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Addressing Local Food Inequity: A Youth Participatory Action Research Project in the Alternative High School in Waterville, Maine

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Addressing Local Food Inequity: A Youth Participatory Action Research Project in the Alternative High School in Waterville, Maine

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May 20, 2019

A thesis submitted to the faculty of the Environmental Studies Program in
partial fulfillment of the graduation requirements for the Degree of Bachelor
of Arts with honors in Environmental Studies

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ABSTRACT

Food security is a global issue. As food insecurity increases, it is continually important to find solutions. Food insecurity in the United States in children is visible is partially addressed via school programs, like the National School Lunch Program (NSLP) and School Breakfast Program (SBP). This project explores food inequity in the Alternative High School in Waterville, Maine, which participates in the NSLP and SBP to reduce food insecurity. This project used a Youth Participatory Action Research (YPAR) process to explore school meals and, to a larger extent, food equity from the Alternative High School students' perspectives as co-researchers. Through an extensive participatory process, a student survey, and student conversations, this paper shows that the taste and quality of the school meals leads to a lack of consumption of the meals. Based on these findings, the students made a protest poster and a booklet with the survey findings, to help the people in power understand the changes they were asking for. Additionally, this paper analyses the YPAR process' ability to increase student voice and agency, improve understanding of the food system, and facilitate learning through participation in the YPAR research process. While there are programs in place to help students improve their food security, there is a need to further address food inequity in the school food system in Waterville. Overall, this analysis suggests that implementing YPAR projects can help to increase student voice and agency, while empowering students to make changes in their own lives by speaking out and demanding better school meals.

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FOOD SECURITY

Food security is a complex issue. There are various measures to reduce food insecurity which will be different depending on the definition used. The Food and Agriculture Organization (FAO) says that “food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life. Household food security is the application of this concept to the family level, with individuals within households as the focus of concern.” (Food and Agriculture Organization, 2003). According to the United States Department of Agriculture (USDA), “Food security for a household means access by all members at all times to enough food for an active, healthy life” (Economic Research Services, 2018). The FAO and USDA definitions can be used to help better understand the most important actions needed to achieve worldwide food security.

The FAO divides food security into four different dimensions: food availability, food access, food utilization, and food stability. The first and most researched is food availability, achieved when there is sufficient high-quality food for everyone in the population. This involves food aid and investments in rural markets, infrastructure, and food production. The second dimension is food access, which is the access of individuals to the food itself and adequate resources or entitlements to get food. These include removing social, cultural, economic, and institutional barriers to make sure that individuals in a community have access to food. The third dimension is food utilization, which involves having nutritional well-being through healthy diets, clean water, sanitation, and health care. Some measures to achieve this include nutrition programming, social rehabilitation programming such as life skills, healthy living, and community integration, strengthening labor markets, and mechanisms to ensure safe food. The fourth dimension is food stability, which means that individuals have access to food at all times of the year, including through seasonal food cycles and during shocks, such as droughts, snow storms and price spikes. (Food and Agriculture Organization, 2006). These four dimensions can be measured to calculate food insecurity around the

world. Wheeler and Braun (2013) determine that nearly 2 billion individuals in the world are food insecure because these individuals do not meet one of the four dimensions of food security.

The following map is the Global Hunger Index of 2018, which shows the ‘hunger’ disparities in the world (Figure 1). The GHI was created by the International Food Policy Research Institute (IFPRI) and Welt Hunger Hilfe and is now co-published by Welt Hunger Hilfe and the Irish NGO Concern Worldwide. The GHI is calculated using four different dimensional values: undernourishment, child wasting, child stunting, and child mortality (Hammond, 2018). These dimensional values then give 100-point GHI severity scale, with 100 is the worst situation. Therefore, GHI measures food security and ‘hunger’. Figure 1 shows that hunger is most severe in South Asia (GHI score 30.5) and Africa south of the Sahara (GHI score 29.4) (Hammond, 2018). In other regions of the world, the GHI score is between 7.3 to 13.2, which means that there is moderate or low hunger levels (Global Hunger Index, 2018).

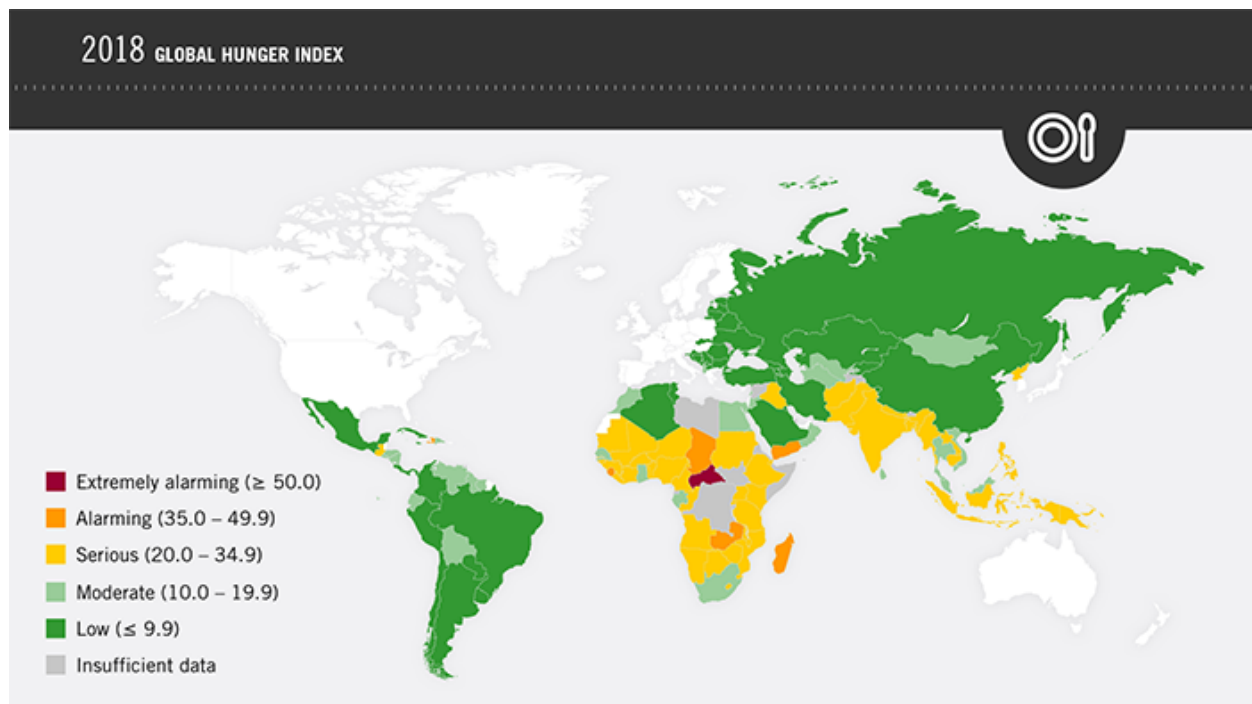


Figure 1. Global Hunger Index 2018. Extracted from (Global Hunger Index, 2018).

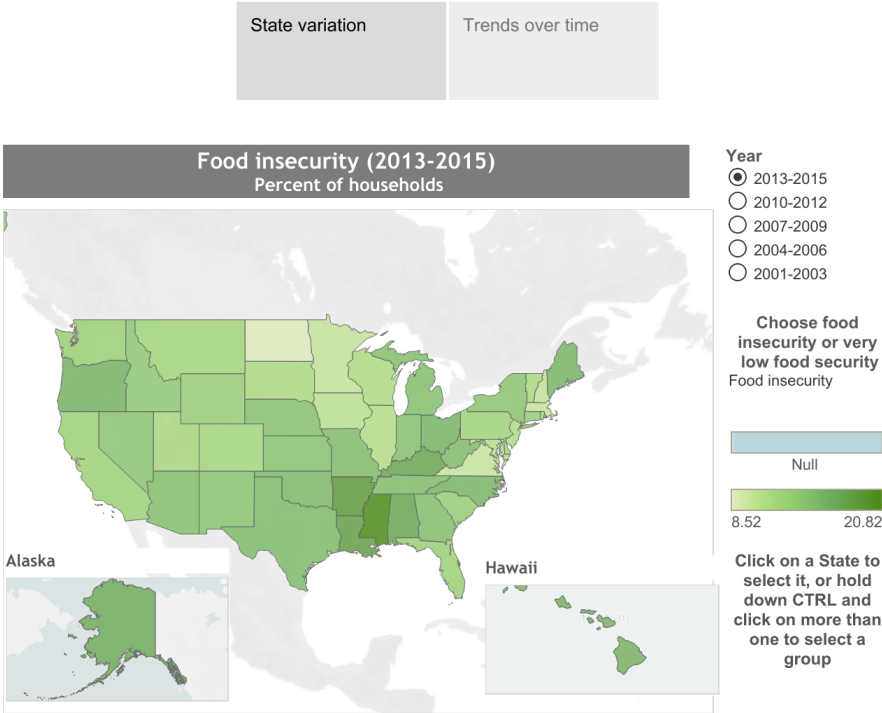
Food Insecurity in the United States of America

The U.S., as an industrialized country, may not be as food insecure as other countries but food insecurity is still prevalent. The USDA further expands on its definition of food security to include at a minimum the ability to access nutritious and safe food in socially accepted ways, which includes emergency food resources (according to the USDA), and other coping methods. In the U.S., in 2017, 88.2% of households were food secure, 7.3 % had low food security, which means that households had to use coping strategies, such as changing their diet and using emergency food sources to obtain enough food, and 4.5% had very low food security, which means that one or more members in the household did not get enough food during times of year due to economic or other reasons. In economically disadvantaged households, food insecurity exceeds 14% at the national level (Sharpe et al., 2018).

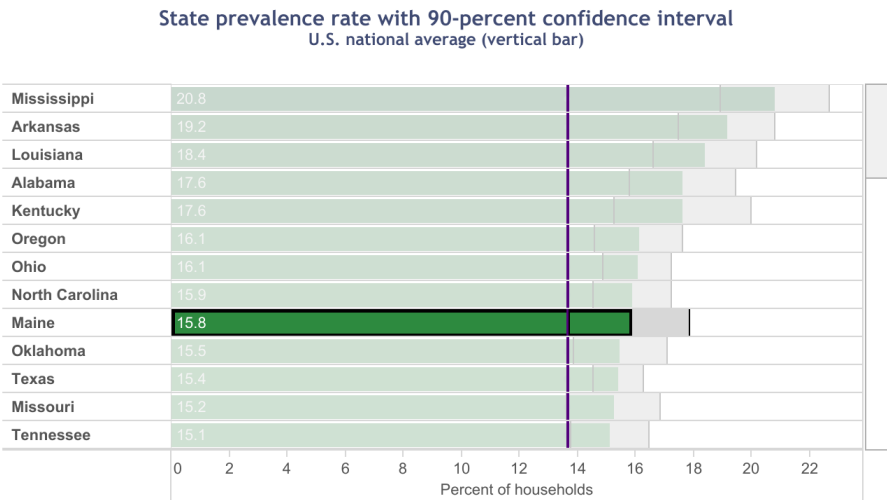
As an example, food insecure individuals only consume 0.96 cups of fruit and 1.43 cups of vegetables per day which is less than the USDA recommended level of 1.80 cups of fruits and 2.60 cups of vegetables (Moak, McAteer, Rossi, & Schmidt, 2018). However, it is important to note that an average American consumes 1.03 cups of fruits and 1.58 cups of vegetables, which is 0.07 more cups of fruits and 0.15 more cups of vegetables than a food insecure individual (Moak et al., 2018). Additionally, these differences are probably not statistically significant but essential to be aware of at the same time.

Food insecurity differs based on a number of characteristics such as race, gender, a household with children, and education level. Figure 2 shows food insecurity in the US on the state level. It is evident that food insecurity drastically differs across the states, with Mississippi having the highest levels of insecurity. Maine has the ninth highest level.

Food Security in the United States: How Do States Compare?



From 2013 to 2015, estimated prevalence rates of food insecurity ranged from 8.5 percent in North Dakota to 20.8 percent in Mississippi, while very low food security ranged from 2.9 percent in North Dakota to 7.9 percent in Mississippi.



Prevalence rates for 3 years are averaged to provide more reliable statistics at the State level. The margins of error for the State prevalence rates should be taken into consideration when interpreting these statistics and especially when comparing prevalence rates across States. The margin of error reflects sampling variation—the uncertainty associated with estimates that are based on information from a limited number of households in each State.

Source: Calculated by USDA, Economic Research Service, using Current Population Survey Food Security Supplement data. <http://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us.aspx>

Figure 2. Food Insecurity by US States. Extracted from (Economic Research Services, 2018).

Food Insecurity in Maine

Figure 2 shows that 15.8% of households in Maine were food insecure in 2013-2015 compared to 13.67% at the national level. According to the latest data available, food insecurity is 14.8% in Maine as of September 2018 (Good Shepherd Food Bank of Maine, 2019). During the recent recession which started in 2008, food insecurity levels increased from 11.1% of households in 2007 to 14.6% in 2008 at the national level. In 2009 after the official end of the recession, the national food insecurity went down again to 12.7% of households in 2015 though the effects of the recession were long-term. The long-term effects were prevalent in Maine, which did not follow this national trend. According to Good Shepherd Food Bank and Pebble (2017), food security was at 15.8% in 2015, rising from the 2008 level which was 14.6%. In 59% of these households in Maine, the most employed person was employed in the last 12 months, and in 57% of them, the most employed person is not working currently, due to retirement (59%), disability (38%) and other reasons (3%). Out of the food insecure households in Maine, 50% of the individuals are children under the age of 18 and adults over 60 and most are below 150% of the poverty level. In fact, one-fifth of the children in Maine are food insecure. (Good Shepherd Food Bank & Feeding America, 2014; Good Shepherd Food Bank & Preble Street, 2017).

Maine has various food resources and programs designed to help reduce food insecurity. One of them is charitable food assistance, which consists of food banks, soup kitchens, and emergency food resources, with Good Shepherd Food Bank as the largest and only statewide food bank. A federal program, Supplemental Nutrition Assistance Program (SNAP), provides financial assistance, which is \$1.40 per person per meal, for food purchases via an electronic benefits transfer (EBT) card. SNAP is available for adults 18-59 for a 3-month time limit unless the adult has a job, job training, or volunteer work. Fifty seven percent of food insecure households in Maine use SNAP, 77% get food from a hunger relief agency, and 23% to a relief agency when they run out of food. Another program, Maine Harvest for Hunger (MHH) does gleaning and gardening to help food pantries. MHH provides nutrition education to people who have limited access to fresh food, which can lead to improvement in diet (Murphy, 2013). Additionally, health

care issues such as diabetes (11%), poor health (13%), high blood pressure (41%), unpaid medical bills (26%), and no health insurance (26%) are problems too. In order to reduce food insecurity in Maine, it is important to make SNAP more accessible, improve school nutrition, support workers and families, invest in transportation, expand health care coverage, increase affordable housing, and strengthen charitable food networks. (Good Shepherd Food Bank & Preble Street, 2017)

Emergency Food in Waterville

Waterville is a population center in Kennebec County, central Maine. In Kennebec County, food insecurity was 13.5% and childhood food insecurity was 19.8% in 2017, and 64% of children are eligible for school nutrition programs (Feeding America, 2019). Waterville has 113 food establishments, which includes supermarkets, corner stores, and CSA pickups. Waterville has 20 emergency food locations, out of which 14 are summer meal locations for children under the age of 18. There are 6 other emergency food resources which include Waterville Food Pantry, Sacred Heart Soup Kitchen, St. Francis Soup Kitchen, Spectrum Generations and the Muskie Community Center, Evening Sandwich Program, and Mid-Maine Homeless Shelter. Waterville has the ‘free and reduced’ lunch program in schools and a weekend backpack program. (Senechal, 2019).

Nutrition Programs

The USDA has many initiatives in place to encourage healthy eating habits and improve nutrition intake. One of these is the MyPlate icon (Figure 3), which has replaced the well-known ‘Food Pyramid’ in 2011, and shows the amounts of fruits, vegetables, grains, protein, and dairy recommended in U.S. diets. However, a *National Health and Nutrition Examination—What We Eat in America* survey from 2011-2014 found that most people without a high school diploma had not heard of the MyPlate icon. For most years of the survey, people with low or marginal food security and SNAP participants had also not heard of it. More research is needed in order to understand the effectiveness of these initiatives. (Jahns, Conrad, Johnson, Raatz, & Kranz, 2018).



Figure 3. MyPlate Icon

The MyPlate initiative is trying to improve nutrition in the American diet. One of the biggest consequences of food insecurity is individuals may not have access to healthy nutritious food, and thus having an increased risk of health outcomes related to lower nutrient content (Eicher-Miller, Mason, Weaver, McCabe, & Boushey, 2009). One such nutrient is iron, which is needed for mental, behavioral, and cognitive development in children, and for reproductive health in females (Eicher-Miller et al., 2009). Low iron can lead to iron deficiency and iron deficiency anemia (Eicher-Miller et al., 2009). Children in food-insecure households are 2.95 times more likely to have iron deficiency than households with children who are food secure (Eicher-Miller et al., 2009). Food security is also linked to health care and health care expenditure. Berkowitz et al. (2018) say that food insecurity led to higher health care expenditure for individuals (\$1,863 annually) in 2012-2013.

Family life and physical activity can greatly influence nutrition and health. For example, monitoring the intake of junk food and reducing the amount of time spent watching television can reduce obesity, which is linked to nutrition. In fact, food insecurity is higher in obese children, but only if the children do not have access to free and reduced lunch. The Family Home Nutrition and Physical Activity (FNPA) screening tool is used to assess evidence-based family environmental factors that predispose children to becoming overweight. It is used to understand behaviors regarding physical activity, television, and diet that significantly influences food security, nutrition, and

BMI, and has programs that encourage children to eat healthier nutritious food through family support. However, it is important to note that families should not be blamed for poor food choices, but rather, the emphasis should be to increase access to nutritious food and to educate families about the benefits of nutritious food. (Jackson et al., 2017).

Likewise, in other communities, individuals get food from churches, food banks, farmers markets, soup kitchens, and even hunting (Moak et al., 2018; Sharpe et al., 2018). Moak et al. (2018) interviewed food pantries, surveyed experts, and did asset mapping to find that even with these food resources, communities find it difficult to access food due to transportation and cost. They found that mobile markets and community gardens would help a community in South Arkansas more than emergency food resources because the biggest barrier to food was transportation and cost, which would be easier with markets and gardens (Moak et al., 2018). Therefore, they suggest that it is important to understand food insecurity broadly and at the community-level. For example, there is significant food insecurity in the United States, 40% of food in the US is wasted (Sewald, Kuo, & Dansky, 2018). Therefore, one of the ways to reduce food insecurity is to use the wasted food. In Boulder, Colorado, a system of volunteers deliver wasted food from local markets and grocers to community centers and schools (Sewald et al., 2018).

School Meal Programs

Food insecurity in children is a big problem, because nutrition and health in childhood affect a person their entire life. In the United States, school meals are essential in order to reduce food insecurity among children. The National School Lunch Program (NSLP) and School Breakfast Program (SBP) run by the USDA are available to students in schools (Food Research & Action Center, 2015). Those eligible for free lunch are children from families whose household income is below 130% of the poverty line. Children with families whose household income is between 130-185% of the poverty line have to pay a national standard of 40 cents for lunch (Food Research & Action Center, 2015). Children with families whose household income is above 185% of the poverty rate have to pay for their meals. The meal price differs due to the cost of food locally, and

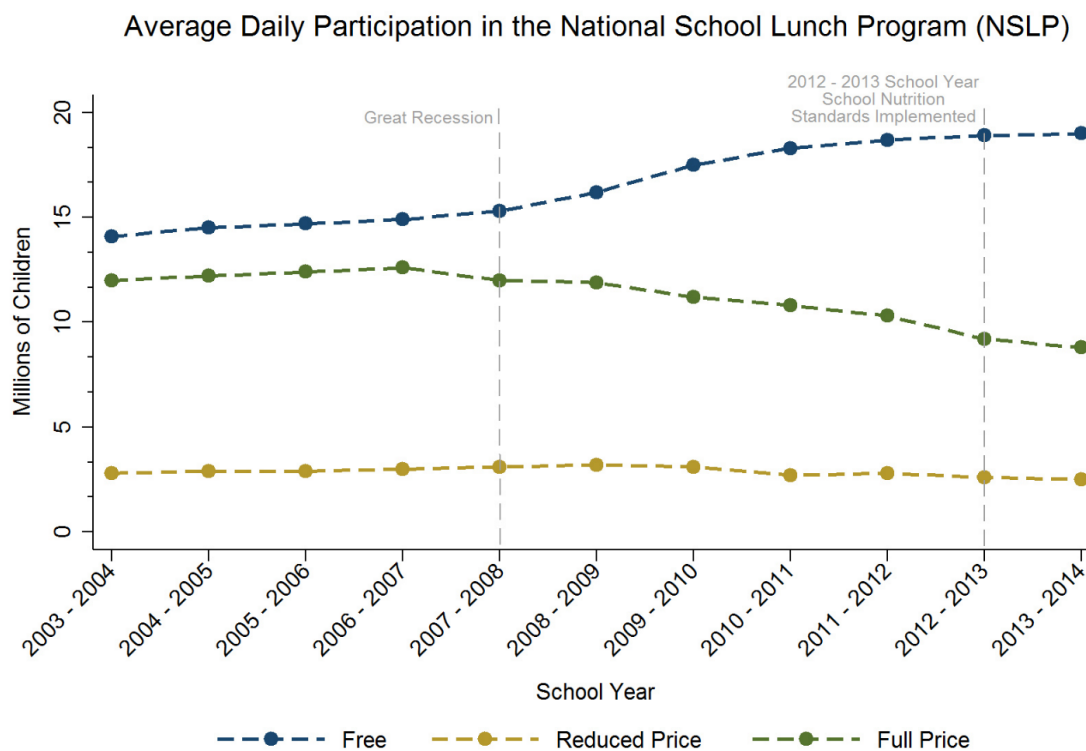
purchasing practices (Ollinger, Peo, & Guthrie, 2018). The School Food Authorities (SFA), local administrative bodies in charge of NSLP and SBP, purchase food for their schools (Ollinger et al., 2018). However, it varies by region, with the cost being higher in the mountainous and northern region and lower in the southern region due to food availability and pricing (Ollinger et al., 2018).

The Healthy, Hunger-Free Kids Act of 2010 was developed to improve the NSLP and SBP by adding Community Eligibility Provision (CEP), which consists of free school meals for all students, improving direct certification of free and reduced meals (through SNAP and TANF), updating the nutritional aspect of the programs, and authorizing the USDA to regulate all food sold in schools (Food Research & Action Center, 2015). The CEP allows the school to provide free meals if at least 40% of the students have direct certification and therefore, these schools are using CEP in order to reduce administrative work such as organizing the certification process for meals (Raiston & Guthrie, 2018). An important objective of the school meals program is to help reduce food insecurity and increase nutrition intake.

The NSLP has a nutritional aspect, which involves increasing the intake of fruits and vegetables through the Healthy, Hunger-Free Kids Act of 2010. However, there is debate as to whether school meals they are increasing the actual intake of fruits, vegetables, and meals in general. Some argue the increase in fruits and vegetables present in the school meals is leading to an increase in wastage of food. According to a study in 10 schools with students age 6-8 in New York City, 70% of the students took fruits, vegetables, or whole grains but only 23% of fruits, 43% of vegetables, and 57% of whole grains were consumed (Gross, Biehl, Marshall, Paige, & Mmari, 2018). However, it is important to note that the NSLP is helping to reduce food insecurity, poor health, and obesity and is not leading to negative health outcomes (Gundersen, Kreider, & Pepper, 2012). Since the recession, state policies that enforce SBP have helped to reduce food insecurity by 14% for young children implying the effectiveness of the program (Fletcher & Frisvold, 2017). Additionally, school meals help food-insecure households and

marginally secure household children get their food, nutrition, and calorie intake from school; this is less significant in food secure households (Potamites & Gordon, 2010).

Figure 4 shows that participation in paid lunch programs is decreasing and participation in free lunch programs is increasing, which is explained by the 2008 recession. However, the figure, does not say anything about consumption of fruits and vegetables, which have essential nutrients for childhood development or the wastage of food and milk, which leads to the loss of nutrients, economic loss, and environmental consequences like CO₂ emissions due to the food production process (Blondin, Cash, Goldberg, Griffin, & Economos, 2017). Therefore, according to the research, it's not clear whether or not the Healthy, Hunger-Free Kids Act of 2010 has been effective in reducing food insecurity or improving child health.



Prepared by the Food Research and Action Center (FRAC)
 Data source: U.S. Department of Agriculture

Figure 4. Participation in the National School Lunch Program (NSLP) Extracted from (Food Research & Action Center, 2015)

Consumption of adequate calories, protein and nutrients, is essential for growth; additionally, the consumption of fruits and vegetables is very important for a healthy life. A lack of fruits and vegetables consumption can lead to health outcomes such as an increased risk of cancer, cardiovascular diseases, diabetes, and hypertension, which are some of the leading causes of death in the United States (Videon & Manning, 2003). Moreover, a study conducted using a cohort in China in 2002 (baseline) and 2007 (follow-up) found that increased consumption of fruits and vegetables can prevent evolution of multimorbidity, which is multiple chronic diseases at the same time (Ruel et al., 2014). However, it is important to note that there are other factors that lead to cancer and cardiovascular diseases (Serdula et al., 1996).

One of the biggest ways to increase intake of fruits and vegetables by children in schools is exposure (Gross et al., 2018; Lakkakula, Geaghan, Zanovec, Pierce, & Tuuri, 2010; Pope, Roche, Morgan, & Kolodinsky, 2018; Wardle, Herrera, Cooke, & Gibson, 2003). For example, repeated tasting of vegetables, which in one study was associated with an increase in liking after 9-10 tastings for half of the 4th and 5th grade students (Lakkakula et al., 2010). Another study compared whether reward or exposure would lead to an increase in liking and consumption of red pepper; exposure did lead to an increase (Wardle et al., 2003). Another method to increase consumption is through sampling or tasting the lunch entree the previous day and it seemed to improve participation (Pope et al., 2018). A study found that less crowding, a quieter cafe, and longer lunchtime is associated with an increase in consumption of school lunch (Gross et al., 2018). Therefore, a variety of different methods to increase the intake of fruits and vegetables in order to meet nutrition standards.

Under the new federal administration, some changes to the NSLP and SBP will be in effect during the academic year 2019-2020, which starts on July 1, 2019. Local operators will be allowed to offer low-fat flavored milk for NSLP and SBP. In addition, a SY 2012-2013 rule will return that stipulates half the grains offered in NSLP must be whole grain. And lastly, a new rule will go into effect, allowing a gradual reduction in

sodium for school meals. These are big changes in the system that could change the trend in Figure 4. (Food and Nutrition Service (FNS), 2018). However, none of these changes are supported by science on eating or child health.

Cyclical Food Insecurity and Summer Nutrition

One of the big problems with school meal programs is that meals are not available during the weekend and in the summer. According to Huang et al. (2016), there is a decrease in food security over the summer. In order to deal with cyclical food insecurity, there is a Summer Electronic Benefits Transfer for Children (SEBTC), which is a card for children who qualify for free and reduced lunch (Collins et al., 2018). This includes \$60 or \$30 per child per summer month, which also helps with nutrition intake (Briefel et al., 2018). SEBTC is successful in reducing very low food security by a third and has improved 6 out of the 8 child nutrition outcomes measured, such as an increase in consumption of fruits and vegetables and whole grains (Collins et al., 2018). This is a good model for the summer months for low-income households. However, there is a need for another model for the weekends.

Another program is the Weekend Food Backpack (WFB), where children get a backpack filled with food before the weekend (Hanson & Connor, 2018). A study found there is at least one proper meal of a vegetable and meat product in the backpack that was generally shared by the whole family; however, since children like snacks such as pudding, granola bars, and juice the most, they eat it quickly (Hanson & Connor, 2018). Overall, the backpack program receives mostly positive feedback in terms of direct reach of food to children who need it, effective ways of getting modest dietary quality food to children, easy adoption by the community, easy implementation, and sustainability due to food donations, all of which could help to reduce children's food insecurity (Shanks & Harden, 2016).

Food Equity

Food equity is an all-encompassing approach to assessing food security. Lacy (1994) talked about food equity as the link between social justice, climate change, and food security. Therefore, food equity addresses food security, but also includes social justice, cultural diversity, biodiversity, climate change, and other issues (Dandekar, 1994; Lacy, 1994). Figure 5 graphically represents food equity. Food equity also includes access to a similar quality of food for all people. Additionally, food inequity exists when the production, retailing, and consumption of food leads to food insecurity (Dobson, 2015). This includes food waste when there is ‘enough’ food for the community (Dobson, 2015). Some methods for an equitable food system include civic conversations in the form of civic agriculture that especially looks into social conditions, such as race, income, and culture in the local context, community food councils, and community gardens (Dobson, 2015; Macias, 2008; Poulsen, 2017).

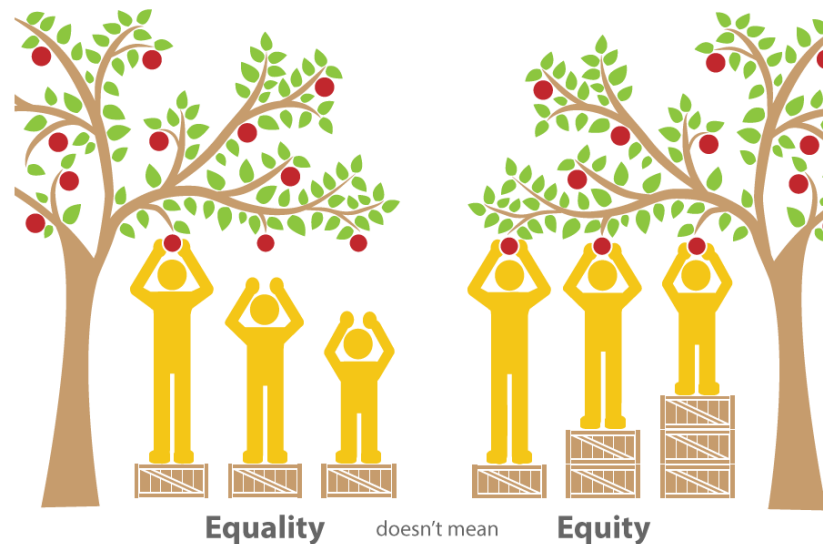


Figure 5. Food Equity: Beyond Food Equality and Food Security. Extracted from (“Equity in Food Systems – Community Food Systems Program,” 2014)

Another aspect of food equity is the emphasis on minority health and food intake. According to Pare et al. (2018), racial and ethnic minorities show higher levels of food insecurity than other groups. One of the reasons for the low levels of food intake is the

lack of culturally familiar food such as Mexican food for immigrants from Mexico (Paré et al., 2018).

Food equity builds on the more established movement of food justice. Food justice is an urban movement that specifically addresses structural racism and the distribution of food resources in low-income communities (Clendenning, Dressler, & Richards, 2016). The food justice movement has helped to build farmers markets, community supported agriculture (CSAs), and urban gardens for people who did not have access to food and food production (Clendenning et al., 2016).

It is also important to take climate change into consideration because the effects of climate change will have the biggest impact on many of the same people who now suffer due to food insecurity/ justice (Garnett, 2011). However, there is a debate about where to put energy and resources: climate change solutions or food insecurity solutions. It is possible to do both together, by eating lower in the food chain, food conversion efficiency taxes, such increasing taxes on food that requires a lot of energy to produce, less intensive agriculture, reducing meat and dairy produce, and improving soil quality (Fanzo, Davis, McLaren, & Choufani, 2018; Garnett, 2011; Robert Goodland, 1997). Food equity takes all this into consideration. Therefore, in order to achieve true food security and improve public health, it is important to use a food equity.

This project focuses on food equity issues among a subset of high school students in Waterville, Maine. I take a unique approach using Youth Participatory Action Research to conduct the research project. My goal is to work collaboratively with high school students to understand and address food issues and more importantly, to empower youth as co-researchers in this process.

WHY YPAR?

Foundational Work on Student Voice and Student Agency

In my Colby classes, I learnt about the importance of student voice and student agency in a child's life through the work of Jessica Taft, Paulo Freire, bell hooks, and Lyn Mikel Brown. These theorists and practitioners brought children's rights and participatory action research (PAR) to the forefront of my academic work at Colby.

Jessica Taft's book *The Kids are in Charge* (n.d.)(in press), introduced me to the 1989 United Nations Convention on the Rights of the Child, especially Article 12, which "assure[s] to the child who is capable of forming his or her own views the right to express those views freely in all matters affecting the child, the views of the child being given due weight in accordance with the age and maturity of the child." Taft's ethnography explores The Movement of Working Children in Peru, which is a nationwide movement, led by children aged 8-17 because they want to 'work' during 'childhood'. The children in the movement consider 'work' to include 'chores' at home and paid work, but not hazardous work or sex labor. Therefore, childhood has a completely different meaning in Peru in comparison to the United States. Taft conveys childhood as a social construct and argues, therefore, that there is no one definition or meaning to childhood. Furthermore, the movement incorporates horizontalism as a practice, which means children and adults are considered equals, which includes equal worth, an equal capability to learn skills, and equal ability to contribute to social and political actions. Consequently, the children have voice and agency because they get to make their own decisions regarding work or otherwise in their lives.

Pedagogy of the Oppressed (1970) by Paulo Freire focuses on the conventional educational system as a banking model where information travels vertically from the teacher (the oppressor) to the student (the oppressed). There is insufficient dialogue between the teacher and student. Freire says there is a need to move to a dialogical model of education, where teachers and students are both subjects and learn together. This involves using critical pedagogy, which takes significant lesson planning to construct an

environment that fosters critical learning. The teacher must create a classroom in which students develop their creativity and curiosity in critical ways, where there is respect for student knowledge, culture, and autonomy. The model requires cultural synthesis, which means working with the oppressed (the students) and learning with them. Cultural synthesis also includes cooperation, love, trust, and humility in the classroom. Therefore, it is evident that cultural synthesis, teaching with critical pedagogy, and the dialogical model of education, all require student voice and student agency. Freire focuses on love as the motivational foundation for social justice work.

In *Teaching Community: A Pedagogy of Hope* (2003), bell hooks also uses critical pedagogy and builds on Freire's work to include a feminist and critical race theory lens. In one of her most famous works, *Teaching to Transgress: Education as a Practice of Freedom* (1994), she writes about the power of the classroom to break through race, gender, and class in order to create freedom. The freeing education can also create hope because teachers give students the opportunity to be engaged, creative, relaxed, excited, and active members of the classroom. According to hooks, it is necessary to create a classroom filled with love and compassion in order to create a community in the classroom, school, and even the world.

Lyn Mikel Brown's work, *Powered by a Girl* (2016), addresses intergenerational collaboration and how it opens space for everyone to breathe and create knowledge. Adults need to understand how adultism is a barrier to genuine relationships with youth, respect for children's knowledge, critical thinking, loyalty, and supportive coalitions. I use Brown's clear and concise "necessary conditions" for intergenerational collaboration in this research project. Through this collaboration, students actually understand the power dynamics in the school system and learn how to voice their concerns and act upon it. Students understand that they matter and belong by working together and learn how to be leaders who are civically empowered. Brown's work reminds us that it is possible for students to have voice and agency and to experience empowerment.

Participatory Action Research (PAR)

Participatory Action Research (PAR) is a radical form of community-based research that has its roots in various theories, particularly critical pedagogy. PAR asks one of the most important questions regarding research: Who is research for? According to Tuck and Yang (2010), traditional forms of research exploit power relationships between the researcher and the researched: the researched can only talk about their pain, academia has access to research on the personal lives of people that should stay private, and sometimes research is not in the best interest of the researched; that is, if the research is applied, it may not identify the interventions needed to address unequal power relations.

PAR, on the other hand, is rooted in principles of justice and democracy and is designed to enact social change with people in the community as co-researchers. It is, in this sense a better, more just, approach to research (Irizarry & Brown, 2018). Furthermore, PAR is more than a methodological approach, it is an epistemological change in research as a process (Tuck & Yang, 2010). PAR is a form of horizontal research; that is, it is not for the oppressors but for those whose voices have not been included (Caitlin, 2007; Fine & Torre, 2008; Irizarry & Brown, 2018; Tuck & Yang, 2010). PAR is based on the belief that the oppressed, the unheard, can be agents of social change (Caitlin, 2007).

In the U.S., PAR has its roots in action research born from Kurt Lewin (1946), who wrote “Action Research and Minority Problems.” Since 1946, PAR has taken many different approaches around the world. PAR is a form of grassroots level work that has been used by those developing critical pedagogy (Freire, 1970), working for racial justice (hooks, 2003; Smith, 1999), in the service of anti-racist feminist projects (Fine & Torre, 2008), womanism (Hooks, 1994), and environmental justice (Environmental Youth Alliance, n.d.). It is, broadly, a framework for social justice research (Caitlin, 2007).

PAR is about giving back power and actually listening to the oppressed (Caitlin, 2007). Fine and Torre (2004) refer to PAR as a decolonizing process because we

are “re-membering” those bodies and histories that have been left out of the research process and those who are socially and politically excluded. Furthermore, traditional research of marginalized people often leads to the essentialization of their cultures, backgrounds, and lives without fully understanding the contexts (Smith, 1999).

PAR is an extremely powerful form of research because of its intentional inclusion of the oppressed in the entire research process, from the research question to the conclusion and action steps (Cahill, Rios-Moore, & Threatts, 2010; Fine & Torre, 2004). Youth Participatory Action Research as a research approach encompasses student voice and student agency that Taft, Freire, hooks, and Brown all write about. Students have agency and power to make change given the right circumstances (Ginwright, Cammarota, & Noguera, 2006; Langhout & Thomas, 2010). PAR believes that the oppressed are the best people to do research about themselves and that all have the right to research, hence the common phrase used to describe PAR: “No research about us, without us.”

Doing YPAR

In PAR, the people who are being ‘researched’ are considered co-researchers along with the traditional ‘researcher’ who could be called the ‘facilitator’. The facilitator could be someone who is from the community or outside the community and is familiar with the PAR process. In Youth Participatory Action Research (YPAR), the facilitator is generally older than the youth/student researchers. The facilitator could also be a young adult (18-25), including a college student. It is very important to build a trusting relationship in the group to overcome the facilitator or teacher having more power than the students or the participants (Dworski-Riggs & Langhout, 2010; Reid et al., 2011). The facilitator could be seen as the oppressor because of the historical injustices due to age and social and political systems. Therefore, it is important to make decisions together in a transparent manner as a way to mitigate the potential for unequal power dynamics (Cahill et al., 2010). Cahill (2007) and her co-researchers, for example, generated group agreements that included listening and respecting opinions even if you disagree.

Gordon (2007) addressed the social construction of age and the negative impact of facilitator assumptions about youth. One of the easiest ways to create a trusting community is to make sure everyone's voice matters and work toward genuine collaboration (Rodríguez & Brown, 2009). Dworski-Riggs & Langhout (2010) take this one step further by taking the already existing power dynamics in the school community into consideration. Additionally, they emphasize the importance of and difficulty in making student voice and agency heard in the larger community. Therefore, with a few of these steps PAR can build a trusting community that feels like home in order to have the hard conversations.

One of the tenets of PAR is that it is based on the everyday life of the co-researchers (Caitlin, 2007; McIntyre, 2008; Reid et al., 2011; Rodríguez & Brown, 2009). The co-researchers take the lead on the research project; they are involved in and formulate every decision in the project, such as the research question, the methodology, analyzing the results, and the action step (Cahill, 2006). This means that the research on the lives of young people is being done by young people (Caitlin, 2007). The co-researchers learn along the way by actually participating and doing the work (Cahill et al., 2010). Cahill (2010) implements a pedagogy of citizenship. “We engage the term citizenship optimistically, in the sense of both feeling included and 'at home;' not defined by arbitrary geographic boundaries” (Cahill et al., 2010, p. 92). In the PAR process, it is essential for everyone in the group to feel like a citizen.

To base a project on citizenship is not an easy process. Very often in PAR projects, we do not know exactly what we are getting into (Cahill, 2009; Irizarry & Brown, 2018). Since PAR is based on the everyday, it leads to uncertainty because a new problem or setback could come up any time. PAR is all about understanding the background or other aspects of the co-researchers' lives. Additionally, PAR researchers confront structural barriers working in school settings or with university guidelines. PAR projects in schools also face pedagogical problems (Irizarry & Brown, 2018). Projects are sometimes very hard or even impossible to implement due to many reasons. PAR projects in schools, for example, have to work within the school system to create social change

and a school system is not always conducive to social change (Irizarry & Brown, 2018). In schools, the people in power, such as the principal and teachers, are not always willing to genuinely listen to the students because they have their own goals in mind, such as improved standardized test scores (Irizarry & Brown, 2018). PAR epistemologically and pedagogically challenges the banking model of education because it makes transparent the pedagogical and political system and its effects on those with the least power. (Freire, 1970; Irizarry & Brown, 2018). At the same time, it allows students to understand and work within these barriers to address inequities.

The co-researchers with lived experiences help the facilitator understand the real-life dynamics of their situation (Torre, Cahill, & Fox, 2015). Together, this experience can be transformative for the entire group. The co-researchers analyze their own lives and this can change the way they look at themselves (Cahill et al., 2010). Therefore, YPAR is all about building the capacity for the young co-researchers to change their own lives and to build their agency (Caitlin, 2007; Rodríguez & Brown, 2009). In order to reach the action stage, the project requires collective responsibility among all the researchers, that is co-researchers and facilitator, for the production of knowledge, a vision for the future, and ways to enact change (Cahill et al., 2010; Torre et al., 2015). The vision for the future can be used to enact change and take action because it could be “opening eyes” of the rest of the community who may not be aware or directly involved (Cahill et al., 2010). However, vision alone is not enough. PAR needs collective responsibility for social change or collective action.

Fed up Honeys: A YPAR Project in New York City

An example of a successful YPAR project is the “Fed up Honeys.” The co-researchers are Pratt Institute professor Caitlin Cahill and six high school students Indra Rios-Moore; Shamara Allen; Erica Arenas; Jennifer Contreras; Na Jiang; and Tiffany Threatts; all self-identified “young womyn of color” living in the Lower East Side of New York City. Their project was about the stereotypes of being a womyn of color in their community. The young womyn were both subjects and researchers in their project, which meant that they could answer some questions themselves, as those living in and

experiencing stereotypes in the community but deepened their research by asking other young womyn questions about how they are seen and stereotyped. Through the process, they were “opening eyes” for themselves and for others too. They understood their neighborhood and the changes in it due to gentrification. The womyn learned a lot about themselves and used their voice and agency to collect and analyze data, develop a website, and write a report of their findings. This YPAR project was successful because the womyn of color were given the power to explore and critically analyze others’ perceptions and therefore the research project was a process of decolonizing and “re-membering”. The project helped to deal with current exclusions or oppression these and other young womyn face in New York City. This project is inspirational, as it was done by womyn of color for womyn of color.

CONTEXT

In the spring of my junior year at Colby, I learned about Adrienne Carmack's '18 YPAR project with students attending the Alternative High School (Alt) and the Teen Parent School Program (TPSP) in Waterville, Maine. This YPAR project was about addressing the stereotypes about their school and the students who attend it. The group called themselves The Equality Coalition (TEC), and they designed a project to better understand the stereotypes and to address them by creating broader awareness of their school. This was the second project in an ongoing YPAR collaboration between Colby and the Alt school advised by Professor Brown.

The Alternative High School (Alt) and the Sharon Abrams Teen Parent School Program (TPSP) are situated at the Maine Children's Home for Little Wanderers on Silver Street in Waterville. Alt and TPSP are part of Waterville High School but exist as a satellite school on a different campus. TPSP has been in Waterville for over 40 years and is a school for teen parents that not only helps them graduate from high school but also provides support through daycare, prenatal care, and emotional and mental health support. Alt is an alternative school for students who do not thrive in the "traditional" high school, which may be due to bullying, mental health issues, or the need for smaller class sizes. The students at Alt are mostly juniors and seniors because the Waterville school district prefers that students spend at least a year at the Waterville High School before transferring to Alt.

The students at Alt and TPSP take classes together (hereafter referred to as Alt students). The school offers all basic high school classes such as Math, Science, Psychology, English, History, Government, and Art. They also offer special classes or groups such as Independent Living, and for TPSP, prenatal and parenting, teen parent support group, and counseling and case management. The Independent Living class can have different areas of focus, such as the green class, which is focused on environmental issues and gardening, senior class, which is focused on skills for living alone after graduation, and an emotional support group, where the YPAR projects are conducted.

I joined Carmack's YPAR project in May 2018 and I heard from the students that they wanted to change the school lunch. I continued to attend the group regularly until summer vacation in order to develop relationships with them and to understand food inequity in the school. At the same time and after the school year ended, I spent the summer in Waterville and interned with Healthy Northern Kennebec to understand the food system in Waterville. This led me to the research question: **"How does the Alt school's meal program contribute to food inequity in the lives of Alt students?"**

Collectively the students and I looked into the ways in which we could improve school meals. In YPAR projects, the work we do is based on the everyday life of the students and of the school. The project is also conducted by the students, from developing and honing the research question to the action steps. Therefore, the school meals project, which is for the students, was also conducted by the students. The (Y)PAR process we used in this project is the philosophy and epistemology behind our work. In the methods and results section, I am going to discuss the food equity project focused on school meals that we conducted together. In the implications and future plans section, I am going to discuss the effects of this project in our lives.

METHODS

This YPAR project was conducted from September 2018 to May 2019 in the Alternative High School and Teen Parent School Program. I facilitated the group through the YPAR epistemology and through the entirety of the project. The group met for an hour and twenty minutes, once a week for the first four months and twice a week for the last four months as part of an Independent Living Class offered at Alt. The group consisted of high school students (aged 15-18): Autumn (she/her), Jimin (he/him), Jeremy (she/her), and Jay (she/her), who were a part of TEC the previous year, and Flint (she/her), John (she/her), and Leslie (she/her) who were new to the YPAR process and the class teacher, Ringo (he/him). All the names of the students and the teacher have been changed to protect their identities. They also picked their own pseudonyms.



Figure 6. The Group

I facilitated this research project at the Alternative High School and Teen Parent School Program with the help of the Independent Living, class teacher, Ringo. Since I am not part of the school community, I was not a researcher in the traditional sense of the word. I helped with the organization of the group research meetings with the students. I developed lesson plans in the summer months of 2018 to facilitate our group sessions for September 2018 to December 2018 to make sure that we had a plan everyday (see Appendix A). Ultimately, though, it was always up to the students if they wanted to change the plan and the group meetings were very flexible. The class teacher, Ringo helped to facilitate the group, as an adult, who does not eat the school lunch, but he was a co-researcher. He also facilitated the group if I was not able to go to the school due to conflicting schedules.

Building a Trusting Community

One of the most important parts of YPAR is to build a trusting relationship in the group. To facilitate this process, I initiated a check-in activity at the beginning of every session called “Peaks, Valleys, and Horizons”. We went around in a circle and shared something good and bad in our lives, and something we are looking forward to. This activity set the tone for our entire project because it helped the group to open up, be honest, and vulnerable. At the same time, this activity also helped to address the power dynamics within the group because we realized that despite our ‘age’ difference we share some similar struggles such as mental health issues and life stress. I also explicitly addressed the power dynamics by telling the students that this is their project since it is their school and they know the most about their lives. Collectively, we came up with the group/class norms as shown in Figure 7. These three specific steps, the check-in activity, addressing the power dynamics, and establishing group norms, among others, helped us to build a trusting community in our group.

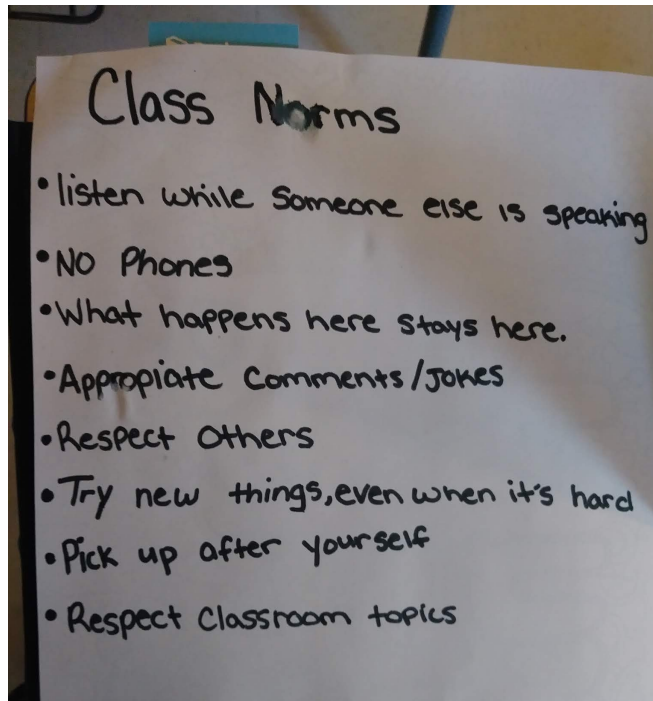


Figure 7. Group/Class Norms

School Meals

After building a relationship, we could start having the difficult conversations surrounding food equity to better understand how it impacts the students' lives. We focused specifically on the school meals and the effects it has on the students' lives. The students decided to document the school breakfast and lunch by taking pictures of it. Additionally, I began to ask the students questions about why they do not like the school lunch. This was a very important methodological step because to make a change we need to understand the problem; in this case, what part of the lunch we need to change and why. The students then articulated the reasons they did not like their school food. As a result of this conversation, we realized our need to understand the school food system in order to change it. This led us to another research question: *How is the food in the Alt school chosen, prepared and checked? How can we improve the Alt School meals?*

We soon realized we could not answer these questions completely by ourselves. Therefore, we developed and sent a questionnaire to Lori Hartin, the School Food Director, for Waterville, Winslow, and Vassalboro public schools. We asked questions

about food preparation, food choices, the freshness of the food, and the difference between the “traditional” high school food and Alt School food (See Appendix B). We conducted an informal interview with the school Program Director, who is essentially the school principal, to find out if it is possible to change the lunchtime or the lunchroom. The Program Director for the Alt school is not technically in charge of the food but helps to serve the food occasionally and heats and serves the breakfast every day. Next, we conducted a second informal interview with the School Food Director to see if she was willing to make any changes to the school lunch, such as increasing options for the meals offered, increasing fresh food, and improving the salad bar. We sent out a survey to the rest of the school to better understand their preferences too (See Appendix C).

RESULTS

At the beginning of our project, we discovered that most of the students in the group did not like the school food because of its taste. Anecdotally, the students said that the school food is overcooked or undercooked, soggy, wet, microwaved, and rubbery. They said that because it sits in containers for a long time, the food gets soggy. They also said that more of the food is wasted because of the 1 cup of fruits/vegetables rule. The students said that the salad bar is not rotated often enough, so some items get stale. Additionally, they sometimes get the same reheated breakfast for three consecutive days. These are the main details students offered about the school breakfast and lunch, and we thought it would be a good idea to find out official details from the Food Service Director.

The Food Service Director told us about the school meal system in Waterville and specifically how the food for Alt is prepared (See Appendix D). Alt is part of a “Satellite Food Program” and the school meals come from Waterville Junior High, as it does for two other locations; however, the food for Waterville High School is cooked on their campus and not, as with Alt, in Waterville Junior High. She also explained the federal guidelines for the menu and the dietary restrictions. She gave us details about the transportation of the meals and the lunchroom specifically that were very helpful:

- 1) The food is transported in covered Cambro units, which are an insulated container to keep food hot or cold.
- 2) There are temperature guidelines for the food (hot/cold) when they are put into the units.
- 3) The food is served from the Cambro unit.
- 4) There are a limited number of staff members at Alt. There is only one person who serves the lunch. She, the primary server, has to work in the Waterville Junior High sometimes, then the Program Director serves the lunch.
- 5) There are limited kitchen facilities at Alt such as prep space, oven space, and freezer space.
- 6) The Alt lunch room is also used as a classroom. Each main course item needs space to be laid out. As a result, there is limited space for the different lines, such

as deli bar, hot entree bar, and full salad bar. As a result, Alt does not offer all the choices in these items.

- 7) The main hot entree, deli bar, and express salad are offered every day.
- 8) The salad bar is rotated daily.

We noticed discrepancies between the Food Service Director questionnaire responses and the actual school meals program at Alt that we knew about through the students in group who see the school meals process every day. For example, the Food Service Director said that the salad bar is rotated every day, which is not true. In addition to addressing these discrepancies, we wanted to increase the space in the lunchroom at Alt to allow for all choices, the hot entrée, deli bar, and express salad. We also wanted to change the lunch time, so the food does not stay in the containers for two hours.

Our first step was to have a conversation with the School Program Director. She told us it was not possible to change the lunch time or remove some items from the lunchroom for a one-time per day investment in kitchen facilities. She also further confirmed the actual situation of the school meals program at Alt that we already knew about but were different from the questionnaire responses by the Food Service Director. After this, we decided to speak to the Food Service Director in order to clarify the discrepancies between her questionnaire answers and the actual situation.

The actual situations were:

- 1) The salad bar is not rotated daily.
- 2) The main entree, deli bar, and express salad are not offered daily.
- 3) Breakfast is not changed daily and that means it is not fresh.

The Food Service Director was surprised by some of the details that we gave her. She said that she would look into all the discrepancies and find out the correct details. She was very receptive to our feedback and this made the students feel genuinely heard for maybe the first time in the project by a person in a position of power. She said she

would work to implement some of our suggestions, such as sending more salad boxes, and would be receptive to more feedback.

The Food Service Director wanted to know what the students at Alt would prefer within the options that are available. To answer her question, we decided to send a survey to the rest of the school to add their preferences along with ours. We received 17 responses to the survey out of 42 students in the school (See Appendix E). The survey was divided into two sections. Section A questions gathered information about students' access to and consumption of meals both at Alt and at home. Section B questions were specifically about lunch preferences based on the options that are available.

Table 1 and Table 2 show the results from Section A of the survey. Table 1 shows the students' access to meals in a school day, the weekend, and the summer. Additionally, it includes information about students' consumption of the school lunch and consumption of meals in a school day.

We found that three students have access to two meals in a school day which means that they presumably have access to only the school breakfast and school lunch (Table 1). Additionally, none of these three students eat the school lunch. Two of the students eat two meals a day and one student eats only one meal a day including both at home and at school. We found that one student sometimes has access to meals over the weekend and during the summer (Table 1).

Table 1 also shows the number of meals that the students at Alt actually eat in a school day. Nearly half of the students (8/17) said they eat one or two meals a day and nine students said they eat three meals a day (Table 1). This low number is not surprising because 88% of the students (15/17) do not eat the school lunch every day.

Table 1. Section A survey responses on consumption and access of meals (n=17)

Student Survey Responses (n=17)	
How many meals do you have access to in a school day? (both at school and at home)	
3	14
2	3
Do you have ACCESS to meals in the summer?	
Yes	16
Sometimes	1
No	0
Do you have ACCESS to meals over the weekend?	
Yes	16
Sometimes	1
No	0
How many meals do you EAT in a school day? (both at school and at home)	
3	9
2	6
1	2
Do you eat the school lunch every day?	
Yes	2
No	15

We found that only two of the students actually eat the lunch every day (Table 1). Table 2 includes student quotes about why they eat or do not eat the school lunch. Twelve of the students said that they do not eat the lunch because they do not “like” it. Additionally, five of the students said they were “not hungry”. The word bubble in Figure 12 illustrates the most common words students use in response to this question. The bubble also shows that “like” and “hungry” are the most common words, signifying the importance of the taste of the food and hunger in the school. This word bubble is a useful way for us to see the schematic of the survey results.

Table 2. Responses to why the students eat the school lunch or not (n=17)

Why do you eat the school lunch? Or why not?
Sometimes I just I feel like eating or I like it but sometimes the food is not cooked right (personal opinion) and not appetizing
sometimes I don't have time or I don't like what they have
It tastes bad and the quality is low. Sometimes things are expired when served. We (the alt school) definitely get the "hand me downs" of the food.
Usually it's just something that I don't like. Sometimes it can look unappetizing, or I'm just not hungry.
Because I get hungry so I eat
Sometimes the food is tolerable and other times it is not
nasty asf
I'm not that hungry
I don't like some of the options for lunch.
Because sometimes the food does not look like it taste or honestly smell good.
Usually because im not hungry.
Sometimes the food is just plain bad
School food is usually gross. Sometimes it's soggy or stale from sitting around or it's just plain gross.
Sometimes I'm not hungry or still full from break feast
Sometimes the food is either not good or I just don't like it.
Because I like food
because sometimes im not hungry and or like whats givin

In terms of meal preferences, Section B of the survey, we found that nine of students preferred the hot entrée, six preferred the deli bar, and two preferred the express salad (Figure 13). We also learned more details about preferences among these options (See Appendix E). The results indicate that the students would like more options for school meals, even among options that currently exist. This information is very important because we can pass it to the Food Service Director.

What is your favourite option for lunch?

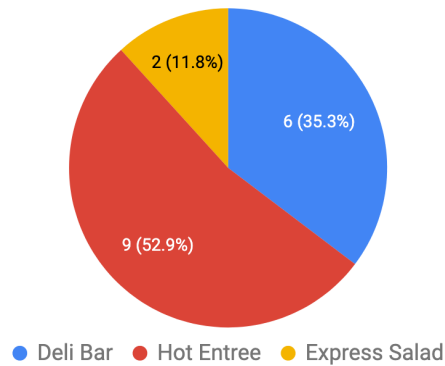


Figure 9. The Number (Percentage) of Students that Prefer Each Meal Option.

Table 3. Additional information on school meals that the students provided (n= 17)

Is there anything else you would like to add about the school lunch?
no
i want more good breakfast options
No frozen food. We want fresh food that hasn't been sitting in the fridge for 2 or more days.
Overall it's been ok lately.
I know its required, but if kids don't want to take something from the salad bar they shouldn't have to because it will just be wasted which is the opposite of what we are trying to do so to me it makes no sense.
no
actual real food
Nope
No
Food that wont make me gag upon getting it
nope
N/A
nope
regular salad on the salad bar butter for buns
Snack bars?
no
no

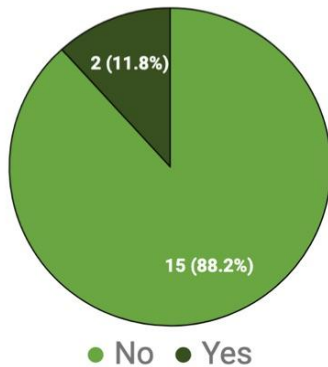
Action Steps

One of the most important parts of a YPAR project is the action steps co-researchers take based on findings. We decided to share our results in order to spread awareness about our school meals program. We specifically wanted to talk about how most students do not eat the lunch every day, how the school meals are not always edible, and how the school meals need to improve. We decided to make a poster with this information, shown in Figure 10. Additionally, we presented our findings at the Colby Liberal Arts Symposium to raise awareness about the project to a larger audience of Colby students, Colby professors, the Waterville community, the food personal who cook the school food and serve it, and Healthy Waterville Action Team Members. We also distributed the informational poster (Figure 10) during the presentation.

We also made and shared a booklet that specifically presented our survey results with the Food Service Director and her team (See Appendix). This was an essential step because the Food Service Director will know exactly what the Alt students want. This may reduce the problems associated with the lack of space for all the three meal options: Hot Entree, Deli Bar, and Express Salad. This will also give the Food Service Director exact details about student preferences regarding the cheese and meat options for the deli bar, the salad bar, and the express salad. Additionally, as does the poster, this booklet shows the lack of student participation in the NSLP, mostly due to the taste and quality of the food. Lastly, we requested the Food Service Director make some changes to the school meals, based on the survey results, conversations with students, and conversations with her, such as fresh breakfast every day, rotating the salad bar more often to reduce the amount of stale food, and better quality of food in general. We also requested the same food as the “traditional” public high school. We hope that these requests are implemented in the following academic year.

FOOD EQUALITY MATTERS

Food Equality Matters (FEM) is a group of seven students from Waterville Alternative High School and Teen Parent School Program who meet regularly to address food inequity in our lives and in our school. We are a high school class that functions as an emotional support group while also looking for solutions to improve our school meals. We sent out a survey to our school to try to improve the school meals. Here are the results.



*Do you **EAT**
the school
lunch every
day?*

Student Feedback...

"It tastes bad and quality is low. Sometimes things are expired when served. We (the alt students) definitely get the 'hand me downs' of the food"

"Food that won't make me gag upon getting it"

"I want more breakfast options"

"No frozen food. We want fresh food that hasn't been sitting in the fridge for 2 or more days"



*We want a change in our school meals.
We want more options.
We want better quality food.*



Figure 10. Information poster distributed at CLAS, school, and to Healthy Waterville Action Team members

Lastly, we purchased water bottles for all the students at the Alternative High School and Teen Parent School Program. Water is an essential part of food security and not everyone has access to water and especially safe drinking water in the neighboring towns. The water bottles will also help to reduce the plastic water bottle waste that is generated in the school. The water bottles also raise awareness about our project in the school and anywhere else they are seen because we put the logo on them (see Figure 11).



Figure 11. Water Bottle's for the Alt school

IMPLICATIONS AND FUTURE PLANS

Youth Participatory Action Research projects impact both the life of the young people involved and the community. This epistemological shift in research enables student voice, student agency, education through participation in all parts of the research process, promotes understanding of the power dynamics in the school and community, engages action steps based on the results, and hopefully improves the problem. Through conversations with the students, I found this to be true of our YPAR project: our project increased student voice and student agency. The students in the group developed knowledge about research methods and food equity. Additionally, they came to better understand the power dynamics in their school and community. Throughout the project, we had hard conversations about access to and consumption of food. This section will explore these implications in detail and the results associated with the food project specifically.

The Project through a Food Equity Lens

The survey results were very telling about the status of the food system and how it affects the lives of the students at Alt. They show that some of the students at Alt are food insecure across all four of the FAO dimensions: availability, access, utilization, and stability. In addition, we learned that the food system is inequitable towards Alt students. Therefore, the food system at the Alternative High School, and to some extent in Waterville more broadly, is broken and there is a lack of food equity for the Alt students.

With regard to access, stability, and availability of food, it may seem like the Alt students are food secure, since they get school breakfast and lunch. However, it is important to remember that according to the FAO, food stability means access to food at all times of the year, including the summer and the weekend. One student in the survey responded that they “sometimes” have access to food over the weekend and in the summer, which means that this student is food insecure because they do not have access to food at all times of the year. In fact, the Alt school does have a food pantry. A few specific students are given bags with food occasionally. However, none of the students in

the group know about this and it is very unclear about whether the program exists or how to access it. The Alt school could be more transparent about the food pantry and this could help reduce food instability over the weekend for the students and food insecurity for the students attending Alt and their families, as the WBP helps feed families too (Hanson & Connor, 2018; Shanks & Harden, 2016).

Additionally, some of the students in group mentioned that they have visited the soup kitchen in Waterville at some point in their lives. This means that these students are food insecure because using emergency food sources is associated with food insecurity. Combining the survey results and the conversation in group, at least six students in the school have explicitly said that they have used emergency food sources. On top of that, three students said that they have access to two meals in a day, which we can assume are the school breakfast and school lunch. These students are also food insecure. These numbers only reflect the students who have explicitly mentioned these facts through the survey or through our group discussions. There is a lot of stigma associated with using emergency food sources, so even though Waterville has 6 emergency food sources, it is possible that students do not use them or dare to say that they used them (Senechal, 2019). Therefore, there may be more students who are food insecure, which is even more worrying, especially if they do not consume the school lunch or use emergency food resources.

The survey results indicate a lack of consumption of food among Alt students. Although, our sample size was small, the results show that only 12% of the students eat the school lunch every day (Table 1). The NSLP was implemented in order to reduce childhood food insecurity; however, if the students do not actually eat the food, it does not help. Technically, the students at Alt have “access” to two meals a day during school days as part of NSLP and SBP, which should help to reduce food insecurity. However, the students do not consume the school lunch every day, though it is possible that they take the meal and discard it. This can lead to food wastage which suggests a loss of nutrients, economic loss, and environmental consequences (Blondin et al., 2017). The fact that the students do not eat the school meals also indicates a failure of the NSLP and

SBP in Waterville. The lack of consumption could be attributed to the changes brought on by the Healthy Hunger Free Act of 2010. The program was introduced abruptly in 2010, which led to a sudden increase in fruits, vegetables, and whole grains for students. In response, the Alt school could implement taste-testing, increase exposure of the same vegetable or fruits, and sample lunch entrées, which is shown to increase consumption (Gross et al., 2018; Lakkakula et al., 2010; Pope et al., 2018; Wardle et al., 2003). Such practices could lead to increased consumption of school meals.

In addition, the students at Alt consume between 1-3 meals in a school day, which could be because most do not eat the school lunch every day. The survey results do show that five of the students do not eat the school lunch because they are not hungry (Table 2). The lack of consumption of meals leads to food under-utilization. Food utilization helps with nutritional well-being through healthy diets, clean water, sanitation, and basic health care (Food and Agriculture Organization, 2006). It could be helpful to have nutrition programming to explain the benefits of eating healthy food. However, students could lack hunger because of mental health reasons, such as body-image issues or depression, or persistent hunger in their lives (Swanson, Crow, Grange, Swendsen, & Merikangas, 2011). This lack of consumption of food in general, and especially the lack of consumption of healthy food, has a lot of health effects. It can lead to iron deficiencies that are needed for mental, cognitive, and behavioral development (Eicher-Miller et al., 2009). Additionally, lack of nutritious food can increase the risk of cancer, cardiovascular diseases, diabetes, and hypertension (Videon & Manning, 2003). Therefore, efforts to increase meal consumption require a deeper understanding of why the students at Alt are not eating three meals a day.

A food equity lens could be helpful in order to increase intake of food at the Alt school. The students at Alt do not get the same quality of food as the Waterville High School students. This seems especially troublesome, given so many of these students struggle with mental health issues or stress related to poverty and parenting young children. In a truly equitable world, everyone should have access to good quality food on a daily basis (Dandekar, 1994, Lacy, 1994). To the point, one student mentioned that Alt

students are getting “hand me downs,” which makes the students feel like they do not matter. The students are served reheated breakfasts and the same boxed salad for a number of days. Even if the students were not technically getting “hand me downs,” the feeling of being treated unfairly is not going to go away for the students, and this leads to internalized oppression. Throughout this project, to make a small change in the school lunch, we had to ask so many times for every small thing. One method to increase food consumption at Alt would be for students to receive better quality and fresh nutritious food and for those who educate and care for them to insist that this happen.

The process of trying to create an equitable food system has been challenging and we have had to fight in order to make a change. The small changes that we have requested for next year should improve the school meals and hopefully, the students will get fresh food. The survey results from Section B along with the booklet we sent to the Food Service Director, should help to increase the options of the food offered at Alt. Hopefully, Alt students will start to get the same food as the Waterville public high school students. The students at Alt are still excited about this small change because the conversation has actually started and the people in positions of power have started to listen.

Student Voice and Student Agency

One of the biggest implications of this research project is student voice and student agency. Taft, Freire, hooks, and Brown all underscore the importance of genuinely listening to children and youth, not only for their healthy development, but as a way to make their environments more just and caring places. The students at Alt were genuinely heard throughout our research project; taking them seriously as experts on their own experience and as knowledge-producers was the central theme of the entire project. The intentional start of group every day with a check-in gave students the time to voice their concerns. The students in group began to talk more about their lives over time and we started to function as an emotional support group, too. This was an outcome of the YPAR process because the students who shared trusted the rest of the group and were truly vulnerable. Students shared details about their lives such as being bullied, having

mental health issues, dealing with alcohol abuse, and their troubled home lives. Furthermore, I was also truly vulnerable as I was a part of the group and honestly, this group knows more about life and my struggles than anyone else. Therefore, our group was a safe space where everyone felt comfortable and could voice their opinions, views, and struggles.

Beyond that, the Alt students also began to voice their opinions about food insecurity and food quality to other people in our project, such as the Food Service Director and the Program Director. The students used their voice to create change in their school. They took action steps such as sending the questionnaire, inviting the people in power to have conversations, and sending out the survey with my help to reach outside resources. Additionally, the students suggested we make an informational poster (Figure 14), and the booklet for the Food Service Director. I encouraged the students to present at CLAS. These were all opportunities for the students to exercise agency.

This project, not only, led to student voice and agency for the Alt students, I was also able to voice my views and opinions. Group was one the safest places for me for the past year. I felt very comfortable and could be completely honest there. However, I also need to address from serious power dynamics between the Alt students, the Alt teachers/administrators, and myself. As an elite Colby student, I had some power over everyone in the school because of the town-gown relationship in Waterville and my power as someone getting an elitist college education. Therefore, I had to make sure that I did not make any statements about the school or the school meals because I do not really know much about the school as an outsider. Despite these steps, I still had some power over the students as an older facilitator in the classroom. On the other hand, as a womyn of color from India, the third world, I sometimes had the least amount of power in group and in the school too. Overall, through the project, I was empowered to make change in this school but also the rest of the world. I realized that whatever small impact I may have had on my students' lives is the most important part of the project for me.

As a result of this project, the Alt students are not scared, timid, or shy to voice their opinions about their own lives anymore; they have experienced the power of using their voices as a form of agency to enact social change for themselves and others (Rodriguez and Brown, 2009, Cahill, 2007). The fact that these students had the confidence to speak at Colby in front of 30 people about their project showcases student empowerment. In addition, over the course of the project, the students also started to ask critical questions such as why they do not receive the same food as the high school. This deeper critical awareness and sense of personal empowerment is an example of all that they have achieved through this process.

Education through Participation

Another component of the YPAR process is that the co-researchers, the Alt students, learn through the project by actually participating and doing the work (Cahill, 2010). Firstly, the students learned how to conduct research and understood the entire research process. We learned how to identify the problem (school meals) and turn it into a research question in order to more deeply understand the problem. The students learned traditional research methods by conducting an interview, formal and informal, developing and sending out a questionnaire and a survey. Before we actually decided on our specific methods, we collectively learned about other methods, namely photovoice, journal entries, observational notes, and focus groups. Additionally, we also learned how to use google docs, google sheets, google slides, google forms, and google drive to organize our research project and implement it. Learning these skills also gave the students the confidence to conduct research and therefore, yet again, led to student empowerment.

Secondly, a big part of the educational process for all of us together was understanding the food production and consumption system and school meals system. Specifically, we looked into the emergency food system in the Waterville Area through a spatial map. The students again participated in this process by talking about their experience in the food pantry or soup kitchen. We also decided to specifically understand the meaning of food security and food equity. This was a great learning moment in the classroom because most of the students did not even know these words existed or what

they meant. The students (the oppressed) did not know the words that are used to describe the situations that they are in or understand the systems that maintain inequity; the YPAR process ensured the students were heard and learned the terminology necessary to make a change (Cahill, 2007, Tuck and Yang, 2010, Irizarry and Brown, 2018, Fine and Torre, 2006). Through this process of ‘educating’, we are “re-membering” the bodies and histories of the Alt students that have been left out of the research process (Fine and Torre, 2004). Therefore, the participatory educational process of learning about food equity and food security was empowering for the students.

“The System”

The group learned about the National School Lunch Program (NSLP) and School Breakfast Program (SBP), which are federal programs. The food at Alt is part of this system, and therefore, we needed to understand the system and how it operates. The Food Service Director helped us understand this through the questionnaire. The group also learned about NSLP and SBP by doing some traditional internet research to find out the federal and state guidelines, specifically the fruits, vegetables, and whole grain guidelines. The students learned that the Food Service Director creates the menus based on these guidelines and that she is in charge of all the food that goes to the Alt school, Waterville Junior High School, and Waterville High School. Through the research project, we learned that we needed to work with a lot of different people in the school meal system in order to enact social change.

Understanding the system and the power dynamics within the system was one of the hardest parts of this research project. Through this collaboration, the students actually began to unpack and question the power dynamics in the school and school meals program and learned how to voice their concerns and act upon it. We understood that the Alt School Program Director was in charge of the lunch that came to Alt. However, she also needed to work within the system as she did not have the power to change menus. There were also other barriers, such as the Alternative High School renting the school building, from the Maine Children’s Home for Little Wanderers. The Alt school is not allowed to leave anything in the auditorium or use any electric appliances without getting

special permission. Students learned how hard it is to work within the system to make a change when they are the lowest and least powerful in the system (See Figure 12). However, because the entire system is meant for the students, they learned to speak up on their own behalf and address inequities. Therefore, we in the group had a chance to voice our opinions on our school meals, and we took this opportunity seriously.

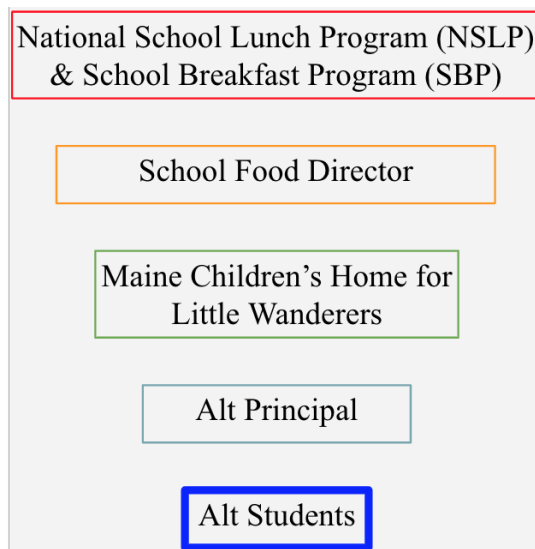


Figure 12. The Power Dynamics in the School Meals System for the Alternative High School

The school meals are for the students; however, they still have the least power over their own food. Therefore, our project was all about understanding the system and tapping into the different resources that were available to us. We gathered a lot of information about the Alt school meals system from the Food Service Director through the questionnaire. Next, we decided to tap into a resource at Alt, the School Program Director. However, she was not willing to make any of the changes we suggested. She said it was not possible to change the lunch time because some students take classes at Waterville High School, even though the change we were suggesting was for ‘SWAP’ period, which is a time to catch up on work. The Program Director was not willing to change the layout of the lunchroom or arrange for additional one-time investments, such as an oven, because the lunchroom is used as a classroom too. Again, we suggested that the classes could be moved to other areas in the school.

In the face of the Program Director's refusals, we tapped into another resource, the Food Service Director. She was willing to genuinely listen to us and was quite shocked to learn some of the details about the Alt school meals. We learned how to tap into the right resource eventually, even though we heard so many "NOs" and through all the ups and downs. The fact that we have started this conversation in the Alt school has already led to small-scale changes, such as salad boxes for lunch and fresh breakfast before the CLAS presentation. Through this, the Alt students understood that they matter and belong. They learned the importance of understanding who has the power to make change and how to access this person; they learned to use their voice and experienced the possibility of having agency to enact social change.

The Essence of YPAR and Food Equity

The YPAR project at Alt was an attempt to understand how food inequity affects the lives of the students. Food inequity definitely has a big impact on the students' lives, as mentioned above. However, we have overcome some big hurdles in this process that embody the essence of the YPAR approach and the philosophy behind food equity. One of the biggest moments in the group was when students shared that they have visited the soup kitchen. To have a conversation where someone actually says that they are food insecure and get support from the rest of the group is the biggest accomplishment of the project. It was only possible because of the YPAR approach and the relationships we built throughout the project. Additionally, if the students start to talk to other students and build this trust outside the classroom, the Alt school can work on reducing the stigma around food insecurity. This YPAR project was successful because the students were given the power to explore and critically analyze the school meals and therefore the research project was a process of 're-membering' the students (Cahill, 2010).

The second big accomplishment of the project was how much the students cared about the project and enacting change. We came up with the name of our project together, "Food Equality Matters" because the students believe that they deserve good food. We discussed the difference between 'equality' and 'equity' with regard to the

name and decided on ‘equality’ because it is a more universal term that most people understand, whereas ‘equity’, though more apt for our project, may not be best to raise awareness about our issue. The students worked together and designed our logo for the project, which is on our sweatshirts and water bottles (Figure 11 and 13). They wanted to create an informational poster about the survey results (Figure 10) that ended up being a protest of sorts because they wanted to fight to make a change for themselves and their school. I think that the change in the students from the beginning of the project to the end has been the biggest accomplishment of the project. Both in terms of the YPAR approach, by giving students voice and agency to conduct research, and also embracing the food equity philosophy by asking for, and demanding change.

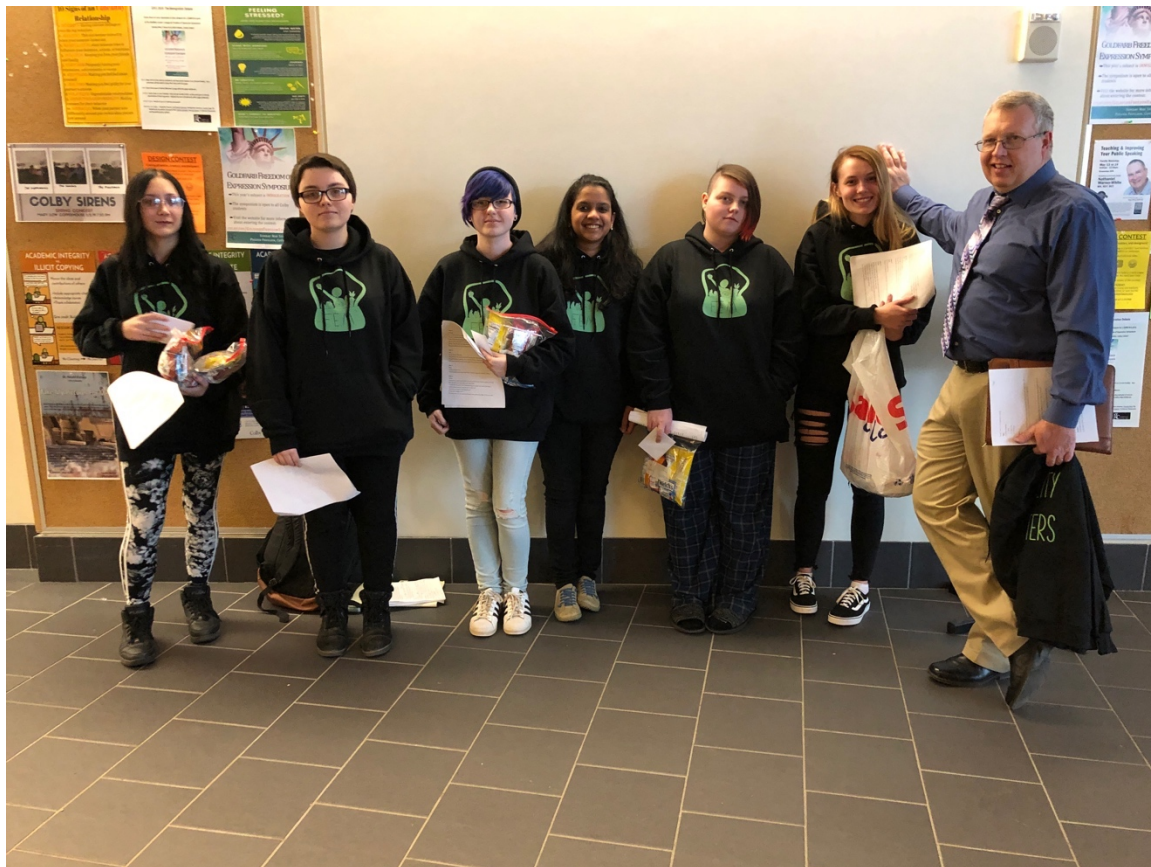


Figure 13. Group picture after CLAS presentation

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APPENDIX

Appendix A

Lesson Plans

First month- September- Building a relationship and understanding PAR!- Creating a safe and trusting space is the first most important step in this work! I will plan ice breakers and activities to start the first week off and some more too but also ask students to decide on some and plan them. I will plan activities to understand PAR and the also the importance of student voice and agency! But also ask the students who were in the class earlier to talk about their experience and take initiative in this!

Second Month or so- Start talking more seriously about FOOD!! Plan activities to tell the students about food resources in Waterville. See what project the students want to implement. Plan some more activities on Food and how to further develop these conversations. Also plan activities and show examples of other youth groups around these issues

Third and Fourth Month- Implement the project. I will plan activities on how to connect data and the different ways that we can collect data, for example using surveys, and other methods!

Fridays: There will be work that is leftover and if there is extra time, I could start on with the following weeks work.

Common Ground Fair: What do we want to do there?

September 21st to 23rd

<http://www.mofga.org/The-Fair/Fair-Volunteers>

September

Week 1

Day 1-With Me!

Activity 1: Naming ritual- 15-20 minutes

Including the meaning of name, where it comes from, and what do you feel like- names of students who introduced themselves previously too.

Activity 2: Who Am I?- 30 minutes- 3 minutes each for 10 people

Anything we all want to say. No one is allowed to react, or reply, or judge. This activity is for the students to open and talk about themselves. It is so that we have an option to open up without judgment.

Semester-Long Talk

Talk about what we are going to do!

My one Rule- everything that is said in here stays in here!- please do not share anyone else's story outside this room. We need to make this a safe space where we are all comfortable sharing. We can make the other rules together later on.

This is for my Thesis for COLBY- be very clear about this!- It is going to be your project and or our project and we are just going to probably do some work around food hopefully.

Introduce PAR to run PAR activity the next day.

Day 2- Without Me!

Activity 1: Who Am I?- 30 minutes- 3 minutes each for 10 people

Anything we all want to say. No one is allowed to react, or reply, or judge. This activity is for the students to open and talk about themselves. It is so that we have an option to open up without judgment.

Activity 2: Introduction to PAR- 55 mins!

From YPAR hub

Week 2

Day 1-With Me!

Activity 1: Who Am I?- 30 minutes

Activity 2: Let's talk about PAR!

Cammarota and Fine lay out five principles of participatory action research that separate it from other forms of social science research:

The research is collective, conducted not by an individual but by a group of researchers with multiple perspectives.

The group of researchers are stakeholders and insiders within the site of their research. Researchers may carry various amounts of power within the site, and may be facilitated by “outsiders,” but the voices of the insiders are centered in the research design, questions, and results.

The researchers are practitioners of Critical Race Theory, meaning they “analyze power relations through multiple axes,” including race, sexuality, gender, and class.

The knowledge produced through research should be critical and oriented toward social changes.

PAR is an active process where the “research findings become launching pads for ideas, actions, plans, and strategies to initiate social change.”

Day 2- Without Me!

Activity 1: Who Am I?- 30 minutes

Activity 2: Learn about another PAR Project!

The one from last year!

HW: try to explore more projects!

Week 3

Day 1-With Me!

Activity 1: Who Am I?- 30 minutes

Activity 2: Let’s talk about what we want to do!- Discuss last years project

Activity 3: Group Norms- 20 minutes

Materials needed: large sticky paper, colorful markers

The how: Split the group into smaller groups of 3-4. Ask each group to brainstorm 5-10 norms they would like to hold in their work, providing examples such as “What’s said in here stays in here,” and “One Mic, One Diva.” After ~10 minutes, bring the subgroups together and ask each group to present their norms. Each proposed norm requires unanimous support to be added to the group norms list; give time for group members to raise objections to each norm, suggest edits or amendments, and discuss. For example,

the proposed norm “No Swearing” was edited to “No harmful or bigoted language” before being unanimously added to our group’s norms. Finally, make time for artistic/interested group members to make a colorful norm poster for the meeting space. You might also ask group members to sign the norm poster.

Day 2- Without Me!

Activity 1: Who Am I?- 30 minutes

Activity 2: PAR Process- 15 minutes

Activity 3: Youth-Adult Power Sharing- 60 minutes

From YPAR Hub.

Week 4

Day 1-With Me!

Activity 1: Who Am I?- 30 minutes

Activity 2: Important of Student Voice and Agency!

Need to make it clear that the students' voices and actions are very important!!

Share my stories and ask other students to share too!

Activity 3: Snowball Fight- 10 minutes

Materials needed: scrap paper, pens/pencils

The how: Ask group members to on their slips of paper, provide feedback on the group: one thing they like (a plus +), one thing they would change (a delta Δ), and one affirmation for another group member (a “props”). Emphasize that the papers are anonymous. Once everyone has written, each person can crumple up their paper into a “snowball.” Then, in an open space, for 3-5 minutes, have a snowball fight, throwing the papers at each other and around the room. At the end of the designated time, each person finds a paper, uncrumples it, and reads aloud what it says. After reading the feedback, group members can discuss.

Example snowball response

Day 2- Without Me!

Activity 1: Who Am I?- 30 minutes

Activity 2: Free Writing! Share with me and the group if you want.

October

Week 1

Day 1-With Me!

Activity 1: Who Am I?- 30 minutes

Activity 2: Let's start to talk about FOOD and what project we want to do.

Day 2- Without Me!

Activity 1: Who Am I?- 30 minutes

Activity 2: Learn about another project and write information that could be useful for us.

<http://www.hartfordfood.org/programs/grow-hartford-youth-program/>

Week 2

Day 1-With Me!

Activity 1: Peaks, Valleys, and Horizons- 30 minutes

Activity 2: What did we think about the project

Day 2- Without Me!

Activity 1: Peaks, Valleys, and Horizons- 30 minutes

Activity 2: What food resources are available in Waterville?

What food resources have you used/visited?

Week 3

Day 1-With Me!

Activity 1: Peaks, Valleys, and Horizons- 30 minutes

Activity 2: Defining the Research Question

YPAR HUB!

Day 2- Without Me!

Activity 1: Peaks, Valleys, and Horizons- 30 minutes

Activity 2: Your Personal Connection to the Issue

YPAR Hub!

Free Writing about this too! To Share with me! I will do this at home and share with the group too. Share the reflection with me too.

Week 4

Day 1-With Me!

Activity 1: Peaks, Valleys, and Horizons- 30 minutes

Activity 2: Start to talk about how we are going to do this.

Day 2- Without Me!

Activity 1: Peaks, Valleys, and Horizons- 30 minutes

Activity 2: Research Methods Round Robin- 60-90 minutes

YPAR HUB!

November

START WORK!!

I have activities like Bias and Stereotype training guides that I will include in different times.

I also have different activities from YPAR Hub like focus groups, interviews and how to conduct those! I will use them as is seen necessary.

Imagining your dream community- YPAR Hub- I will do this at a time when the group seems down or when it is a good time.

Appendix B

Questionnaire for School Food Service Director

Lori Hartin: School Food Service Director

We are going to ask you a few questions related to our school's breakfast and lunch.

Please answer in as much detail as possible. Thank you so much.

1. What is the food budget for the Alternative High School and where does it come from?
2. Where does the menu come from? Is there any possibilities for changing the menu?
3. How often is the salad material rotated?
4. Where is the food purchased from? Are the vegetables, meat, fruit, and bread purchased fresh?
5. How is the food prepared?
6. Why do we receive reheated foods? Why do we receive leftover food that is reheated?
7. Are there certain restrictions to ingredients like salt and pepper? If so what are the restrictions and where do they come from? Can they be changed?
8. How can the quality of the food (freshness) be improved?
9. Where does the leftover food go?
10. Why does the high school serve higher quality food? Not overcooked, not cold, not soggy, reheated, wet, hard, dry.

Appendix C

Survey Questions for the Student at ALT

Please fill this form as honestly as possible. Please note that the answers are confidential. The aim of this survey is to improve the school lunch and breakfast most likely for the following year. All the information collected will help prove that this is an important

Section A

1. How many meals do you have ACCESS to in a school day? (this includes both at school & at home)
2. How many meals do you EAT in a school day? (this includes both at school and at home)
3. Do you have ACCESS to meals over the weekend?
4. Do you have ACCESS to meals over the summer?
5. Do you EAT the school lunch every day?
6. Why? Why not?

Section B

1. What is your favourite choice among the three options for lunch?
2. What options would you like for cheese for the deli bar? Check all that apply
3. What options would you like for meat on the deli bar? Check all that apply
4. What would you like to see offered on the salad bar? (choose all that apply)
5. Which salads would you eat (choose all that apply)
6. Is there anything else you want to add about the lunch program?

Appendix D

Questionnaire Answers by the Food Service Director

1. What is the food budget for the Alternative High School and where does it come from?

The Alternative School is part of the Satellite Food program. The Foods are delivered to the Alternative School each day. Foods come from the main production kitchen which is located at Waterville Junior High School. Food are made according to the menu and forecast has to how many students may participate in the meal service on any given day.

2. Where does the menu come from? Is there any possibilities for changing the menu?

Menus are created each month and must go through an analysis to ensure all components are met for each meal. These components include fruits, vegetables , proteins, whole grains and milk. The school nutrition program must serve lunches/breakfast that meet Federal meal pattern requirements that the National School Lunch Program is based.

3. How often is the salad material rotated?

Salad materials are rotated daily.

4. Where is the food purchased from? Are the vegetables, meat, fruit, and bread purchased fresh?

We have a variety of vendors. We use a variety of fresh vegetables, fruits that are used daily. Products are purchased twice a week to allow for freshness.

5. How is the food prepared?

Food is prepared in the main production kitchen then it is transported to the outlying schools to be served. Food is prepared/cooked according what the menu is and according to HACCP standards. When foods have gone through the appropriate cooking process or prep process, the foods need to be transported.

We use a cambro unit, an insulated unit which can be either used for hot or cold foods. Food are covered and packed into these units. Staff makes sure to pack according to temperature(cold or hot) needed for transporting.

6. Why do we receive reheated foods? Why do we receive leftover food that is reheated?

The kitchen facilities at the Alternative School are very limited and food is prepared at the main kitchen then transported to the Alternative School. It is served from the cambro unit. There is a very small salad bar, which limits what is offered. The main entree which is what is listed on the menu or a deli sandwich or an express salad is offered as choices each day.

7. Are there certain restrictions to ingredients like salt and pepper? If so what are the restrictions and where do they come from? Can they be changed?

The recipes and menus go through an analysis and part of that program is sodium. There are strict guidelines for sodium intake for all students. When the nutrition program checks the menus it will show if there is too much sodium in the menu for any given day. I have to make adjustments to the menu when and if it happens, to bring the sodium levels within the requirements.

8. How can the quality of the food (freshness) be improved?

Satelliting to the Alternative School is a way to allow students to have a breakfast/lunch program within their building. The kitchen facilities and food service staff are limited. The kitchen does not have prep areas or adequate oven space, freezer space. The serving line area is small and the salad bar limits the amounts of choices due to limited space. The food service staff try to do their best while working with these limits. There are also regulations that staff must follow (HCCAP) concerning food safety and service.

9. Where does the leftover food go?

Every day the foods are transported back to the main kitchen.

10. Why does the high school serve higher quality food? Not overcooked, not cold, not soggy, reheated, wet, hard, dry.

The difference is the kitchen facilities, there is no transporting, all foods are made daily just like the Waterville junior high school kitchen. It is a full kitchen with prep/table space, refrigeration, freezers, as well as a full staff. Fresh items delivered 2x a week and the ability to store items. With the space comes the ability to serve different lines. Because the high school has a larger area the

serving lines are separate, having a deli bar line, hot entree line and the salad bar is a full size salad bar unit allowing for more fruit and vegetable choices and the students can be served from either side of the salad bar.

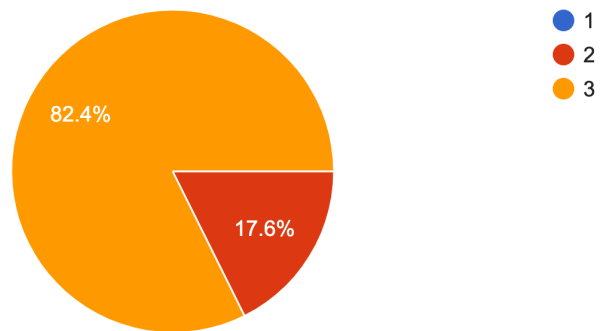
Appendix E

Survey Response

Section A

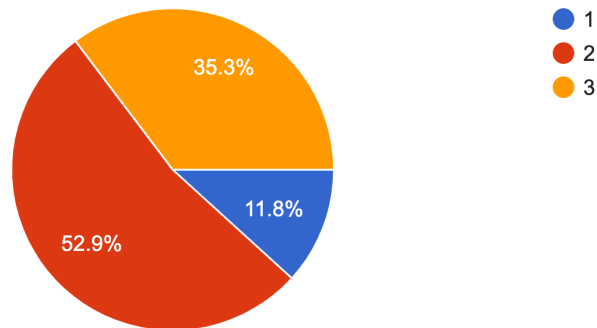
How many meals do you have ACCESS to in a school day? (this includes both at school and at home)

17 responses



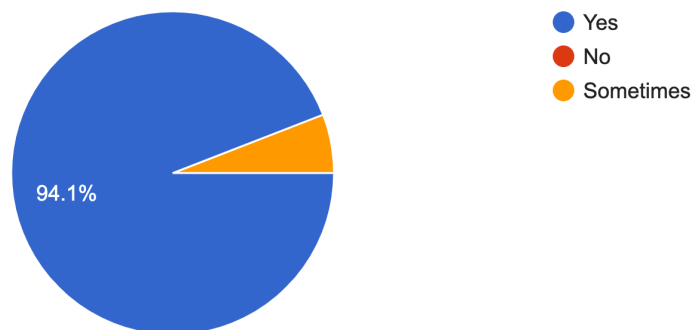
How many meals do you EAT in a school day? (this includes both at school and at home)

17 responses



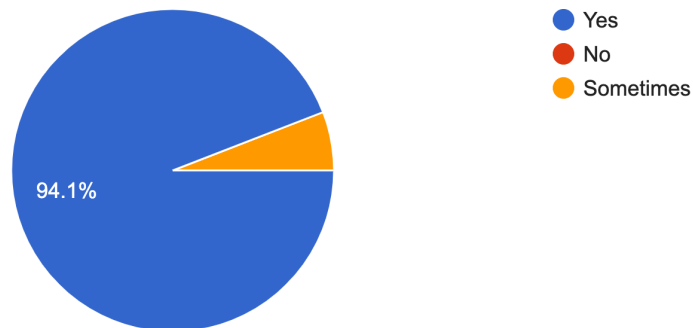
Do you have ACCESS to meals over the weekend?

17 responses



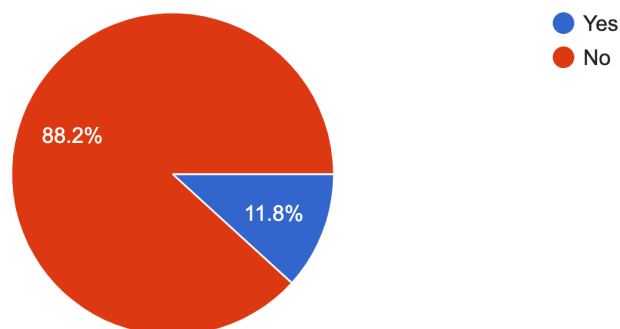
Do you have ACCESS to meals over the summer?

17 responses



Do you EAT the school lunch everyday?

17 responses



Why? Why not?

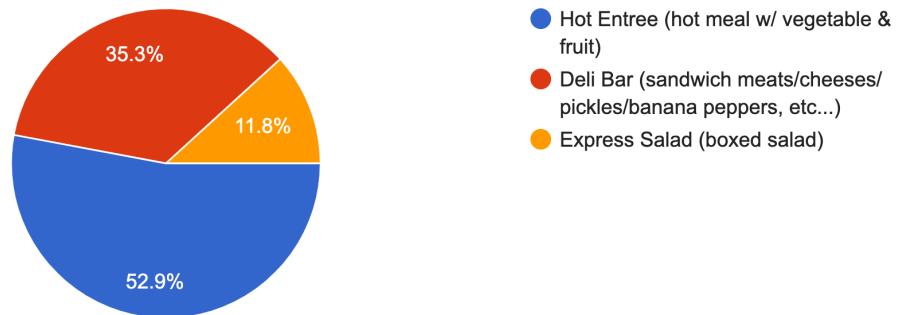
1. sometimes i just dont feel like eating or dont like it but sometimes the food is not cooked right(personal opinion) and not appetizing
2. sometimes i dont have time or i dont like what they have
3. It tastes bad and the quality is low. Sometimes things are expired when served.
We (the alt school) definitely get the "hand me downs" of the food.
4. Usually it's just something that I don't like. Sometimes it can look unappetizing, or I'm just not hungry.
5. Because I get hungry so i eat
6. Sometimes the food is tolerable and other times it is not

7. nasty asf
8. I'm not that hungry
9. I don't like some of the options for lunch.
10. Because sometimes the food does not look like it taste or honestly smell good.
11. usually because im not hungry.
12. Sometimes the food is just plain bad
13. School food is usually gross. Sometimes it's soggy or stale from sitting around or it's just plain gross.
14. sometimes i'm not hungry or still full from break feast
15. Sometimes the food is either not good or I just don't like it.
16. because i like food
17. because sometimes im not hungry and or like whats givin

Section B

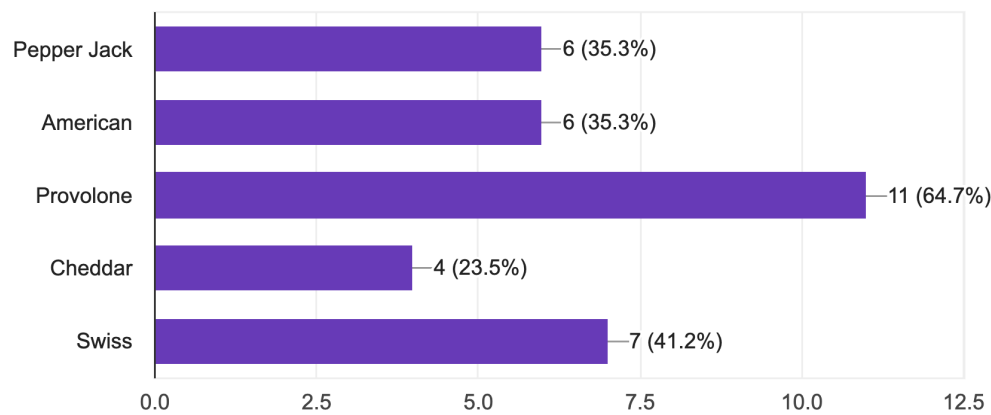
What is your favourite choice among the three options for lunch?

17 responses



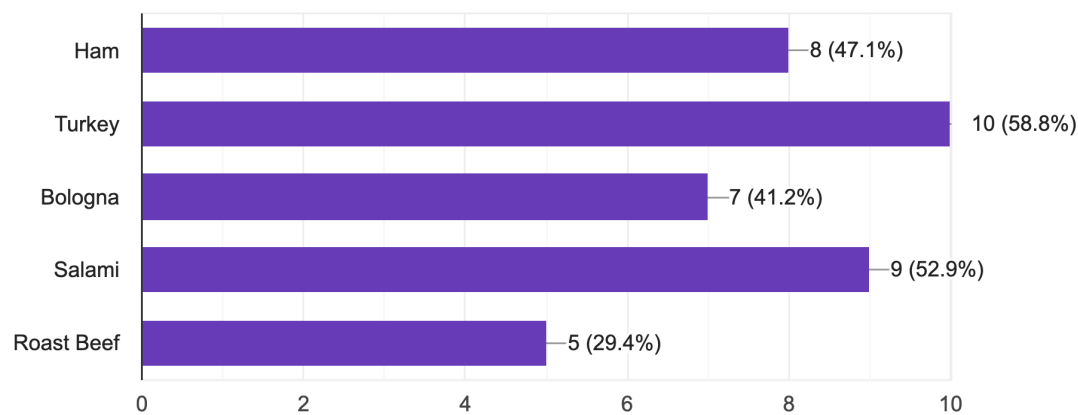
What options would you like for cheese for the deli bar? Check all that apply

17 responses



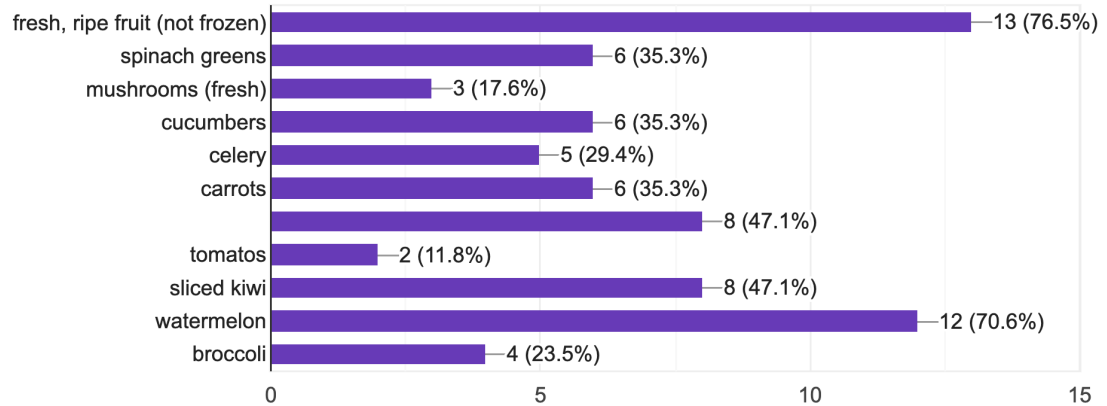
What options would you like for meat on the deli bar? Check all that apply

17 responses



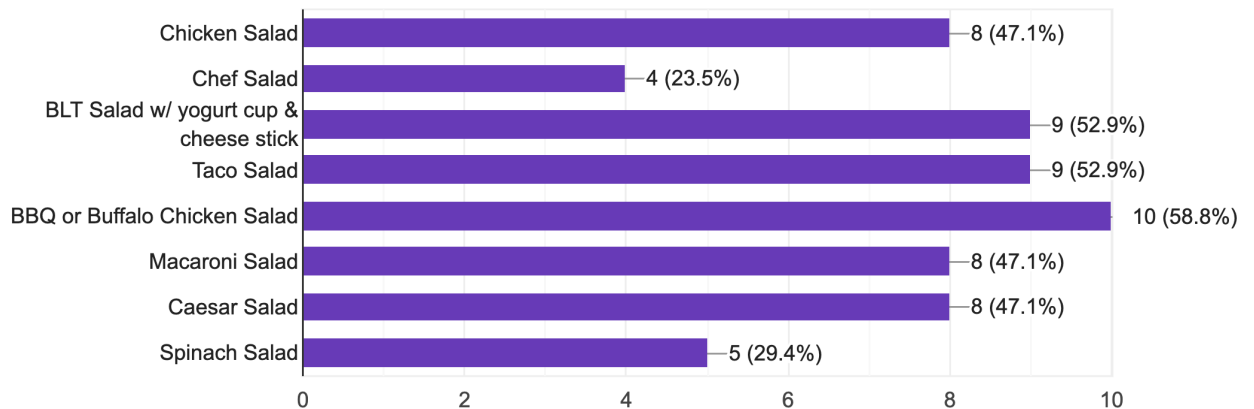
What would you like to see offered on the salad bar? (choose all that apply)

17 responses



Which salads would you eat (choose all that apply)

17 responses



Is there anything else you want to add about the lunch program?

1. no
2. i want more good breakfast options
3. No frozen food. We want fresh food that hasn't been sitting in the fridge for 2 or more days.
4. Overall it's been ok latley.

5. I know its required, but if kids don't want to take something from the salad bar they shouldn't have to because it will just be wasted which is the opposite of what we are trying to do so to me it makes no sense.
6. no
7. actual real food
8. Nope
9. No
10. Food that wont make me gag upon getting it
11. nope
12. N/A
13. nope
14. regular salad on the salad bar butter for buns
15. Snack bars?
16. no
17. no

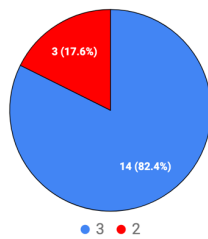
Appendix F

Booklet for Food Service Director

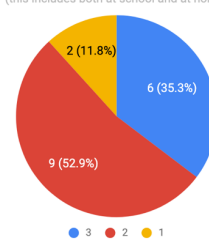
FOOD EQUALITY MATTERS

Food Equality Matters (FEM) is a group of seven students from Waterville Alternative High School and Teen Parent School Program who meet regularly to address food inequity in our lives and in our school. We are a high school class that functions as an emotional support group while also looking for solutions to improve our school meals. We sent out a survey to our school to try to improve the school meals. We got 17 responses from the survey out of 42 students in the school. Here are the results.

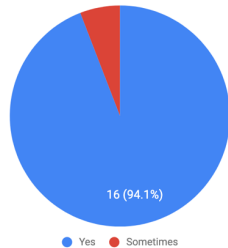
How many meals do you have ACCESS to in a school day?
(include both at school and at home)



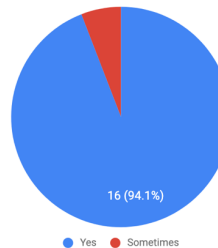
How many meals do you EAT in a school day?
(this includes both at school and at home)



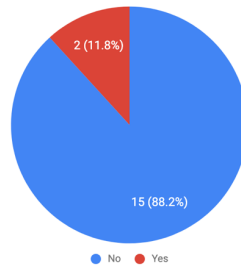
Do you have ACCESS to meals over the weekend?



Do you have ACCESS to meals over the summer?



Do you EAT the school lunch everyday?



FOOD EQUALITY MATTERS

Why do you eat the school lunch? Or why not?

sometimes i just dont feel like eating or dont like it but sometimes the food is not cooked right(personal opinion) and not appetizing
sometimes i dont have time or i dont like what they have
It tastes bad and the quality is low. Sometimes things are expired when served. We (the alt school) definitely get the "hand me downs" of the food.
Usually it's just something that I don't like. Sometimes it can look unappetizing, or I'm just not hungry.
Because I get hungry so i eat
Sometimes the food is tolerable and other times it is not
nasty asf
I'm not that hungry
I don't like some of the options for lunch.
Because sometimes the food does not look like it taste or honestly smell good.
usually because im not hungry.
Sometimes the food is just plain bad
School food is usually gross. Sometimes it's soggy or stale from sitting around or it's just plain gross.
sometimes i'm not hungry or still full from break feast
Sometimes the food is either not good or I just don't like it.
because i like food
because sometimes im not hungry and or like whats givin

These are the results from the first part of the survey that focused on ACCESS to meals and CONSUMPTION of meals in our school.

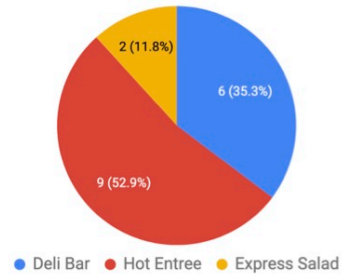
The figures show that while most students have access to 3 meals a day, most students actually eat 2 meals a day.

Additionally, 12% of the students eat the school lunch every day.

The next part of the survey focused on student's preferences about the school meals.

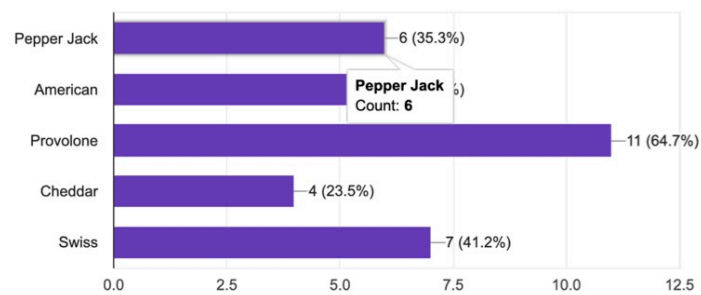
FOOD EQUALITY MATTERS

What is your favourite option for lunch?



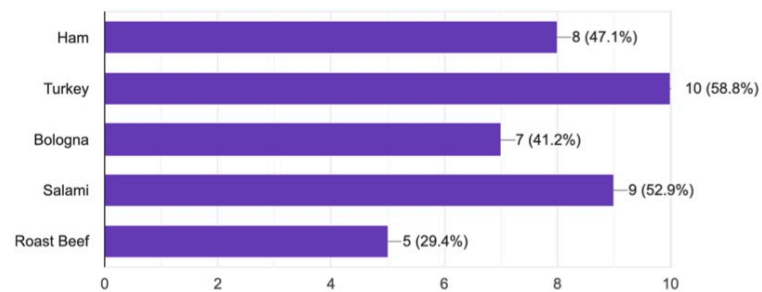
What options would you like for cheese for the deli bar? Check all that apply

17 responses



What options would you like for meat on the deli bar? Check all that apply

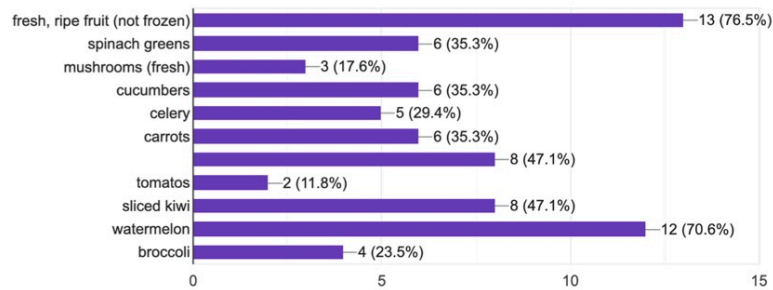
17 responses



FOOD EQUALITY MATTERS

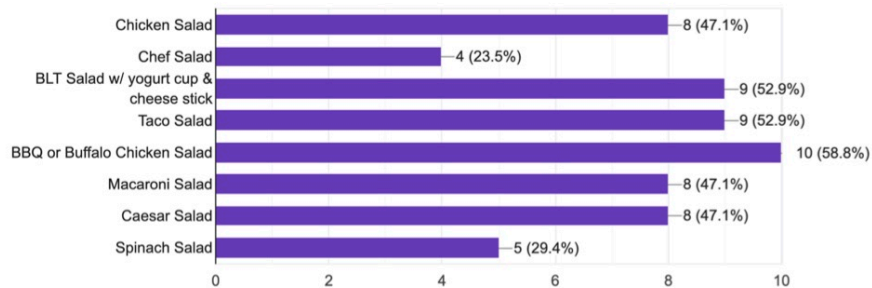
What would you like to see offered on the salad bar? (choose all that apply)

17 responses



Which salads would you eat (choose all that apply)

17 responses



FOOD EQUALITY MATTERS

Is there anything else you would like to add about the school lunch?

no
i want more good breakfast options
No frozen food. We want fresh food that hasn't been sitting in the fridge for 2 or more days.
Overall it's been ok latley.
I know its required, but if kids don't want to take something from the salad bar they shouldn't have to because it will just be wasted which is the opposite of what we are trying to do so to me it makes no sense.
no
actual real food
Nope
No
Food that wont make me gag upon getting it
nope
N/A
nope
regular salad on the salad bar butter for buns
Snack bars?
no
no

With these results, we would like to request:-

- 1) All options in the main meal such as the hot entrée, deli bar, and express salad.
- 2) The cheese, meat, salad bar, and salads based on our preferences as shown in the figures above.
- 3) Fresh breakfast every day.
- 4) Rotation of the salad bar more often to make sure it is fresh.
- 5) Better quality food overall.
- 6) The same options that are offered in the Waterville High School.

We hope that you are able to accommodate our requests. Please reach out to us if you have any questions.