Alleviating Child Food Insecurity in Iowa by Expanding the Breakfast in the Classroom Initiative[1]

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In Iowa, one in six children live in food insecure households. The Food Research and Action Center (FRAC) ranked Iowa 48th in the nation for statewide participation in the National School Breakfast Program (SBP). During the 2011-2012 school year, Iowa served school breakfast to approximately 39 low-income students for every 100 low-income students served a school lunch. In addition to participation at schools that offer breakfast, adoption of the program by new schools is a major concern. There are currently 173 public elementary schools that do not participate in SBP. Low SBP participation in Iowa indicates a large potential for program expansion, which would leverage additional federal funds for local food assistance. This report examines current research, reports, and case studies of SBP to identify participation barriers and propose possible solutions to

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expand and promote the adoption of the program. This study finds that the social stigma and cost of implementation of SBP is the largest barrier for student participation and administrative support, thus preventing expansion. Using three selection criteria: political feasibility, implementation feasibility, and effectiveness‹this study argues that Alternative 4: Implementing Breakfast in the Classroom in more schools is the most optimal policy alternative. Current research shows that children who face food scarcity suffer both physical and mental trauma that diminish their intellectual capacities, physical health, and earning potential throughout their adult lives, inequities that often underlie social and economic conflict.

Food insecure children face a greater chance of become cognitively, educationally, and financially disadvantaged. Research has shown that food insecurity in early childhood can have a long-term negative impact on the cognitive and socio-emotional development of a child, ultimately impairing his or her productivity and economic potential (Cook and Jeng, 2007). Children who enter school without proper nourishment and support have been found to be at an early disadvantage and struggle to keep up with their more advantaged peers (Cook and Jeng, 2007). A study that investigated the effect of food insecurity on learning and growth found that kindergartners from food insecure homes not only entered school with lower math scores but also learned less over the course of the school year (Winicki and Jemison, 2003). Moreover, the study found that children living in marginally food secure households, which meant that they had enough food but their families struggled financially to meet their needs, did not perform as well as children from food secure households. The study concluded that food insecurity thus depresses both the starting point and the upward trajectory of a child's education from the moment he or she enters the kindergarten classroom.

Another study found that elementary school-aged food insecure children not only had an increased prevalence of negative behavioral and health outcomes, but were more than twice as likely to have seen a psychologist (Dunifon and Kowaleski-Jones, 2003). Further, researchers have found that elementary-school children who are food-insecure are four times more likely than food secure children to have a history of needing mental health counseling; seven times more likely to be classified as clinically dysfunctional; seven times more likely to get into fights frequently; and twelve times more likely to steal (Kleinman, 1998).

I. Low Participation in SBP among Public Elementary Schools in Iowa

Over the past two decades, SBP student participation has increased significantly. According to the 2013 Iowa Child Nutrition Programs Annual Report, breakfast participation has increased almost 500 percent since 1981 (Table 1, Figure 1) and is increasing at a rate of about 1 percent annually (Iowa Child Nutrition Programs Annual Report [ICNPR], 2013). Moreover, almost 75 percent of all breakfasts served are free or reduced-price meals (ICNPR, 2013; see Table 1).

There are several advocacy groups that are working in partnership with state government agencies to increase SBP participation in Iowa. On a state level, the School Nutrition Association of Iowa (SNAI) and the Walmart Foundation are working closely with the Midwest Dairy Council to expand SBP. On a national level, important advocacy groups include the FRAC, NAESP Foundation, the National Education Association Health Information Network (NEAHIN), and the School Nutrition Foundation (SNF) which are working together to expand, promote the adoption of, and de-stigmatize SBP.

There are 176 public elementary schools in Iowa that do not participate in SBP (IDOE, 2013). In order to increase SBP participation and motivate the adoption of the program in non-participating schools, the IDOE-BFN, in partnership with Midwest Dairy Council, launched the Iowa School Breakfast Challenge (ISBC). This initiative targets local schools and encourages them to increase their SBP participation by at least 20 percentage points (IDOE, 2013). If Iowa increased SBP participation from 39% to 59%, 10,417 more eligible, low-income Iowa kids would receive breakfast. Two schools from each of four designated tiers, with the highest increases, receive cash awards each year (IDOE, 2013). These awards serve as financial and/or symbolic incentives to increase SBP participation. Each school that has received an award successfully implemented distinct strategies based on student and community demographics to increase the SBP participation rate.

The ISBC has proven to be successful. The United Community School District and Assumption High School demonstrated 91 percent and 128 percent increases in SBP participation in 2012, respectively (EducateIowa,

2013). Of the 786 public elementary schools statewide, the lowest-performing elementary school, Prairie Trails Elementary School, serves only 3 assisted breakfasts per 1000 assisted lunches (IDOE, 2013; See Figure 2). Further, there are 176 public elementary schools that do not participate in SBP at all (IDOE, 2013).

II. Benefits of SBP: A Review of Recent Research

The USDA set out to address food insecurity among children from low-income households by establishing the SBP (USDA, 2013). Current research supports that SBP is successfully working to achieve that goal. According to the FRAC (2013), in the 2011-2012 school year more than 50 low-income children participated in school breakfast for every 100 participating in school lunch, and more than 90 percent of all schools that participated in the SLP also participated in the SBP. Participation in SBP is growing as more schools are beginning new, innovative strategies to combat under-participation and under-enrollment (NAF, 2013; see Table 1).

A 2002 article in the *Annals of Nutrition and Metabolism* concluded that participation in a school breakfast program enhanced daily nutrient intake. In addition, improvements in nutrient intake were associated with significant improvements in student academic performance and psychosocial functioning and lead to decreases in hunger (Kleinman et al., 2002). Studies showed that children at SBP schools were more likely to consume breakfast meals than the students at non-SBP participating schools and they were more likely to meet the Recommended Dietary Allowance (RDA) (FNS, 2013). Meeting the RDA requirements consists of consuming a number of micronutrients, fiber intake, fruit consumption, and providing Vitamin A, Calcium, Vitamin C, Riboflavin, Zinc, and Iron, all of which are essential for "optimal health" (Breakfast First, 2010). As students consume breakfast and meet the RDA, they experience improvements in their academics and behaviors.

III. Child Food Insecurity and Structural Violence

Lack of access to food is a form of structural violence. Structural violence can be defined as the systematic or institutional ways by which

social structures harm disadvantaged populations. Paul Farmer (1996) of Harvard Medical School explains structural violence as:

> Structural violence is one way of describing social arrangements that put individuals and populations in harm's way… The arrangements are structural because they are embedded in the political and economic organization of our social world; they are violent because they cause injury to people … neither culture nor pure individual will is at fault; rather, historically given (and often economically driven) processes and forces conspire to constrain individual agency.

Lack of access to breakfast for children has been argued to be an economic, health, and social justice issue for decades (Truehaft and Karyn 2006). Within the policy domains of health and education, policymakers have recognized the role that healthy meals, especially breakfast, plays in the growth of local economies, neighborhoods, and communities. In our research, we found that schools in rural and low-income areas of Iowa had some of the lowest participation rates in SBP. For example, school districts in Polk and Jasper counties were found to have participation rates as low as 0.01 (Figure 2).

IV. Potential Barriers to Access in Iowa

Barriers to adoption, implementation, and expansion of SBP concern both non-participating schools and schools looking to increase student participation. These barriers can take many forms, ranging from a lack of institutional support and equipment to a lack of experience and expertise. According to Patti J. Delger, Co-Director of Team Nutrition and Representative of the IDOE, the largest obstacle is the shared belief of some administrators and parents that breakfast should be served at home (Delger, 2013).

This first barrier is compounded by educators' reservations about breakfast programs. The loss of instruction time is a major concern of several teachers and administrators. According to Iowa General School Standard 12.1(7), schools are required to provide 180 full school days of education. Section 12.1(8) mandates that each of those school days must have 5.5 hours of instruction, excluding time reserved for lunch. This strictly

limits instruction time for educators and school administrators. Roughly one third of educators agree that breakfast in the classroom is not a good idea due to the loss of limited class time (Share Our Strength [SOS], 2013).

However, the remaining two-thirds of educators support Breakfast in the Classroom (SOS, 2013). Overall, teachers recognize the importance of their students eating breakfast, with 77 percent indicating that they like knowing that students have eaten, and 75 percent enjoy the knowledge that their students may be more energized and ready to learn. Moreover, 56 percent of educators prefer that no student be singled out or stigmatized due to food assistance, a hallmark of the Breakfast in the Classroom program (SOS, 2013).

These figures fit into a larger, national trend. About 50 percent of teachers agree that the food insecurity of school-age children is a serious issue (SOS, 2013). One study in 2013 found that 88 percent of teachers agree that hungry children cannot concentrate, and 82 percent agree that these same children demonstrate poor academic performance (SOS, 2013). Approximately 67 percent further agree that hungry children create disciplinary problems. As educators have both street-level experience and agency, they play a major role in shaping classroom policy.

SBP policy must also consider the role of parents in the classroom. Their reservations about SBP constitute another major barrier to program adoption. Among Iowa parents, the largely accepted belief is that school breakfast may not be as nutritious or as beneficial as "homemade" meals (Delger, 2013, Moisse, 2012). SBP regulations outline "no more than 30 percent of an individual's calories come from fat, and…must provide one-fourth of the Recommended Dietary Allowance (RDA) for protein, calcium, iron, Vitamin A, Vitamin C and calories" (FNS, 2013). Although a home cooked meal may better meet RDA standards, SBP is an effective tool for helping disadvantaged students who may not have the luxury of being able to eat breakfast at home (USDA, 2013).

The stigmatization of receiving SBP aid presents a further barrier to program participation, even at schools with fully operational SBP efforts (McDonnell, 2004). This stigma has been observed across school districts, counties, and states. The stigma suggests that only poor students who absolutely cannot afford breakfast at home participate in SBP (No Hungry Kids, 2013). This stigma can deter students from the program who may need it the most. Campaigns such as No Kid Hungry have taken steps to

broadly address these social stigmas. However, reaching individual schools and students will require more specific targeting efforts.

In addition to the social and time costs of implementing a new school breakfast program, financial costs pose a further barrier to program expansion. For non-participating schools, introducing a new school breakfast program can potentially entail significant startup costs. These costs can vary, depending on what pre-existing facilities and resources can be leveraged. Currently, additional equipment has been found to cost approximately $23,000, including a reach-in-refrigerator at $4,500, a wireless register at $1,660, a toaster at $935, and a serving cart at $474 (Hilleren, 2007).

Finally, along with these material needs, administrative resources are crucial for implementation and program sustainability. According to a 2011 study, the most common predictor of SBP success is school administrative support. Many school nutrition directors noted that schools where school administrators, teachers, janitors, and other school employees supported SBP are more likely to accept SBP (School Nutrition Association [SNA], 2013). Furthermore, administrative support enables better integration between SBP mandates and school schedules or instructional policies.

VI. Final Policy Recommendation: Implementing Breakfast in the Classroom

Breakfast in the Classroom (BIC) is a useful way to alleviate the stigma of receiving free breakfast and target accessibility issues due to transportation and/or scheduling conflicts. BIC would require prepackaged meals to be available each morning for teachers to distribute to their students. BIC would creatively provide students with a nutritious meal and allow the instructor to take attendance, handle matters with individual students, prepare the next lesson, or converse with students. After students finish their brief 10-15 minute breakfast period, they can work together to clean up after themselves and move onto the next scheduled activity or lesson, full and focused.

BIC is an official member of SBP and participating schools would be eligible for federal reimbursement. There are two different funding options for schools to choose from when implementing BIC. The first is to use the standard reimbursement rates for each breakfast served and the second is

through the method titled Provision 2. Provision 2 is designed for schools with 75 percent of students receiving free or reduced price lunch. This option provides students with universal school breakfast: free breakfast for all students despite family income (NEA 2011). While schools pay the difference of meals served for free without reimbursement, the individual schools make up the difference in saved administration costs. Provision 2 does not require schools to track the payment type of meals that are served for multiple years in a row, thus freeing up administrative time and funds (NEA 2011).

The political feasibility of BIC is above average because there is currently high support among school administration and potential private financiers to implement BIC (SNF Memphis City Schools, 2013). Research shows that BIC significantly improved academic performance and decreased disciplinary issues across school districts, including: suspension, absenteeism, and tardiness—inspiring teachers to serve as lead advocates for BIC (Wisconsin School Teachers' Perceptions about Breakfast in the Classroom, 2009). Furthermore, BIC is widely documented and encouraged on a national scale. There are numerous guides, case studies, and articles on successful BIC implementation. For example, the official Breakfast in the Classroom website provides case studies of Dallas and Memphis schools, financial planning guides, menu options, videos, and research (Breakfast in the Classroom, 2013). For this reason, new schools have effective and adaptable resources to utilize to aid the implementation of BIC in their diverse school environments, leading BIC to score above average in regard to its implementation time frame when compared to other policy alternatives in this work's larger report[1].

The challenge lies within a school's financial and administrative capability to replace an existing SBP platform with BIC. Specific to Iowa, Des Moines Public Schools joined the Partners for Breakfast-in-the-Classroom project in SY2012-13 and has now implemented BIC in 35 schools and three early learning centers across Des Moines to date (McIntosh, 2014). Sandy Huisman, the Director of Food & Nutrition Management of Des Moines Public Schools, noted that for each of these cases, the principals took the initiative to bring an individualized BIC program to their school based on their knowledge of the success of the program and aspiration to increase SBP participation.

Currently, the U.S. school districts that are participating in BIC have proven to experience positive results from the program. For example, the BIC partner schools in California (named 'Classroom Breakfast' in CA) have witnessed positive effects. In Compton United School District (CUSD), four schools that participate in Classroom Breakfast reported an increase of over 50% in SBP participation per school (CSBA, 2011, 5). As a result, 290 schools in LAUSD have successfully implemented breakfast in the classroom (Share Our Strength, Breakfast Report 2013).

To conclude, BIC is an innovative strategy to bring breakfast to children who would otherwise miss this critical meal at school. Students in rural and low-income areas of Iowa, especially those in Polk and Jasper counties, are more susceptible to this loss due to financial disadvantages, transportation issues, and/or the negative stigma attached to free breakfast. Providing children with an excellent education can be thwarted without access to proper nutrition. It is vital that administrators of schools in low socio-economic areas become fully aware of the social responsibility they hold to provide their students with the academic resources to succeed and ensure they fully capable of utilizing those resources. In the same way it is necessary to supply the services of a school nurse to address medical problems or a school counselor to address psychological problems, it is necessary to supply breakfast and lunch to address nutritional problems or disadvantages. Any other model would be a form of negligence and thus structural violence. It is key that school administrators recognize this responsibility and implement initiatives, like BIC, to raise both SBP participation and the nutritional standard of the U.S. public school system.

References:

Breakfast First. (2010). The Benefits of Breakfast: Health & Academics. Retrieved from http://www.breakfastfirst.org/pdfs/HealthAndAcademicBenefits.pdf/. Date Accessed: Nov 15, 2013. Web.

Delger, Patti. (2013). Interview with Patti Delger, Co-Director of Team Nutrition and Representative from the Iowa Department of Education. Nov. 21, 2013.

Dunifon, R. and L. Kowaleski-Jones (2003). The influences of participation in the National School Lunch Program and food insecurity on child well-being. Social Service Review March 72-92.

Food and Nutrition Service (FNS). (2013). School Breakfast Program. Food and Nutrition Service. http://www.fns.usda.gov/sbp/school-breakfast-program. Date Accessed: Nov 12, 2013. Web.

FRAC Iowa Profile. http://frac.org/wp-content/uploads/2010/07/ia.pdf. Date Accessed: Nov 15, 2013. Web.

Farmer, Paul. (1996). On Suffering and Structural Violence: A View from Below. Daedalus. 125: 261-283.

Kleinman, R. et. al. (1998). Hunger in children in the United States: Potential behavioral and emotional correlates. Pediatrics 101(1):e3.

Kleinman R., Hall S, Green H, Korzec-Ramirez D, Patton K, Pagano ME, et al. (2002). Diet, breakfast, and academic performance in children. Ann Nutr Metab: 46 Suppl 1:24-30.

McIntosh, Marcus. (2014). Free school breakfast, lunches to be offered at 35 schools. Retrived from http://www.kcci.com/news/free-school-breakfast-lunches-to-be-offered-at-35-schools/27090642#ixzz3D3cwIbjK. Date Accessed: Sept. 11, 2014. Web.

New American Foundation (NAF). (2013). Federal School Nutrition Programs. Retrieved from http://febp.newamerica.net/background-analysis/federal-school-nutrition-programs/. Date Accessed: Nov 15, 2013. Web.

No Kid Hungry: End Child Hunger In America. (2013). Retrieved from http://www.nokidhungry.org/. Date Accessed: Nov 15, 2013. Web.

School Breakfast Scorecard. (2013). *Food Research and Action Center.*

School Nutrition Association (SNA-1). (2013). State-by-State Listing for School Meal Mandates and Reimbursements. Retrieved from http://www.schoolnutrition.org/uploadedFiles/2012- 2013State-by-State%20School%20Meal%20Mandates%20and%20Reimbursements(1).pdf?n=9023/. Date Accessed: Nov 15, 2013. Web.

School Nutrition Association (SNA-2). (2013). Breakfast in the Classroom. Retrieved from http://docs.schoolnutrition.org/SNF/BIC/. Date Accessed: Nov 15, 2013. Web.

Share Our Strength (SOS). (2013). Breakfast Changes Lives: Ensuring No Kid Goes Hungry in the Classroom. Retrieved from http://bestpractices.nokidhungry.org/school-breakfast#dialog_996. Date Accessed: Sept. 11, 2014. Web.

Truehaft and Karpyn. 2006. The Grocery Gap: Who has access to healthy food and why it matters. The Food Trust, Policy Link.

Winicki, J. and K. Jemison (2003). Food insecurity and hunger in the kindergarten classroom: its effect on learning and growth. Contemporary Economic Policy 21(2): 145- 157.

USDA (1). (2013). Food Security in the U.S. Iowa State Report. Economic Research Service. http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us.aspx#.UqvdnJExCoU Date Accessed: Nov 30, 2013. Web.

USDA (2). (2013). School Breakfast Program Fact Sheet. http://www.fns.usda.gov/sites/default/files/SBPfactsheet.pdf. Date Accessed: Dec 1, 2013. Web.

Appendix:

Table 1. SBP student and agency historical participation rates. Source: 2013 Iowa Child Nutrition Programs Annual Report

	1980-81	1990-91	2000-01	2010-11	2011-12
Total Breakfasts Served	2,637,141	4,591,339	11,220,113	14,910,664	15,601,155
Total Free/Reduced Price Breakfasts	1,822,126	3,276,952	6,061,864	10,965,359	11,636,463
Free/Reduced as a Percentage of All Breakfasts Served	69.1%	71.4%	54.0%	73.5%	74.6%

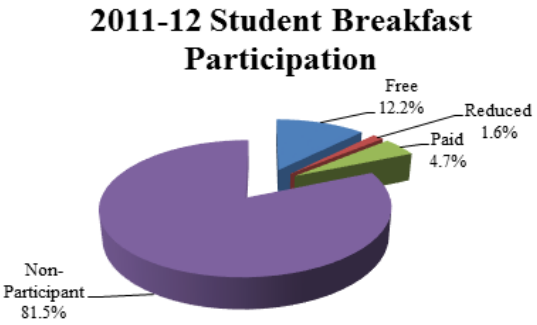

Figure 1. Current Iowa student participation rate in SBP. Non-participants make up the largest proportion of students statewide. Source: 2013 Iowa Child Nutrition Programs Annual Report

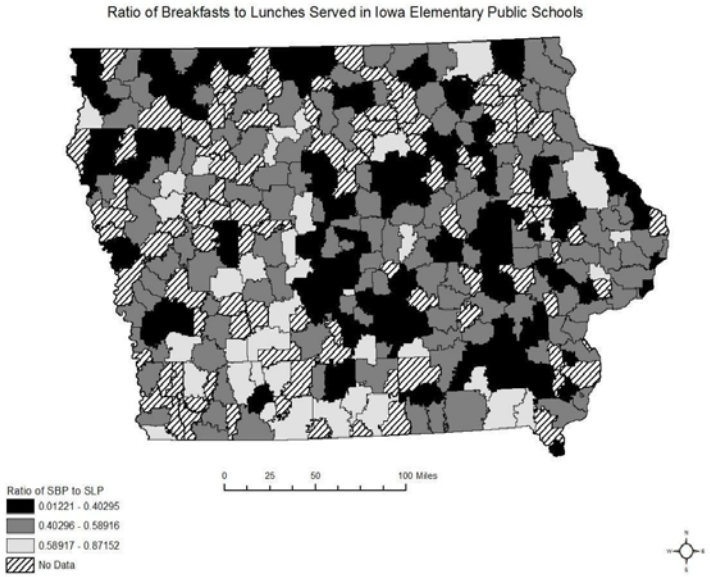

Figure 2. Map of Iowa showing how ratios of the free and reduced SBP to free and reduced NSLP compare between school districts. Source: Iowa Department of Education