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# Food justice youth development: Using Photovoice to study urban school food systems

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## **Food justice youth development:**

### **Using Photovoice to study urban school food systems**

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#### NOTE:

This working paper is also an article under review--please do not cite without permission. The Nuestras Raíces Photovoice project was collaboratively designed and carried out by the youth group and community food systems coordinator Diego Angarita from Nuestras Raíces, Fertile Ground Director and consultant Catherine Sands, undergraduate anthropology intern Molly Totman, and Professor Krista Harper of the Department of Anthropology and the School of Public Policy at the University of Massachusetts, Amherst.

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## ABSTRACT:

How do youth learn through participation in efforts to study and change the school food system? Through our participatory youth action research (YPAR) project, we move beyond the "youth as consumer" frame to a food justice youth development approach. We track how a group of youth learned about food and the public policy process through their efforts to transform their own school food systems by conducting a participatory evaluation of farm-to-school efforts in collaboration with university and community partners. We used the Photovoice research method, placing cameras in the hands of young people so that they themselves could document and discuss their concerns and perspectives. The research was designed to gain insight about youths' knowledge of food, health, and community food systems. Drawing upon the youth group's insights, we build a framework for building critical consciousness through food justice youth development (FJYD).

**KEYWORDS:** participatory action research, youth, food justice, urban communities, school food systems, civic engagement

*“Improving the health of our youth will require a transformation of our food system... A new, youth-led, multiracial coalition could unleash the voice and energy of those with the most to gain from transforming the food system – young people.” Anim Steel (2010)*

## **Introduction**

In the deindustrializing city of Holyoke, Massachusetts, middle- and high-school students explored a community farm where gardeners have planted rows of cilantro, tomatoes, and *aji dulce* peppers—a taste of the island for people transplanted from Puerto Rico to Massachusetts. Some interviewed farmers while others approached a family that was harvesting their garden and asked them to pose for photos with their produce. The youth came from Nuestras Raices, a community and economic development organization that is trying to improve the quality of school meals by getting the cafeteria staff to cook with local farm products. Over an eight-year period, Nuestras Raices was a central partner of the Holyoke Food and Fitness Policy Council (HFFPC), a network with a mission to create and sustain a more healthy and vibrant Holyoke through the development of programs, policies, community leaders and advocacy. The Nuestras Raices youth group was part of a growing national phenomenon in the United States: youth mobilizations to change the food system. The project presented here involved youth participation, not only as a way of developing healthier food preferences as consumers, but also as a form of civic and environmental education that allowed youth to gain a voice in the complex, layered world of school food policy and to contribute to wider mobilizations around social justice and food justice issues.

How do youth learn through participation in efforts to change the school food system? We present a brief overview of food justice as a concept and as a social movement, and then discuss how youth struggles over school food intersect with broader social justice issues in

Holyoke, Massachusetts. We share results from our youth participatory action research (YPAR) project in which young people from Holyoke studied the school food system in order to make interventions in their own school district. Ginwright and Cammarota's "social justice youth development (SJYD)" framework provides a useful lens on our own work (2002) because they call for social justice youth development (SJYD) framework specifies three lenses for learning: individual, collective, and global. Their model resonated with our team's observations of youth-led food justice work as it unfolded and with young peoples' analysis of their initiation as community activists, and we draw upon it to articulate our own framework for "food justice youth development (FJYD)." We argue that food justice youth development offers unique opportunities for young people to develop sensory awareness and self-efficacy, to critique and challenge stereotypes applied to them, and to gain insights on policy processes and broader social change.

### ***Youth and food justice***

This article takes the critical role of youth as community-based participatory action researchers in the area of food justice as its starting point (Tsui et al., 2013). We draw upon emerging methodologies of youth participatory action research (YPAR) (Sabo-Flores 2008, Delgado 2015, McIntyre 2000). Co-authors Maitín, Colón, Sostre Rosado, and Alger were participants in the youth group that undertook the project is presented here, and they have been involved in the development of this project from the planning stage to data collection, analysis, applications, and dialogic editing with adult co-authors Harper, Sands, Angarita Horowitz, and Totman. Here, we review the existing research on the role of youth in mobilizing for food justice and improving school food that informs our youth participatory action research.

The food justice movement emerged in the last decade and represents the convergence of

insights, issues, and interests from the alternative food movement and the environmental justice movement (Alkon and Agyeman 2011, Gottlieb 2008, Gottlieb and Joshi 2010). Guthman describes the commonalities between these two social movements:

What food justice draws from environmental justice is concern with how certain communities lack access to good food and are often exposed to nutritionally vacuous and even debilitating food, owing to spatial practices such as redlining and disinvestment.

What it draws from alternative food is its attempts to ameliorate these conditions through developing institutions that shorten or eliminate... the social and geographical distance from farm to table in order to provide healthful, nutritious food at low or no cost.

(Guthman 2011: 1-2)

Social scientists and social justice activists have criticized the alternative food movement for its tendency to represent the tastes and concerns of upper-middle class, white consumers without marrying these to a social justice framework (Allen and Guthman 2006, Sbicca 2012, Schlosser 2012, Slocum 2007). When the alternative food movement has linked its cause to the conditions of low-income consumers and people of color, it has often done so by uncritically linking these groups to the "obesity epidemic" or by trying to "educate" low-income consumers who are presumed to have poor diets because of a lack of "awareness" (Slocum, et al., 2011).

Food justice takes a broader social justice perspective on considering how unequal access to quality foods interacts with other injustices contributing to poor health such as environmental exposures, epigenetic factors, and stress (Guthman 2011). Access to quality education, transportation, opportunities for building wealth, a healthy and safe environment, and political empowerment all affect individuals' life achievements and health outcomes. However, these resources are often limited or unavailable in low income communities of color, resulting in

disproportionate stresses and lack of access healthy, affordable, fresh food (Beaulac 2009, Walker 2010, powell 2009). Without addressing structural barriers to health and well being, efforts to improve food systems and nutrition will not be equitable.

School meal programs are a public policy program with the potential to improve the overall food environment of low-income children and youth. In the last fifty years, the federal school lunch program has successfully extended its reach to provide meals for all students in need. In many low-income areas, breakfast, lunch, dinner and summer meals are provided universally free. "Hunger in the summer," the problem of seasonal food insecurity in low-income youth and children during the summer school vacation months, demonstrates the importance of school meals (Nord and Romig 2007). However, school meals now underperform in providing fresh, tasty meals to students (Poppendieck 2010). In the United States, the national farm-to-school movement has addressed this need to improve the quality of school meals by supporting and advocating for farm to school programs, now in 42% of US Schools (National Farm to School Network, 2015). Strategies include on the meal preparation side: purchasing fresh, seasonal vegetables from local farms and scratch cooking; education enhancement; hands-on growing, harvesting and cooking curriculum; and policy recommendations such as universal free meals, summer meal programs, raising the federal meal reimbursements, and local food procurement incentives.

Improving school food can be an important part of food justice work for youth and an entry point to developing their capacity for social change. Around the world, from Great Britain and France to Australia and the United States, young people have taken action to demand higher quality and culturally appropriate school meals and to challenge adults' social control of cafeteria space (Pike and Colquhoun 2012, Marshall 2015, Robert, E.S.A. and Weaver-Hightower, 2011).

In the United States, Tsui, et al. (2012) surveyed youth-organized healthy food interventions and found that youth organizations that engage youth in community service learning and leadership skills were the most effective in planning and carrying out research and interventions related to food justice. Learning about food systems—how food gets to our table—creates a window for learning about the structures that have precluded fair wages and labor conditions, and perpetuate environmental degradation and lack of opportunity in low-income communities of color (Levine 2008, Weaver-Hightower, 2011). Using food as a locus for learning, presents an opportunity not always evident in school pedagogy, to connect overlapping environmental and health sciences, citizenship, and justice (Bencze et al. 2012, Hayes-Conroy 2013).

### **Food justice and school meals in a New England city**

Lack of access to healthy, affordable, fresh food is one of many challenges facing the small city of Holyoke, Massachusetts. The city once drew workers from Ireland, eastern Europe, and the Canada. Puerto Ricans were the last wave of newcomers to Holyoke, arriving to work in its paper mills and the surrounding rich agricultural region. Today Latinos constitute 48.4% of the city population. It is by most criteria the poorest city in Massachusetts: 31.5% of the city's population lives below the poverty level, compared to 11.4% below poverty level in the state at large (U.S. Census 2015). Today, 42% of Holyoke youth and children under 18 live in households with incomes below the poverty level (U.S. Census 2015). Hampden County residents suffer from the highest diabetes rates in the Commonwealth (Hampden County Health Rankings, 2015).

Given these challenges, school food is an especially critical resource for children's food security and health in Holyoke. Holyoke Public Schools provide children with two to three meals per day and often a snack. The school district has been challenged by severe lack of resources



and underperformance typical to urban areas struggling with poverty and unemployment. Three-quarters of the children in Holyoke Public Schools are from low-income households eligible for free and reduced-price meals (Massachusetts Budget and Policy Center 2015). Like many under-resourced school districts, the food service management program spends up to \$.90 cents per lunch on food after cost of labor. (HFFPC 2011). In order to meet this requirement, schools purchase discounted bulk foods from the USDA Commodity Program. The City of Holyoke has contracted with large food vendors who subcontract fruit and vegetable procurement to a large regional food distributor. While the local distributor does purchase some seasonal local produce, this arrangement limits the schools from cultivating direct relationships with farmers, and small farms in particular. Little local produce ends up on the lunch plate.

Those working for the Holyoke farm-to-school improvements initiative attempted to increase students' access to fresh, high-quality fruits and vegetables, produced sustainably at the community gardens and other local small- and medium-scale farms. One initiative, which became the focus of this Photovoice project, connected produce grown by urban farmers to the school district's cafeterias. While two thirds of students identify themselves ethnically as Latino, school meals rarely include dishes reflecting Puerto Rican and other Latino food preferences.

Transformation of the school food system has the potential to directly improve food quality and access for a large percentage of the city's population of vulnerable children. In 2010, Holyoke had a growing campaign of robust youth organizing at the Nuestras Raices urban farm. Nuestras Raices is a community and economic development organization working within the largely Latino Holyoke community to integrate grassroots community gardening with activism for structural change (Slocum 2006, Gottlieb and Joshi 2010). Holyoke teens applied for and were paid to participate in a youth development program, learning how to grow vegetables at the

urban farm, selling them at the downtown farmers market and participating in a curriculum on social justice and food sovereignty. They also adapted a youth engagement program initiated by Seattle Food & Fitness peers called FEEST (Food Education Empowerment Sustainability Team) in which they cooked weekly youth meals with fresh produce and held conversations about the broader food system, racial justice, and food resilience. (Charbonneau et al. 2014). In fall, the team coalesced as the Nuestras Raíces youth group and some members served on the intergenerational steering committee of the Holyoke Food and Fitness Policy Council (HFFPC), building systems and policy change strategies for improving access to healthy food and safe places to exercise within the city.

The W.K. Kellogg Foundation began funding the HFFPC in 2007, as one of nine sites around the country to receive a substantial multi-year grant, and join a national network of community based initiatives seeking to improve the health of our nation's most vulnerable children by transforming food systems and the places kids live, learn and play (W.K. Kellogg Foundation, 2013). In Holyoke, the core partners were Nuestras Raices, the Greater Holyoke YMCA, the Holyoke Health Center and the City of Holyoke. Together they assembled a network of residents, youth leaders and community based groups and neighboring academic institutions working to identify shared values and to improve community food access through community gardens, farmers markets, mobile markets, community cooking classes; improve school food and participation; and active living through complete streets (biking and walking access), and youth engagement. The aim was to engage multiple stakeholders in shifting systems and policies, through networks, advocacy, and evaluation. The Photovoice collaboration sprang from the synergy of these established programs and relationships.

## **Methods: Youth Studying School Food Systems through Photovoice YPAR**

*“Young people’s participation in research offers a potential radical shift in the power relations inherent in the production and application of knowledge.”* (London 2007: p. 408)

In Fall 2010, a group of eight youth group members worked with [authors] to develop a Photovoice project documenting the path of food from the Nuestras Raices farm (“La Finca”) to public school cafeterias. Photovoice is a participatory action research method that includes three key elements: community-generated photography, use of photos to elicit participants’ stories and interpretations about important issues facing their community through group discussion and critical dialogue, and communication these concerns to community members and policy makers (Wang 1999, Gubrium and Harper 2013, Checkoway & Gutierrez, 2006). We explore how youth-driven, participatory action research and policy engagement evolved with decision-making around the school district’s food services operation, and as the youth used photos and words to articulate their emerging needs and interests.

### *Community collaboration and recruitment*

Youth programs leader Angarita Horowitz recruited participants during the spring of 2010. The youth, ranging from 13 to 20 years old, all attended local public middle and high schools except for two older participants who attended Holyoke Community College and were recent alumni of the Holyoke school district. The group was evenly split by gender, and most youth identified ethnically as Latino/a. Initially there was a four-week unpaid training period during the month of May centered around food justice and environmentalism which provided the youth with a foundational experience and language around "systems thinking" in regards to the water cycle, carbon cycle, and local versus industrial food systems. The youth who successfully

completed the four-week training received summer jobs in Holyoke working on the farm, in media production, and efforts around environmental justice and food systems. After the eight-week summer program, many youth wanted to stay involved with the organization. Angarita Horowitz and Sands were participating in the HFFPC strategy and evaluation teams, Totman was working as a VISTA volunteer, and Harper approached the group with the idea of doing a youth Photovoice project. Nuestras Raices had received a grant from the Community Food Security Coalition to help pilot a values based evaluation tool, Whole Measures for Community Food Projects. Together we saw an opportunity to draw these multiple efforts together by designing a youth participatory action research (YPAR) project that could fulfill the partners' varied needs.

Youth Participatory Evaluation and Action Research (YPE, YPAR) involves young people as the generators of research and evaluation design; they are knowledge creators, devising their own methods, analyzing and interpreting data and coming to their own conclusions (Sabo Flores 2007). YPAR is about the real influence of young people in institutions, as decisionmakers and designers. Young people and adults work together, practicing dialogue, active listening, and designing research methods and analysing the impact of what they see together (Kang 2015, Checkoway & Gutierrez 2006).

Collaboration included youth leaders, Nuestras Raices staff, university partners and HFFPC representatives, with adults taking roles of as “facilitators” and “network weavers” (Monitor Institute 2011). The adults in the research team worked with eight youth participating in the Nuestras Raices youth group as well as additional youth participants who joined sessions informally. Our project followed a youth participatory action research process composed of three phases. First, we worked together to define the problem and design the project. We chose the Photovoice methodology as a strategy that has been successfully used to engage youth in

studying food, health, and environment in their own communities (Madrigal et al. 2014, Harper 2012, Delgado 2015, Leung et al. 2016). Next, we carried out the Photovoice research process and communicated initial findings to relevant audiences. Later, we dug deeper with youth participatory data analysis and dialogic editing of this article. We cannot generalize on the basis of our small sample of participants. As is typical in YPAR, our analysis is based on in-depth, long-term research with multiple team members analyzing the data for themes and narratives, and we compare our research findings with other published YPAR studies on issues related to school food, food justice, and environmental justice.

#### *Photovoice documentation and discussions*

In early project discussions, the group decided to focus on school food because it is such an important resource for children and youth in Holyoke. The youth group initially saw the Photovoice project as a way of learning about, documenting, and evaluating the farm-to-school initiatives under way in Holyoke. These included a salad bar at the technical high school which was stocked in part by produce grown at Nuestras Raices farm, the workings of a Salad Bar Committee which included the Executive Chef, culinary arts students and the NR farm manager, and participating on the HFFPC school food committee (school nurses, teachers, cafeteria directors, regional activists). Through the Photovoice project, youth sought to learn about how the school food procurement system works, how the farm-to-school initiatives were succeeding or failing, and how to make more effective interventions in the policy process as a group of “school food stakeholders.”

Before distributing cameras, Harper and Angarita Horowitz gained photo permission from school principals and guided the youth through training in research ethics. The youth group discussed ethical issues in taking photographs and the importance of each person having the right

to refuse to be photographed:

“So, a lot of times people don’t want to be photographed if they don’t look ready for it yet. So, asking people’s permission avoids that.”

“Like when you are eating, that’s not funny.”

“You could also see getting a person in trouble by taking a picture of them doing something wrong.”

We talked about the kinds of stereotypes related to race, ethnicity, gender, socioeconomic class, and age that people in the community face in their daily lives. We discussed how photographs could be used to challenge or reinforce those stereotypes. Once they had completed training, youth received cameras on loan from the university.

The youth group researched and mapped out the stages of getting fresh vegetables from the community farm to the students’ plates at school, working with the school district’s executive chef, the HFFPC’s wellness coordinator, and food systems educator and evaluator [Author 2]. They decided to take pictures of each of the following four stages: growing food, transport, storage, preparation, and eating. The youth group first traveled to the community farm and asked farmers, who are mostly also Puerto Rican, for a guided tour of their plots, taking pictures of the plants and people who make fresh food, some of which has been acclimatized from Puerto Rico. Youth observed and documented the school district’s truck stopping at the farm to pick up a shipment of peppers for salads, sauces, and pizzas. Later, they ventured into the school district warehouse, where an employee gave them a tour of the storerooms and large refrigerators and freezers where the school district’s food is stored. This gave the youth a sense of the scale of institutional food service that they would not have imagined as consumers at any one school. Youth visited and photographed the central kitchen where the head chef of school food services

explained how thousands of meals are planned and prepared for students and faculty each day. Finally, each student took a picture of his or her own lunch plate at school, showing the final product that students consume at the end of the school food production process, while also giving a sense of how individuals accommodate their personal dietary preferences within the institutional food setting.

On days when the youth group was not going to visit and document sites within the school food chain, they met to review and discuss the photos. Photos of gardeners growing food on a patch of land just outside the industrial core of Holyoke [INSERT FIG 1 ABOUT HERE] inspired the youth to talk about access to green space, the need for fresh fruits and vegetables in their neighborhood stores, and the sense of hope they derived from seeing people from their community growing food:

It represents how healthy Holyoke is. He is getting local vegetables in the farm. And he is going to bring it back to the school, and people are going to eat healthy. The food comes from the community.

Their discussion also connected the urban farm with other ideas for improving the livelihoods and health of low-income people in Holyoke: creating and supporting small businesses, lobbying the city government, and having local civic organizations in which people could take pride.

[Fig 2 commodity foods here]

Photos of food transport and storage elicited discussion of the larger constellation of policies and systems in which school meals are embedded, but that are usually hidden behind the scenes, invisible to consumers: food safety regulations, state and federal laws about school food procurement, and the influence of large agribusiness corporations on “commodity food” policies. Given this complexity, the fact that some fresh produce from La Finca made its way into the

school cafeterias was cause for real excitement: “...we are actually getting stuff that’s locally grown from people in the community instead of going somewhere else.” Photos of the school kitchens got youth talking about the work involved in putting out students’ meals every day and elicited discussion of how food service bottlenecks affected students’ meals: “Some people give up on lunch because of the line, some because they don’t like the food. There’s got to be a more efficient way to serve lunches.” The group also discussed how to convince adult decision-makers that access to healthy, fresh food is important to youth and that they should have a say in school food policies: “Kids should have a say in what they are eating. Grown-ups think kids want junk food. But we do care about what we eat.”

#### *Photovoice audiences and action*

One month into the Photovoice project, the Holyoke School Committee announced a competition for the new food services contract. The company that held the previous contract, withdrew from the competition. The youth group was concerned because the company's school chef and food services director had both worked closely with the *La Finca* community farm manager to work out a way of bringing local produce into the school cafeterias. Would the new school food services company collaborate with the organization to build and maintain farm-to-school initiatives?

After learning of the upcoming food services contract decision in the HFFPC meeting, youth group came to see their Photovoice project as a way of gaining a voice in the school food policy discussion. The school food services contract opened up a “policy window” (Kingdon 2002) where the youth group could demonstrate the importance of farm-to-school as a factor in selecting the new contractor. This “policy window” shaped the group’s discussion of the third part of Photovoice as an applied research strategy: where (and by whom) did they want to “be



heard”? The youth group decided that in addition to having a public photo exhibition at the end of the project, they also should present their project to the Holyoke School Committee before it made the final selection of a new contractor. With an adult’s help, they signed up for a place on the meeting agenda. On the evening of the school committee meeting, they arrived wearing green *Nuestras Raíces* t-shirts and carrying bundles of fresh produce, which they presented to the members of the school committee. The youth group presented a short slideshow of their photos, taking turns speaking:

We care about healthy food. When kids have a chance to try healthy food, we start liking it. Students want a say in decisions made about what we eat at school. Our goal is to raise awareness among students, parents and school committee members about getting local produce into Holyoke schools.

The committee members listened but did not engage with the youth group's presentation and moved on the other agenda items. Debriefing after the presentation, the youth compared how the committee reacted to their presentation with the committee's more attentive response to a group of parents who presented at the same meeting. One of the youth expressed discouragement that was widely shared by the group: “I felt like they (school committee) didn’t care. They had their own problems to talk about. WE need to change this. Make it their problem.”

Following the school committee presentation, the youth planned a public exhibition of their photos in an exhibition space provided by the Holyoke Health Center. The group invited local experts and policymakers who were involved in decisions about the school food system, including school board representatives, teachers, food services staff, and local doctors and nurses. The group sent out a press release, and articles about the event appeared in local Spanish-language newspapers. Several youth appeared on a local television news program and discussed

the farm-to-school initiatives while giving a healthy cooking demonstration. The youth group prepared a community feast, organized a fundraising raffle, and mounted the posters in the exhibition space. [INSERT FIG 3 ABOUT HERE] A group of schoolchildren from the elementary school gardening program joined the event, providing a dish made with foods they had grown at school and an art activity where participants were encouraged to draw their “dream school lunch” on paper plates. Approximately sixty people attended the event, including several of the invited experts and policymakers.

#### *Participatory data analysis in a YPAR framework*

The last phase of the Photovoice project was holding several participatory data analysis sessions (Gubrium and Harper 2013). Krista and Catherine brought in printed transcriptions of quotations from the Photovoice discussions. Monica and Jonell cut up the transcriptions into individual quotations with scissors, and each of the youth drew a handful of quotations. Next, the group set out four big sheets of newsprint, and Jazzy wrote categories at the top of each page. Based on a first reading and discussion of the transcriptions, Krista and Catherine suggested "learning about policy," "youth doing research," "school lunch experiences," and "other" as thematic codes. The group discussed and negotiated what might be included in each theme. Once the youth expressed confidence in the categories, they sorted the quotations and taped them onto the sheets of newsprint. [INSERT FIG 4 IMG\_0451.JPG HERE] Once the quotations were all sorted, youth circled the table with felt markers in hand, scribbling notes on each poster and drawing stars, checks, or dots next to the quotations they thought were especially important, following the group's tradition of using "dot surveys" to gauge interest in topics. The free movement, snacks, and graffiti-style writing made data analysis more lively and fun for the youth researchers who had already spent a full day in school. As we developed drafts of this

article, we periodically sought further feedback from participants in a dialogic editing approach (Feld 1987).

### **The Emergence of Food Justice Youth Development**

Our Photovoice project demonstrated how youth engagement in food justice mobilizations can lead to new forms of critical consciousness and social justice outcomes. Ginwright and Cammarota describe social justice youth development as operating through critical consciousness and three specific levels of awareness: self (or individual), social, and global. New awareness leads in turn to praxis, or forms of action to address issues that youth identify. Through this process, critical consciousness may lead to both community and youth social justice outcomes.

We apply Ginwright and Cammarota's concepts to our youth participatory action research project on school food systems, we evaluate how youth developed new levels of awareness, took action, and achieved food justice outcomes in the process. Bringing food into the social justice framework is a powerful way of connecting the sensory, embodied, and everyday forms of knowledge of youth with reflection on power relationships with adults, institutions, and political economic systems. In this section, we analyze how youth-led food justice advocacy transformed participants individually, socially, and globally. (Table 1 here)

#### ***Individual or Self Awareness***

In our food justice work, building critical consciousness at the self awareness level meant reflecting on stereotypes about urban youth and developing sensory awareness of food and the body. Youth identified stereotypes about urban youths' food habits, tastes and apathy about demanding better food in schools. Students returning to school after a summer program working in the community youth garden were called "the Farmers" by their peers. Instead of seeing this as

a putdown, they started calling themselves the Farmers as a positive identity based around healthy food and doing something in the community.

Working at the self-awareness level, youth program director [author 3] wanted to address issues of nutrition and health without "fat-shaming." The public health focus on youth obesity tends to stigmatize low-income people and people of color for their body size, interpreted as the product of bad individual choices (Guthman 2011, Slocum et al., 2011, Slocum 2011). In earlier projects, some of the youth had mapped the limited food options in their neighborhood, exposing structural barriers shaping individuals' access to good nutrition. At the individual level, [author 3] encouraged youth group members to develop sensory awareness food of how different foods affected their physical and emotional states. When viewing pictures of individual lunch plates during a Photovoice discussion, the youth talked about how their own preferences and knowledge about food had changed as a result of participating in the youth group and how they might influence their peers to eat healthier foods:

"Yeah, I don't get full with pizza."

"Yeah, I know, one bite and it falls off (cheese)."

"I got the pizza one time and it was like meat pizza and it wasn't real meat. It looked like something you'd get from taco meat but it wasn't hard. So I ate it and it's so gross."

Many of these comments can be easily dismissed by adults as typical student complaints about school lunch. Instead, the group recognized individuals' internal sensory experience as valid and gave them space to distinguish how they felt after eating different kinds of foods. These discussions contrast with external judgments of body size that are common popular responses to youth obesity (Monaghan et al. 2013). Looking back on their participation in the group, Jonell stated, "It helped me learn how to eat healthier," and Monica said that it led overall to "a more

positive lifestyle."

Self awareness of the connections between food, energy, and mood led youth to assert themselves with adult team members. Early in our work together, Jazzy, then a middle-schooler, spoke up to let the adults know that if we were going to hold after-school wellness committee meetings, we needed to use interactive activities and always bring snacks. The adults began to bring food for the youth to assemble into snacks, cutting up locally grown apples to dip in sunflower butter or layering yogurt with fruit and granola. Many weeks brought the excitement of unfamiliar tastes such as pumpkin butter and pomegranates. We also used movement and games to animate our discussions. Not only did the youth learn new skills and tastes, but they also built a more supportive relationship with adult team members, and a sense of empowerment in demanding a healthy change. Looking back, Jazzy saw that moment of frustration and resistance as one of her first acts of self-advocacy: "We went to the boring meetings. I didn't pay attention. What changed it: I told you we needed food." Reflecting back on the project, Monica summed up this shift in the group as "Adults supporting youth--youth recognition," and she said it marked an important shift in how she perceived herself.

Other research on school food issues supports our finding that individual sensory experiences are an integral part of developing a larger systemic and structural analysis of school food. A school meal study with Latino/a youth notes the importance of taking low-income students' perceptions of food quality seriously, broadening the lens of "food access" to include sensory experiences of food (Leung 2015). In their study of youth participation in school garden and cooking programs, Hayes-Conroy and Hayes-Conroy (2015) call attention to sensory and affective experience as part of the "political ecology of the body":

a student's affective/emotive ability to be motivated to eat healthy, alternative food

therefore depends upon not just her/his ability to exchange money for a product, or her/his geographical closeness, or knowledge of the food, but upon her/his articulated bodily capacity to feel a certain level of comfort, excitement, affection, pride, and so on, for what she/he is eating. (Hayes-Conroy and Hayes-Conroy 2015: p. 86)

In our project, greater sensory awareness not only allowed youth to critique school food quality and the lack of culturally appropriate foods, it also empowered them to change the way we ran team meetings, which shifted the power dynamic between youth and adults.

### ***Social Awareness***

As they were developing an understanding of justice, they were exploring deeper questions about their place in society, their school, and neighborhood, as well as cultivating skills to think critically, pose clarifying questions, and present their convictions to adults. As Monica later put it, "When there's not enough info around, not enough motivation--the problem doesn't seem 'problematic.'" We explore two moments when youth developed greater social awareness of the policies and decisions shaping their school food environment: the group's presentation of the Photovoice project to the School Committee meeting and a moment the youth came to call "The Lettuce Story."

Youth developed social awareness through their Photovoice project on the school food system, learning how food travels from farms and distributors to the district warehouse, then on to the cafeteria kitchen and students' lunch plates. They began the Photovoice project with the idea of strengthening nascent farm-to-school connections in their school district. When the district put out a call for a new food services contractor, the youth group took action, asking the School Committee to consider farm to school, high-quality food, and student views as priorities.

The youth also organized a public photo exhibition and community meal (FEEST) to draw attention to these issues. Although they faced some setbacks, youth group members also gained seats in the new School Food Task Force.

The group talked at length about the school food environment and how to define policy in order to learn about the systems and policies that frame their school lunch choices. They began by mapping the school food system, from the field to the table. The mapping process, although interactive, was still conceptual to the youth. By taking photographs of each step of the way: growing, harvesting, packing, storing, preparing, serving—they experienced the school food system and gained a broader knowledge and language to describe it.

In order to build a deeper awareness of the school lunch program, we also talked about the policies that determine what food can be served school meals and how it will be obtained, farming in the United States, and discussed how some communities have access to more healthy food than others due to policies that frame opportunity. Below is a sample of our conversation about policy:

Catherine (Adult researcher): So, what is policy?

Nick: It's rules and regulations. Who runs what.

Catherine: Oh, OK. We can also talk about "little p" policies and "big P" policies.

Remember when we talked about the Farm Bill? That's a "big P" policy.<sup>6</sup>

Jazzy: "Little p" policies are like what is served for lunch?

Catherine: Exactly.

Nick: When I hear policy, I think we're talking about government and the mayor.

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<sup>6</sup> In this discussion, [Author 2] drew from Danly's policy education strategy (Danly 2008, C.S. Mott Group), which was part of the Kellogg Foundation's Food and Fitness Initiative's technical assistance workshop.

Krista (Adult researcher): Policy could also be about how you get groups of people to change things. After doing this project, did you know more about changing policy?

Monica: Yes, because I didn't know how school food worked. WE have to know what we're trying to change if we're going to move forward and change policy.

As the discussion continued, youth identified the school committee and two specific food service managers as people with power to enact or implement cafeteria policies:

We want the school committee on our side so that we can be a better boss, because they are kind of like the boss, but really because they are the city, we are kind of their boss, because they are supposed to be representing us we elect them. So it's our job to let them know what we want to they can let the school food company know what they want.

Debriefing on their presentation to the school committee, the youth articulated a more complex understanding of policy and institutional change as well as the need to persevere through both formal school district and activist channels. When he later reflected on this experience, Jonell said, "If the students and parents aren't aware of an issue in the school system, it will take a long time to change it...being aware of school issues makes a huge difference."

During data analysis, youth identified the "Lettuce Story" as an example of gaining power and voice in the community through school food activism. Several months after the presentation to the School Committee, some members of the youth group were invited to serve on the new School Food Taskforce. As the Taskforce began to meet and shape its mandate, the youth used the opportunity to bring their perspectives to the table and work as a group to identify the system or policy change behind it. They began to cultivate face-to-face relationships with the food service director and executive chef, and in so doing had new and meaningful opportunities to voice their concerns about the school food and to know that they were heard by the adults who



make the decisions. An eighth grader who attended McMahon School and stated that he did not eat salad at lunch because the lettuce was “always frozen”. Food temperatures had been an issue youth had identified for many years, as documented in a video by a previous cohort of Nuestras Raices youth participants. At a meeting with administration, the student addressed the Food Service Director in his most professional manner possible but his comment was almost passed off by some of the adults in the meeting as unfounded complaints. Also at the table was a representative of the Board of Health who corroborated the teen’s complaint by stating that her inspectors had identified temperature issues in their inspections consistently at that school and at other schools. This raised two systematic problems--the first being frozen lettuce, and the other being that the food service director was not directly receiving the reports from the Board of Health. At the table, it was worked out that the inspectors would continue to deliver a copy of their inspection to the principals but also would now begin to deliver a copy directly to the food service director. The food service director then visited the school and discovered that the lettuce was being stored on the top shelf of the refrigerator after receiving it and it would freeze. When asked why this frozen lettuce continued to be served to the students, the response was that “that’s just how we have always done things.” The food service director rectified the storage problem, and students were encouraged to see that their salads were no longer frozen, and to know that they had contributed to this system change that mattered to them.

In these two moments--the school committee presentation and the “Lettuce Story”--youth began identifying positively as food justice advocates and shifted their narrative of Holyoke from deficit- to asset-based. After the Photovoice documentation phase finished, the youth had an educational tool that demonstrated through large posters the process of how food grows on the farm and goes through the production chain to become school lunch. [Author 3] worked with the

youth to develop a workshop about the school food work to present at conferences. The youth presented this workshop at the Community Food Security Coalition Conference in Oakland in 2010, at the WK Kellogg Food and Community Conference in Detroit in 2012, at the Civil Liberties and Public Policy Conference in 2011 and 2012, at PV Grows flash presentations, and at the Real Food Challenge conference in Boston in 2011. The youth also presented the workshop around Holyoke to other local youth groups. Monica now looks back at these as moments of personal transformation as a community activist: "I felt part of social change, part of a movement, and that was important to me."

Using their own photographs and insights, youth developed a new story about their community that reflected their pride and understanding of themselves. When many of the youth arrived to the program, their story of Holyoke mirrored the broader narrative of the city reflecting its negative aspects. During one of the first orientation sessions, Angarita Horowitz asked the youth to define food justice. One youth asked "*lo que es la justicia?*" and the rest of the youth agreed that they did not have an understanding of "justice" nor did they have a modern-day example. Later, when presenting their Photovoice in food justice workshops, the youth told the story of how they worked with adults to change school food. They presented their experience as a triumph, and many attendees were impressed with the enthusiasm the youth had for their group as well as their positive declarations about their hometown.

### ***Global Awareness***

Awareness at the global level means learning about and forging connections with other people's struggles at a broader scale, beyond the local community. This happened when two youth group members returned from a social justice conference where they saw youth from the Baltimore Algebra Project present the idea of "push out," the accumulation of structural forces

that cause low-income students of color to “drop out” of school. They explained this concept to the school food group, and the youth were immediately able to apply this framework to the problem of low-quality school food and drop-out rates in Holyoke.

Monica: Once in awhile I ate chicken patties, but those ended up being gross too so I just went to the vending machine and grabbed a drink, and that was my lunch.

Jazzy: "Push out" is when a student doesn't eat lunch because it tastes nasty or gross or there's something wrong with it, and then they put their head down in class.

Kevin: By putting their head down they'll get sent out of class. Getting sent out of class enough will get you suspended. So you can't come back to school.

Monica: This turns into detention, detentions turn into suspension, and a suspension turns into expelled. As in getting pushed out of school. The school system is pushing them out since they're not getting good food.

Jazzy: If we have food that we want and that is healthy for us, then we'll focus better, and we'll have more to, like, learn.

By reframing the struggle for good school lunches in broader social terms, they were able to see themselves as youth contributing to a nationwide social movement for food justice and educational equity.

Even though the youth had experience working in the community gardens and farm, understanding the lack of equitable conditions and wages for farm laborers seemed distant, largely because laborers are a hidden component of our food system. As some of their relatives had been farm laborers, this issue was particularly relevant to understanding food justice. They met farmworkers from the Coalition of Immokalee Workers (CIW) several times at conferences and protests: attending the Real Food Challenge Conference in Boston and marching for Stop N

Shop to support the CIW's ongoing tomato campaign (Griffith 2009) . Later Jazzy marched with CIW at the National Farm to School Conference in Oakland. These meetings and actions impressed them to share their experiences with the group. The youth also discussed the conditions of farmworkers in the Pioneer Valley, and how they are largely invisible to those benefiting from the good food movement. They talked about the difference between one of the local organic community-supported agriculture (CSA) farms with Guatemalan and Ecuadorian workers and the non-profit the Nuestras Raíces farm, La Finca. They noticed that customers do not see the farm workers at the organic CSAs, but at La Finca, customers connect with Puerto Rican immigrant farmers who have autonomy over their own projects and do not hire out the labor.

The youth experienced different ways of participating in change-making. They marched in protests with the CIW members, did power mapping, presented their Photovoice to the school committee and policy makers. They began to learn to take a broader view, to see that systems and policy change take a long time. "Our whole food system is in a vicious cycle that makes disease and obesity," Jonell said, "but many communities can do what we did to help their school food system." Participating in the larger group of Nuestras Raíces leaders, youth learned how to be strategic, how to analyze the situation and be more critical, and how to set realistic goals. The youth began to understand that they can advocate for system change at multiple levels. Building cooking skills impacts individual health, and cultivating speaking skills enables youth to convey their concerns to the school committee. Building networking skills and critical thinking impacts policy on the global level.

## **Conclusion: The promise and limits of Food Justice Youth Development (FJYD) for systems change**

To what extent can Food Justice Youth Development (FJYD) translate into systemic food systems change? Team members developed critical consciousness from the micro-level of their own bodily experiences of hunger, distaste, and low energy, to the community level of identifying ways to improve school lunch, to the global level of recognizing the role of food in young people's school success and in low-wage workers' struggles. The youth group drew attention to the fledgling farm-to-school effort that was the result of a relationship developed over time between youth and adult school food advocates and the school district's food services director. Their Photovoice project showed that bringing vegetables grown on the community farm to the school lunch program was not only possible, but also had positive "ripple effects" such as investing resources back into the neighborhood economy, fostering a sense of connection to the farm, and integrating culturally appropriate produce such as *aji dulce* peppers on the lunch menu.

The youth put their emerging skills as community food researchers and activists to the test when a school food "policy window" opened. Youth investigated the policy process involved in institutional food service decisions and developed an activist intervention. They presented documentation of the emerging possibilities in the farm-to-school supply chain to the school committee and asked committee members to consider farm-to-school a priority in selecting the next food services provider. They also demanded that youth should take a formal role in decisions related to school food services.

Unfortunately, the school committee selected a food services provider that had made

only vague statements about local produce and youth involvement. It initially appeared that the farm-to-school presentation had not influenced the selection process, which discouraged members of youth group. The fledgling Holyoke farm-to-school supply chain fell apart with the change in school food service companies.

Shortly after the new food services company came on board, the HFFPC formed with the new food service director a "School Food Task Force" a subcommittee of the District Health Advisory Committee, made up of students, parents, and health care providers. Many of the Nuestras Raices youth who had participated in the Photovoice project joined this group. The School Food Task Force sidelined the previous policy focus on farm-to-school procurement and reframed itself around the issues of preventing food waste, encouraging students and parents to enroll in the free school meal program, and considering culturally appropriate lunch menus.

Food services responded to committee members' recommendation to integrate more Latino foods into menus by initiating a "Puerto Rican Food Carnival" menu timed with the Carnival holiday. The adults on the YPAR team saw this menu event as superficial multiculturalism rather than structural change: "let them eat identity." However, dialogue with the youth group opened the adult authors' eyes to the significance the youth attached to this tangible school food innovation. Jazzy saw the Carnival menu as a rare sign of the school officially recognizing and valorizing Puerto Rican culture:

You don't learn about other cultures. You never learn about it. Schools don't want to teach it. But where in my life do I feel like I'm most Puerto Rican? Rice. My food. My food is my culture. What you have for big holidays.

Although this was a small intervention, youth expressed delight at the sensory conquest of school space. Jazzy told the story of arriving at school to be greeted by the aromas of home: peppers,

cilantro, and onions cooking down into a savory sofrito. Nick joked about a white teacher who mistook the smell of garlic for a gas leak. The food service provider gradually made gestures toward the farm-to-school model. In the next two Latino food events, for example, the contractor used locally grown produce in some of the dishes, but did not extend these efforts systematically in procurement policies. Nevertheless, the youth group members' enthusiasm with seeing action and recognition in the form of familiar Latino food aromas vividly taught the adult collaborators to see the school food environment as part of a multi-layered "political ecology of the body" (Hayes-Conroy and Hayes-Conroy 2013).

Food justice youth development is built on the primary values that youth are a community resource to be cultivated (Sabo-Flores 2008). A survey of youth-led food activism in New York City characterizes youth organizations as "a critical if fragile asset for health in low-income urban neighborhoods" (Tsui et al. 2012: p. 826). Our YPAR project underscored both the importance and vulnerability of youth-led efforts to transform school food environments. Youth made progress in influencing the school food system by lobbying for a salad bar and locally grown produce. They learned about the school food supply chain as they researched which institutions must be linked in order to connect local farms to schools. When a "policy window" opened, they communicated their findings with policymakers and healthy food stakeholders in Holyoke, and they asked for and eventually achieved a formal place at the table where decisions about school food happen, the School Food Task Force, a subcommittee of the District Health Advisory Council. Jazzy and other youth saw positive change in the inclusion of healthy Puerto Rican foods for special events in the cafeteria and experienced a sense of agency and power in this process. The progress that they made, however, was offset by disappointments, as when the food service contractor with whom a successful farm-to-school program had been forged left the

district, and the group had to start over with a new contractor that was not engaged in farm-to-school initiatives but promised more efficient management to a financially strapped urban school district. Transforming the institutional environment of the school food system is a slow, ongoing process, and requires support for strengthening the education system as a whole. The Photovoice research cycle allowed us to see our school food research and policy interventions as a form of food justice youth development (FJYD) operating at the individual, social, and global levels. Photos become doorways to other forms of dialogue, confrontation, and expression, equipping youth with a new way of communicating with adult experts and showing their knowledge of the school food systems they seek to improve, from farm to fork.

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## Figures:

Figure 1: A farm-to-school connection: Food from *La Finca* being picked up by a school district warehouse worker. (Photo credit: Monica Maitín)





Figure 2: Youth document the path of school food as it reaches the district's warehouse and note the prevalence of processed "commodity foods." (Photo Credit: Janelis Rivera)



Figure 3: The team's culminating photo exhibition and "FEEST" (Photo credit: Nuestras Raíces Youth Group)





Figure 4: Youth analyzing data. (Photo credit: Catherine Sands)



### Critical Consciousness and Youth Outcomes for Food Justice (Inspired by Ginwright and Cammarota 2002)

Awareness Level	Forms of Action	Community/Social outcomes	Youth Food Justice Outcomes
<b>Self</b>	<ul style="list-style-type: none"> <li>• Critique of stereotypes</li> <li>• Developing sensory awareness</li> <li>• Engagement in identity development as "farmers"</li> <li>• Asking for resources needed for successful participation in group</li> <li>• Cultivating taste and building cooking skills</li> </ul>	<ul style="list-style-type: none"> <li>• Awareness of food politics</li> <li>• General emotional, spiritual, psychological, physical wellness</li> <li>• Self-care as community value</li> </ul>	<ul style="list-style-type: none"> <li>• Empowerment and positive orientation toward life circumstances and events</li> <li>• Pride in self and ethnic identity</li> <li>• Assertion of the value of youth perspectives</li> <li>• Relationships with adults as supporters (rather than as instructors or opponents)</li> </ul>
<b>Social</b>	<ul style="list-style-type: none"> <li>• YPAR on school food system as policy education</li> <li>• Youth exercising power in community institutions: School Committee presentation</li> <li>• Community organizing: FEEST and photo exhibition</li> </ul>	<ul style="list-style-type: none"> <li>• Equitable institutional practices: youth gain seats in School Food Task Force</li> <li>• Innovative solutions to community and social problems: school-led Puerto Rican food events, youth-led FEEST</li> </ul>	<ul style="list-style-type: none"> <li>• Asking and answering questions related to the school food environment</li> <li>• Social problematizing &amp; critical thinking: "Little &amp; big P" policies</li> <li>• Capacity to change social conditions</li> <li>• Feeling a part of something meaningful &amp; productive</li> </ul>
<b>Global</b>	<ul style="list-style-type: none"> <li>• Connection to others' struggles: applying "push-out" to school food.</li> </ul>	<ul style="list-style-type: none"> <li>• Community and social well-being: vision of healthier food system and better education</li> </ul>	<ul style="list-style-type: none"> <li>• Seeing themselves as part of a nationwide food justice movement</li> <li>• Empathy with farmworkers</li> <li>• Solidarity with other marginalized youth</li> <li>• Optimism about social change and resilience in the face of setbacks</li> </ul>