
Milk
Food donations: to the school or homes
Sourcing

4. Obstacles/concerns/problems

Chronic stress: in general, in students' lives
Emotional concerns: in general, in students' lives
Food concerns: eg., vegan, religious (pork, kosher), food dyes, additives, etc.
Food insecurity: access to food, food deserts
Food safety: concerns about sanitation, procedures, etc
Obstacles: General obstacles to eating healthy, as defined by participants
Not eating: the schools lunch: what are they eating instead and why
Obesity: concern or mention of weight gain or eating disorders
Plate waste: what and how much food is thrown away
Time: lack of/enough time for lunch, to eat at home, cook, grocery shop
Fresh & Healthy obstacles: obstacles to implementation
Time/Scheduling
Space/sharing space
Cost
Facilities
Conflict between Fresh & Healthy and TLS
Staff buy-in

5. Bodily Responses to Foods

Ability to Learn/concentration/clear thinking, as related to food/hunger/fullness, according to participants
Allergies: adverse food reactions, including celiac
Attention/engagement
Chronic illnesses: esp. identified as caused by or improved by eating (eg. diabetes)
Digestive/Stomachache
Energy: foods identified as providing more or less energy
Fullness: feeling satisfied by the meal, not hungry until next meal
Headache

Hunger: hunger pangs, skipping a meal, not eating enough, malnutrition
Hyperactive/ADHD
Skin: hives, rashes, eczema, acne, other
Sluggish/sleepy
Smell: of food
Toothache

6. **Nutrition Education**
   Awareness: of dominant view of nutrition, also physical responses to foods, what feels healthy/unhealthy
   Kids in the Kitchen: after-school cooking program
   nutrition class
   school gardens
   USDA guidelines -- knowledge of official guidelines, compliance

7. **Sense of Community**
   Attitudes: positive or negative, about school or school-related
   Behavioral: concerns, eg. fighting, arguing, angry outbursts
   Connection: sense of connection to caregivers, family, teachers, friends
   Climate: overall tone of the school
   Disciplinary: infractions, response to behavioral concerns
   Recess
   Reform: eg. conversations shifting from standardized to holistic
   School choice: how students choose a middle/high school, what factors do they consider
   School quality: participant understandings about what makes a high quality school—especially when mentioned with regard to food program
   Sharing food/meals: the impact of, or importance of eating with others
   School descriptions: Franklin, Chester, Washington
   "Share": policies that distribute leftover food to students or families
   Caring: feeling cared for, importance of caring

8. **Habitus/Identity**
   African-American: traditions, foods, cultural pertaining to African-American identity/culture
   Class: economic bracket, social mobility
   Code-switching: term used at Chester to talk about appropriate formal and informal language use, especially around the lunch table, extended to "manners" etc.
   Cultural capital: awareness/conformity to dominant/valued middle-class culture
   Etiquette: Fresh & Healthy's explicit teaching about "manners" and "etiquette" during mealtime
   Economic capital: poverty, income, wealth, financial literacy
   Family special foods: traditions, holidays, ethnic, etc.
   Parenting: beliefs/practices especially regarding food, home environment, single parenting
   Race: general references

Resistance: to efforts to change habitus, teach etiquette/cultural/social capital
Social capital: network, professional, kinship, etc.

9. Policies & Procedures

Traditional Lunch Services procedures - paperwork
Family style
Kitchen - facilities, including staffing
Lunch line
Meal components
MyPlate
Rituals: particular rituals that the school follows (eg. prayer before eating, 10 minutes of silence, etc.)
Rules: school-specific rules and procedures, eg. no artificial food dyes allowed, silence during lunch
State paperwork--incl. "school food authority" application
Tables - shape
USDA nutrition guidelines
Fresh & Healthy procedures/paperwork

10. Methodology

Observer comments: reflections, reactions, experiences
Researcher decisions