# Agriculture Education Neg

## Topicality

### T – Postsecondary

#### Perkins IV not topical – Recipients of Perkins IV grants required to link standards with postsecondary education

Dortch, Congressional Analyst in Education Policy, 12

[Cassandria, 12-5-12, Congressional Research Service, Carl D. Perkins Career and Technical Education Act of 2006: Background and Performance, <https://fas.org/sgp/crs/misc/R42863.pdf>, pg. 4, Accessed 6-29-17, RK]

The purpose of Perkins IV is to develop the academic and career and technical skills of secondary and postsecondary education students who elect to enroll in CTE programs, particularly programs that prepare students for high-skill, high-wage, or high-demand occupations in current or emerging professions. The act aims to achieve this through the following grant programs:

• Basic State Grants, which support the development, maintenance, and improvement of CTE at the state and local level; • Tech Prep, which specifically supports programs that integrate secondary and postsecondary CTE; and • Tribally Controlled Postsecondary Career and Technical Institutions (TCPCTI), which supports CTE programs at TCPCTIs.

Grant recipients are expected to develop rigorous and challenging academic and technical standards and assist students in meeting such standards.10 The standards must link secondary and postsecondary education. Perkins IV is also intended to promote professional development that improves the quality of CTE teachers, faculty, administrators, and counselors, and to support partnerships among educational institutions, local workforce investment boards, and business and industry.

#### Perkins Act is extra-topical – includes post-secondary education – CTE education is abusive.

Dortch, Congressional Analyst in Education Policy, 12

[Cassandria, 12-5-12, Congressional Research Service, Carl D. Perkins Career and Technical Education Act of 2006: Background and Performance, <https://fas.org/sgp/crs/misc/R42863.pdf>, pg. 1, Accessed 6-29-17, RK]

The Carl D. Perkins Career and Technical Education Improvement Act of 2006 (P.L. 109-270), reauthorized and revised the Carl D. Perkins Vocational and Technical Education Act of 1998 (Perkins III; P.L. 105-332) and renamed the act the Carl D. Perkins Career and Technical Education Act of 2006 (Perkins IV). Perkins IV supports the development of academic and career and technical skills among secondary education students and postsecondary education students who elect to enroll in career and technical education (CTE) programs, sometimes referred to as vocational education programs.1 Perkins IV was authorized by statute through FY2012 and was funded at $1.1 billion in FY2012. The General Education Provisions Act (GEPA) automatically extends the authorization for one additional fiscal year to FY2013.2

CTE provides occupational and non-occupational preparation at the secondary, postsecondary, and adult education levels. Generally, CTE programs require two years or less of postsecondary education or training. As defined in a publication by the U.S. Department of Education’s (ED’s) National Center for Education Statistics (NCES), CTE prepares students for roles outside the paid labor market, teaches general employment skills, and teaches skills required in specific occupations or careers.3 For example, CTE provides preparation in homemaking and a variety of occupations, such as nursing, business administration, culinary arts, automotive maintenance, software programming, engineering technology, and cosmetology. The definition distinguishes CTE from liberal arts: the fine arts, English, mathematics, science, foreign languages, and the humanities.4

#### Tech Prep policies include secondary and postsecondary education

Dortch, Congressional Analyst in Education Policy, 12

[Cassandria, 12-5-12, Congressional Research Service, Carl D. Perkins Career and Technical Education Act of 2006: Background and Performance, <https://fas.org/sgp/crs/misc/R42863.pdf>, pg 20, Accessed 6-30-17, RK]

Title II of Perkins IV authorizes another state formula grant program known as Tech Prep. The goal of the program is to combine and coordinate secondary and postsecondary vocational education activities into a coherent sequence of courses, known as the “2+2” model for two years of secondary education followed by two years of postsecondary education, which may include a two-year apprenticeship program. States award grants to consortia consisting of participants from both the secondary and postsecondary education levels. Consortia use the funds to develop and maintain CTE 2+2 programs of study. Funds are allocated to the states according to the Basic State Grant allocation without the application of minimum grant amounts. States must describe in their Basic State Grants state plan how Tech Prep activities will be coordinated with other activities described in the state plan.

### T – Education

#### Education means the structured system of schooling – does not include after school programs

Ngaka et al., Makerere University Centre for Lifelong Learning Coordinator, 12

[Willy, George Openjuru, Makerere University School of Distance and Lifelong Learning in the College of Education and External Studies Dean, Robert Mazur, Iowa State University Professor of Sociology, 2012, The International Journal of Diversity in Organizations, “Exploring Formal and Non-Formal Education Practices for Integrated and Diverse Learning Environments in Uganda”, <http://www.soc.iastate.edu/staff/mazur/Formal%20%20Nonformal%20Education%20in/%20Uganda%20(condensed).pdf>, p. 110, accessed: 7/2/17, KW]

Firstly, in our paper, we use the term ‘formal education’ to refer to that type of education which is structured, in some cases state supported, certified and follows a pre-determined/written curriculum. Drawing from Coombs, Prosser, and Ahmed (1973), Baguma and Okecho (2010, p. 2) further describe formal education as: “the hierarchically structured, chronologically graded educational system running from primary school through to University and including, in addition to general academic studies, a variety of specialized programs and institutions for full-time technical and professional training”.

#### Education is about receiving instruction

Oxford Dictionary

[Oxford, “education” https://en.oxforddictionaries.com/definition/education, accessed: 7/2/17, KW]

1. The process of receiving or giving systematic instruction, especially at a school or university.

### Perkins/Career & Technical Education – Not Elementary

#### Perkins IV legally only applies to 7th grade and up

Dortch, Congressional Analyst in Education Policy, 12

[Cassandria, 12-5-12, Congressional Research Service, Carl D. Perkins Career and Technical Education Act of 2006: Background and Performance, <https://fas.org/sgp/crs/misc/R42863.pdf>, pg. 4, Accessed 6-29-17, RK]

Perkins IV defines CTE as organized educational activities that • offer a sequence of courses that provides individuals with coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in current or emerging professions; provide technical skill proficiency, an industry recognized credential, a certificate, or an associate degree; and may include prerequisite courses (other than a remedial course); and • include competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of an industry, including entrepreneurship, of an individual. Funds cannot be used for students prior to the 7th grade, except that equipment and facilities purchased may be used by such students.

Basic State Grants

## Capitalism Links

### Link – Dietary Education

#### Focus on dietary education and food sufficiency masks systematic barriers of economic participation based in class and race

Slocum, Saint Cloud State University Department of Sociology and Anthropology Professor, 6

[Rachel Slocum, March 1, 2006, Antipode, "Anti‐racist Practice and the Work of Community Food Organizations." 38.2 (2006), <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8330.2006.00582.x/abstract>, page 333-334, RK]

ODC member Hank Herrera, wrote in response to a point made about self reliance that ‘‘Among all of the possible solutions . . . the one that continually eludes us is the solution based on individual and family self-sufficiency. That solution requires access to the means to earn adequate income through employment or business ownership and thus strategies to overcome systemic barriers to full participation in the economic life of the community, barriers that still exclude groups of people based on race and ethnicity’’ (H Herrera, email to comfood listserv 5 November 2004). Peter, another list member responded, ‘‘My view is such people won’t ever have food security until they take the trouble to learn and grow their own as much as possible—or move where they can. Their grandparents did it but they’ve lost it. When you grow your own you don’t have to have ‘full participation in the economic life of the community’. When you grow your own, the plants don’t care what ethnic group you belong to’’ (Peter, email to comfood-l, 16 November 2004). ODC member Tiffany Golden responded to another part of Peter’s email in which he said, ‘‘ . . . the biggest problem is some ethnic groups don’t have any ‘culturally appropriate’ foods that are healthy’’. She wrote, ‘‘Not only is this not true, but [it does not include] the context of 1) how unhealthy foods were introduced to these communities, when and why—mainly due to colonialism, or indigenous farming practices/ foods used stripped away by traumatic imperialist/industrialist movements; and 2) how violently changing a culture from a landbased self-sustainable model to corporate dependency through force and economics is an undertone that is conveniently omitted, yet it is encouraged that African-American and Latino communities embrace a land-based self-sustainable model as if it were never a pre-existing reality. Once again, the Missionary Complex is unfolding—the ideal that there is no innate Wisdom within the culture, that it must all come from outside the group—THROUGH EDUCATION no less’’. (T Golden, email to comfood listserv, 17 November 2004, her caps). The emphasis on access and education in community food rather than rights and power has been noted elsewhere (see Allen et al 2003).

### Link – Food Choice/Obesity

#### Food systems are sustained by histories of exploitation. Focus on “bad food” and obesity reinforces boot-strap ideology that props up the system

Slocum, Saint Cloud State University Department of Sociology and Anthropology Professor, 06

[Rachel Slocum, March 1, 2006, Antipode, "Anti‐racist Practice and the Work of Community Food Organizations." 38.2 (2006), <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8330.2006.00582.x/abstract>, page 337-338, RK]

Toward Practicing Anti-racism in Community Food Work

It may be useful for community food advocates to actively consider that the US food system was built on a foundation of genocide, slavery and layers of racist institutions that have dispossessed racialized groups of cultural pride, land and wealth, in gender- and classspecific ways. It survives, for instance, through the work of people of color who serve, disproportionately, in the hazardous work of farm labor and food processing. Institutionalized racism intersecting with processes of colonialism, welfare ideology and gender and class oppression is also visible in the areas of food insecurity, disease and excess death.

A few statistics suffice to illustrate. In the 1980s, the number of black and white farmers declined by 30% and 6.6%, respectively. In 1999 black farmers owned less than a quarter of the land they owned a decade earlier (Flanagan and Inoyue nd). Further, American Indian nations’ survival is threatened by high rates of diabetes. Fifteen percent of American Indians and Alaska Natives have diabetes.9 Between 1990 and 1998, the total number of young American Indians and Alaska Natives with diagnosed diabetes (most of which are type 2) increased by 71% (Acton et al 2002) and these two groups are 2.6 times more likely than the Euro-American population to have diabetes.10 Additionally, in 2003, African American and Hispanic households experienced food insecurity at double the national average (Weil 2004; see also Shields 1995). Finally, a study found that Spanish-speaking immigrants in California, Texas and Illinois were more likely to suffer from food insecurity than immigrants from other language groups (Kasper et al 2000, cited in Lee 2004:1). This land loss, food insecurity and vulnerability to excess death must be understood relative to whites’ land ownership, greater food security and lesser vulnerability (see Pulido 2000). Of critical importance is that white members of the movement recognize how they benefit personally and organizationally from the work of racism in the food system, in the community food movement and in society more generally.

While I present the dire side of the food/race story, I am aware that the way social problems have been racialized has presented people of color communities as fixed and uncomplicated (Harrison 1995). These statistics risk speaking to our assumptions and adding unwittingly to the sediment holding races ‘‘in their place’’ in society. For instance, in nonprofit programming, a focus on poor blacks’ consumption of ‘‘bad’’ food and their subsequent obesity may inadvertently support bootstrap ideology. In any event, the figures cited previously are only part of the picture. Equally, I do not want to reduce all aspects of the modern food system and states of food insecurity to white privilege because to do so would ignore the agency of diverse peoples of color as well as the role of class exploitation and gendered relations of power in the mix (Alcoff 2003).

### Link – Obesity Rhetoric

#### The rhetoric of an obesity crisis is constructed in neoliberal order blaming individuals for their wait and unproductivity - educational initiatives ignore poverty, corporate industry and class

Hensley, Syracuse University Composition and Cultural Rhetoric Program PhD Candidate, 2015

(Anna, January 2015, Syracuse University Surface, “"The Terror Within:" Neoliberalism and the Rhetoric of the Obesity Crisis.” <http://surface.syr.edu/cgi/viewcontent.cgi?article=1320&context=etd>, Accessed 7/2/17, GDI - JMo)

At the same time the rhetoric of the “war on obesity” attempts to make sense of ongoing political, economic, and social anxieties, it constructs its lessons about what it means to be an American citizen within the scope of the neoliberal logic currently dominating economic and political thought. As Wendy Brown explains in “Neoliberalism and the End of Liberal Democracy,” while we frequently think of neoliberalism as a matter of economic policy, neoliberalism entails its own social ideology—an ideology marked by a focus on individual choice rather than systemic or institutional responsibility. That is, in a context dominated by neoliberal values, the means for altering social or cultural circumstances are largely imagined as a matter of getting individuals to voluntarily change individual behaviors. The neoliberal emphasis on choice and personal responsibility works to obscure larger systemic issues that might be at the root of social issues.

In the context of current discussions of the “obesity crisis,” neoliberal values might emphasize education-based initiatives founded on the assumption that teaching individual family units to make better choices regarding food, exercise, and preventative health care would make the biggest difference towards intervening in rising rates of obesity and chronic disease. While these educational initiatives certainly have a place, they often overlook the fact that the circumstances of poverty, the corporatization and consolidation of the agriculture/food industry, and the effects of systemic racism and classism make some “choices” completely out of reach for many communities. Encouraging preventative health care or visits with nutritionists is all well and good, but these sorts of suggestions have severely limited reach when these services are not universally accessible. And, of course, access to services like these is made all the more tenuous by an ever-deepening wealth gap.

The social ideology of neoliberalism heightens a focus on individual choices by moralizing the results of those “choices.” We encounter this moralizing discourse, for instance, when the argument is made that those who lack access to affordable, quality healthcare in the U.S. are simply not working hard enough to properly provide for themselves and their families. Again, these kinds of arguments ignore systemic factors that limit access to health care, but they also position lack of access as a personal, moral failure. In the context of the “obesity crisis,” exceeding the accepted “normal” weight range is frequently constructed as a personal moral failing, as fat people are assumed to be gluttonous, lazy, unclean, uncaring, and lacking in self- control. This moralization is compounded by historic stigmas associated with race, gender, class, and ability, such that the rhetoric of obesity works to justify existing marginalizations, reducing the material effects of structural inequities to a failure of personal morals and will.

## Critical Race Link

### Link – Food Security Rhetoric Racist

#### Food security rhetoric masks systematic racism in farming industry with whiteness

Slocum, Saint Cloud State University Department of Sociology and Anthropology Professor, 06

[Rachel Slocum, March 1, 2006, Antipode, "Anti‐racist Practice and the Work of Community Food Organizations." 38.2 (2006), <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-8330.2006.00582.x/abstract>, page 327-328, RK]

Whiteness enables the coherence of an alliance organized to promote community food security and sustainable farming. This unnamed presence shapes a discourse identifying the focus of struggle as well as resource allocation, conference form and content, list serv discussions, staffing and programming. Unacknowledged white privilege gives the lie to the movement’s rhetoric of justice, good intentions and sustainability. And yet it is clear that racism is an organizing process in the food system: people of color disproportionately experience food insecurity, lose their farms and face the dangerous work of food processing and agricultural labor. Critical analyses of social movements argue that a failure to confront difference undermines progressive change efforts. The paper provides evidence of how the community food movement reproduces white privilege and proposes ways it might engage with anti-racism.

Introduction The urgency and intricacy of negotiating racialized difference in social justice alliances is a compelling question for scholars of cultural politics (eg Bystydzienski and Schacht 2001; Grossman 2003; Narayan 1988; Pulido 2002; Reagon 1983; Twine and Blee 2001). The article contributes to this literature by exploring anti-racist practice as a framework for meaningful alliance across difference in the context of nonprofit work to promote community food systems. By focusing on race, I add to work on other aspects of difference in community food politics (see P Allen 2004; Guthman 2004; Qazi and Scholten 2005; Trauger 2004).

Community food work promotes fair prices and sustainable practices in farming as well as accessible, affordable, culturally appropriate nutritious food for all. Practicing anti-racism requires an analysis that recognizes intersecting forms of power, privilege cognizance and specific ways of working in alliance. Ruth Wilson Gilmore has pointed out that ‘‘we are trying to understand racism here’’ because it ‘‘gives us the foothold we desire’’ to show that one of the critical aspects of difference is the fatalities it produces. Researchers need to ask ‘‘what is the rationality or integument that keeps this insanity intact?’’ (Gilmore 2005). The paper attempts to reveal parts of this rationality in community food work.

## Spending Link

### Perkins Grant Funding Link

#### Perkins costs $1.1 billion

Dortch, Congressional Analyst in Education Policy, 12

[Cassandria, 12-5-12, Congressional Research Service, Carl D. Perkins Career and Technical Education Act of 2006: Background and Performance, <https://fas.org/sgp/crs/misc/R42863.pdf>, pg. 1, Accessed 6-29-17, RK]

The Carl D. Perkins Career and Technical Education Improvement Act of 2006 (P.L. 109-270), reauthorized and revised the Carl D. Perkins Vocational and Technical Education Act of 1998 (Perkins III; P.L. 105-332) and renamed the act the Carl D. Perkins Career and Technical Education Act of 2006 (Perkins IV). Perkins IV supports the development of academic and career and technical skills among secondary education students and postsecondary education students who elect to enroll in career and technical education (CTE) programs, sometimes referred to as vocational education programs.1 Perkins IV was authorized by statute through FY2012 and was funded at $1.1 billion in FY2012. The General Education Provisions Act (GEPA) automatically extends the authorization for one additional fiscal year to FY2013.2

## Politics Links

### GOP Wants Weaker Nutrition Regs

#### Republicans pushing reduction in nutrition regs

Wheeler, The Hill Regulations Reporter, 17

[Lydia, 4/28/17, The Hill, “USDA to ease school meal standards”, <http://thehill.com/regulation/healthcare/331148-usda-to-ease-school-meal-standards>, Accessed 7-1-17, RK]

Newly minted Agriculture Secretary Sonny Perdue is expected to unveil a new rule Monday aimed at giving schools more flexibility in meeting federal nutrition standards for school lunches.

The U.S. Department of Agriculture (USDA) announced Friday that Perdue and Sen. Pat Roberts (R-Kan.) will make the announcement at the Catoctin Elementary School in Leesburg, Va., where they are expected to eat lunch with the students.

Republicans have long been trying to dial back the standards that became a pillar of former first lady Michelle Obama’s initiative to curb childhood obesity in the U.S.

Roberts introduced legislation with Sen. Debbie Stabenow (D-Mich.) last year to give schools two more years to meet new reductions on sodium, but the bill never passed.

Renewed efforts to ease the federal standards came as disappointing news to some advocates.

The American Heart Association was quick to push back. In a statement, the group’s CEO, Nancy Brown, said the current standards are already working and that 99 percent of schools are in compliance.

“Improving children’s health should be a top priority for the USDA, and serving more nutritious foods in schools is a clear-cut way to accomplish this goal,” she said.

### Perkins/CTE Funding/Regulation Unpopular

#### Funding and regulation of CTE education is empirically unpopular -- our evidence is Perkins Act specific

\*1105 Media = Los Angeles media organization that owns the papers below

Schaffhauser, THE Journal and Campus Technology, senior contributing editor, 16

[By Dian Schaffhauser, senior contributing editor for 1105 Media's education publications THE Journal and Campus Technology, internally cites the Alliance for Excellent Education, October 10, 2016, Campus Technology, “Perkins Act Update Stalls in U.S. Senate,” <https://campustechnology.com/articles/2016/10/10/perkins-act-update-stalls-in-u.s.-senate.aspx>, accessed 7.1.2017]//TRossow

A major revamp of the federal regulations and funding rules related to career and technical education in this country is on hold after the United States Senate [Committee on Health, Education, Labor and Pensions](http://www.help.senate.gov/) canceled a scheduled meeting. The [Workforce Advance Act](https://www.congress.gov/bill/114th-congress/senate-bill/3271?q=%7B%22search%22%3A%22committeesshr00%22%7D&resultIndex=4), reauthorization of the Carl D. Perkins Career and Technical Education Act, had been read twice in the Senate and sent back to the committee.

According [to reporting by the Alliance for Excellent Education](http://all4ed.org/strengthening-career-and-technical-education-house-passed-bill-would-rewrite-perkins-act-better-align-cte-with-twenty-first-century-jobs/), there are major disagreements over bill language related to prohibitions on the U.S. Secretary of Education proposed by Senate Republicans. "At this point, the bill is not dead, but time is running out," the alliance noted.

That's a different outcome than what happened in the U.S. House of Representatives, which passed its version of the bill by a vote of 405 to five. The "[Strengthening Career and Technical Education for the 21st Century Act](http://edworkforce.house.gov/uploadedfiles/strengthening_career_and_technical_education_for_the_21st_century_act.pdf)" would provide $1.1 billion in federal funds for middle schools, high schools and postsecondary education to deliver career and technical education (CTE). That version put the Perkins Act through the same kind of milling work given to the larger No Child Left Behind Act as it transformed into the Every Student Success Act (ESSA). For one, there's less emphasis on federal agency oversight; for another, states take over more control related to how funds are spent and how results are assessed.

## CP Options

### Higher Education

#### Colleges can implement CASE

Ulmer, Texas Tech University teacher educator, and Witt, Texas Tech University Agricultural Education, doctoral student, 11

(Dr. Jonathan and Phillip, September/October 2011, Agricultural Education Magazine, “Integrating Science Instruction into Pre-Service Teacher Education.” ProQuest, Accessed 6/30/17, GDI - JMo)

Universities are looking at their pre-service teaching programs and asking, how do we prepare our students to teach integrated science in their agriculture classes? Pre-service teacher education continues to change on an annual basis with a strong foundation in theory. Changes include the evolution of agriculture content, new findings in the learning process, new policies, programs, and recently content integration. CASE might just be the answer at the collegiate level also.

With the policy that Texas state institutions reduce their undergraduate programs to 120 credit hours came some tough issues about teaching the students enough content to be successful. One of the results of this policy at Texas Tech University was the ability to count some agriculture classes as the core science that they are. As a result, students are allowed to take agricultural science electives. Recognizing agriculture for science has opened up some additional opportunities. The Department of Agricultural Education and Communications is proposing the addition of a course on the integration of science into agricultural education.

The new course will be based on the CASE Institutes, or the summer professional development for agriculture teachers who are adopting the curriculum. The challenge with turning the CASE Institute into a pre-service course, is time. The CASE curriculum includes a large number of activities, projects, and problems, several in the form of lab experiments. The resulting course will have a strong emphasis on laboratory instruction. For Texas Tech Ag Ed, this will be the first course outside of agricultural mechanics that will have such a strong emphasis on the laboratory. To complement the ag mechanics classes, part of the integration course will be instruction on the management of a laboratory. Similar to the CASE Institute, students will participate in most of the activities, projects and problems that they would be teaching to their students with the program.

It is the hope of the department that even if the students do not teach in a school that adopts the CASE program, they will still understand the challenges and opportunities in the integration of science. Additionally, Texas Tech graduates will earn their CASE certification as well as a stronger foundation of inquiry based learning that is the foundation of agricultural education.

### Low Achieving Schools PIC

#### CP Text: The United States Federal Government should:

Increase federal funding for \_\_\_\_\_\_\_\_\_ only at schools that have met federal standards needed to graduate high school.

#### The CP competes – it doesn’t do the aff at low-achieving schools -- focusing class time on core curriculum at those schools is necessary to academic achievement

Flanagan, Atlantic contributor, 10

[Caitlyn, B.A. and an M.A. in [Art History](https://en.wikipedia.org/wiki/Art_History) from the [University of Virginia](https://en.wikipedia.org/wiki/University_of_Virginia). Before becoming a writer, Flanagan was an English teacher and college counselor at the [Harvard-Westlake](https://en.wikipedia.org/wiki/Harvard-Westlake) school. January/February 2010 Issue, The Atlantic, “Cultivating Failure,” <https://www.theatlantic.com/magazine/archive/2010/01/cultivating-failure/307819/>, accessed 7-2-17, TR]

Last October, we lost the greatest educational reformer of the late 20th century, [Theodore Sizer](http://en.wikipedia.org/wiki/Ted_Sizer), the founder of the Essential Schools movement, who was brave enough to say that when a school is in crisis, its leaders should strip away every program and resource that is not essential to the mission of schooling. He wrote in his classic 1984 book, Horace’s Compromise:

**If students have yet to meet the fundamental standards of literacy, numeracy and civic understanding, programs should focus exclusively on these**. Some critics will argue that the school must go beyond these subjects to hold the interest of the pupils … but a fourteen year old who is semi-literate is an adolescent in need of intensive, focused attention.

My state is full of semiliterate 14- year-olds. Let their after-school hours be filled with whatever enriching programs the good volunteers and philanthropic organizations of California care to offer them: club sports, choruses, creative-writing workshops, gardens. But until our kids have a decent chance at mastering the essential skills and knowledge that they will need to graduate from high school, **we should devote every resource and every moment of their academic day to helping them realize that life-changing goal.** Otherwise, we become **complicit**— through our best intentions—in an **act of theft** that will not only contribute to the creation of a permanent, uneducated underclass but will rob that group of the very force necessary to change its fate. The state, which failed these students as children and adolescents, will have to shoulder them in adulthood, for it will have created not a generation of gentleman farmers but one of intellectual sharecroppers, whose fortunes depend on the largesse or political whim of their educated peers.

### Private Funding

#### Private funding solves agriculture education

Mercier, former Senate Agriculture Committee Chief Economist & Farm Journal Foundation Director of Policy and Advocacy, 15

[Stephanie, July 2015, AGree, “Food and Agricultural Education in the United States”, <http://www.foodandagpolicy.org/sites/default/files/AGree_Food%20and%20Ag%20Ed%20in%20the%20US_0.pdf>, p. 10, accessed 6-26-17, AFB]

Non-Public Funding

As noted above, there is significant private funding of food and agriculture education in the United States by companies, foundations, and individuals. While a number of prominent foundations and companies fund these organizations with large donations, there is also significant investment by smaller foundations and companies in food and agricultural education.

Investments range from traditional agricultural education to community-based food system projects that support garden-based education to healthy eating initiatives in public schools. Table 2 was compiled through publicly available information including web searches of agricultural education organizations and the foundations themselves. It is not an exhaustive list, but representative of the philanthropic and agribusiness sectors’ interest in supporting these activities.

### Nongovernmental Programs

#### Nongovernmental programs solve local food and nutrition education

Mercier, former Senate Agriculture Committee Chief Economist & Farm Journal Foundation Director of Policy and Advocacy, 15

[Stephanie, July 2015, AGree, “Food and Agricultural Education in the United States”, <http://www.foodandagpolicy.org/sites/default/files/AGree_Food%20and%20Ag%20Ed%20in%20the%20US_0.pdf>, p. 11, accessed 6-26-17, AFB]

Other innovative approaches to bringing food and agriculture to public schools have emerged in recent years. FoodCorps was established as a component of AmeriCorps in 2009, with the goal of placing young people in schools around the country to improve students’ knowledge about food and nutrition.53 In 2014-15, there were 182 FoodCorps service members in place at 500 schools in 16 states and the District of Columbia, setting up community garden projects and improving the quality of students’ diets at school and at home. The National Farm to School Network provides information and resources to assist local school districts in bringing more locally-produced foods into school cafeterias for meals, educating students about food choices, and providing menus and recipes for school nutrition staffs.54 In 2012, the USDA Farm to School Census estimated that 23.5 million students benefited from the farm to school efforts across the country (Table 4). Other innovative approaches identified include the Wellness in the Schools initiative and My American Farm computer app, created with funding from the American Farm Bureau Foundation for Agriculture.

### Food Policy Councils

#### Food policy counsels can integrate food justice and environmental justice

**Purifoy, J.D. Harvard Law School, & Duke University Environmental Policy PhD candidate, 14**

[Danielle M., 2014, Duke Law Scholarship Repository, "Food policy councils: integrating food justice and environmental justice,” http://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=1302&context=delpf, p. 375-6, accessed: 7/1/17, KF]

FPCs often advocate the ecological and human health benefits of local food markets and the growth and consumption of fresh, chemical-free food.3 Though addressing these issues is critical to advancing food sustainability, FPCs **may miss critical opportunities** for structural change to food systems **by advancing agendas in which equity and justice are not central objectives**. By adopting principles of environmental justice and food justice, FPCs can advance their goals **without reproducing the same inequities perpetuated by the current food regime**.

Environmental justice refers to equity in the distribution of environmental benefits and in the prevention and reduction of environmental burdens across all communities.4 **Food justice is equitable access not only to healthy, culturally appropriate food, but also to the benefits of food production and distribution for all communities.**5 By working at the intersection of environmental justice and food justice, FPCs can create a profound opportunity for the integration of two parallel social movements that are distinguishable from their mainstream iterations— traditional environmentalism and the sustainable food movement—and demand the inclusion and empowerment of minority and low-income communities in the process and outcomes of improving food and the environment.

This article makes two main arguments. First, environmental justice and food justice, social movements defined by ideals of equity and justice in environmental and food production practices intersect at three critical points—public health and safety, ecological health, and social justice. These movements would benefit both in increased capacity and influence by greater integration. Second, FPCs are ideal institutions to integrate the environmental justice and food justice movements, not only because they share concerns for the ecological and health consequences of the industrial food system, but also because they are localized forums with a great capacity for democratic participation and equitable social change. In the aggregate, **FPC successes at local, state, and regional levels have the potential to make system-wide impacts to the food industry from the ground up, fostering a national food democracy.**

#### Food policy councils bolster local participation and sustainable food systems

**Purifoy, J.D. Harvard Law School, & Duke University Environmental Policy PhD candidate, 14**

[Danielle M., 2014, Duke Law Scholarship Repository, "Food policy councils: integrating food justice and environmental justice,” http://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=1302&context=delpf, p. 398, accessed: 7/1/17, KF]

Food policy councils, now spread throughout North America—193 councils at the state, local, and regional levels127—**are thriving institutions with collective potential to engender food democracy across the continent.** Further, many FPCs have already made environmental protection a core part of their mission and advocacy, making the critical connection between food and ecological sustainability. However, as illustrated by the history of social exclusion and elitism reflected in the mainstream environmental and food sustainability movements, **FPCs that do not also make social justice central to their mission risk reproducing the same race and class inequalities in their advocacy and policy outcomes.** This paper argues that in order to accomplish goals of ecological sustainability, **food sustainability, and community food access, FPCs should adopt the principles of the environmental justice and food justice movements**. These parallel movements intersect at three critical points— public health, ecological health, and social justice. Environmental justice and food justice are perfect allies because their integration creates tremendous opportunities for more comprehensive approaches to structural social problems in the physical environment and food system. Further, because the tenets of food justice are so dependent upon structural shifts in environmental stewardship in low-income and minority communities, food justice is a critical component of environmental justice. Utilizing FPCs as a democratic institutional framework, advocates from both movements can finally integrate at the grass-roots level—**where people care most about their food and environment—building upward towards a more sustainable and just national food system.**

### Healthy Food Promotion

#### Cardiometabolic deaths can be prevented by emphasis on maximizing the good food choices, the establishment of school nutrition programs, economic incentives on good food, and taxation on unhealthy food

**Dr. Micha, Tufts Friedman School of Nutrition Science and Policy professor, et al., 17**

[Renata, an epidemiologist whose research focuses on the effects of diet on cardiometabolic diseases, José Peñalvo, Tufts University, Nutrition Science and Policy, assistant professor, worked for 6 years on how lifestyle determines cardiovascular health, Fred Cudhea, PhD in Biostatistics from Harvard, Fumiaki Imamura, Cambridge, Epidemiology, Senior Investigator Scientist and Harvard, Epidemiology, Postdoctoral Research Fellow, Colin Rehm, Einstein University, Epidemiology & Population Health, Clinical Assistant Professor, Dariush Mozaffarian, Tufts University, Nutrition Science and Policy, Dean, 3/7/17, The Jama Network, “Association Between Dietary Factors and Mortality from Heart Disease, Stroke, and Type 2 Diabetes in the United States”, [http://jamanetwork.com/journals/jama/article-abstract/2608221, Jama](http://jamanetwork.com/journals/jama/article-abstract/2608221,%20Jama) Network, pg. 921-922, accessed 6/28/17, JBC]

Between 2002 and 2012, several improvements were identified. Even accounting for underlying declines in total cardiometabolic mortality, fewer diet-associated proportional deaths were related to excess SSBs and insufficient polyunsaturated fats and nuts/seeds. Improvements were not uniform. For example, less-educated individuals experienced no significant declines in cardiometabolic deaths associated with low nuts/seeds and smaller declines in cardiometabolic deaths associated with SSBs.

Nationally, estimated cardiometabolic deaths related to insufficient healthier foods/nutrients remained at least as substantial as those related to excess unhealthful foods/ nutrients. These results inform strategies for prevention to reduce the health and economic burdens of cardiometabolic diseases in the United States. For example, positive messaging to patients, the public, and industry can emphasize maximizing the good (rather than simply reducing the harmful) food choices and products. Within the health system, changes to clinician education, multidisciplinary care teams, electronic health records, quality guidelines, and reimbursement standards can each facilitate lifestyle counseling and behavior change.1,23 At local or national levels, strategies with evidence for effectiveness include multicomponent school and workplace programs focused on healthier eating, economic incentives (eg, subsidies) for more healthful foods or taxation of less healthful foods, incentivized or mandated product reformulation (eg, to reduce additives such as sodium and trans fats), and restrictions on advertising of unhealthy foods to children.24,25 For example, the US Food and Drug Administration recently announced voluntary sodium reduction targets for the food industry,26 while in the 2016 elections, SSB taxes were passed in all 4 cities with this measure on the ballot.27 Compared with education alone, such “upstream” strategies could also reduce disparities. For example, disparities in diet related cardiometabolic deaths identified in our investigation might be partly addressed by the Supplemental Nutrition Assistance Program (SNAP), which serves 44 million low-income individuals in the United States; for example, by expanding the SNAP Food Insecurity Nutrition Incentive program28 to provide wider incentives for purchasing fruits and vegetables as well as nuts/seeds and adding restrictions or disincentives for unhealthier products such as SSBs, processed meats, and high-sodium foods.29,30 Gaps in knowledge remain regarding cost-effectiveness, equity assurance, and political feasibility of dietary policies in different settings and within different subgroups; our results highlight the need for government and other stakeholders to prioritize implementation and evaluation of such strategies.

Among unhealthful foods/nutrients, the present findings suggest that sodium is a key target. Population-wide salt reduction policies that **include a strong government role to educate the public and engage industry to gradually reduce salt content in processed foods** (for example, as implemented in the United Kingdom and Turkey) appear to be effective, equitable, and highly cost-effective or even cost-saving.31,32 Such population approaches can also minimize challenges of public taste preferences, placing all companies on a level playing field and allowing the population’s taste receptors for salt to gradually upregulate, preventing any major perception of changes in taste.33 Functional benefits of salt in foods, such as for texture or food safety, must also be further addressed by advances in food processing.33

The decline in SSB-associated proportional mortality between 2002 and 2012 is promising. The current results suggest that continuing programs to reduce SSBs are important, especially among younger adults, blacks, Hispanics, and individuals in the United States with lower educational attainment. The price responsivity of SSBs 34- 36 makes tax strategies, already implemented in Mexico, the United Kingdom, and several US cities, an effective option. For example, evidence from Mexico suggests that a national SSB tax reduces overall consumption and with greatest benefits among those of lower socioeconomic status,35 reducing disparities. Whether these taxes ultimately improve health outcomes remains unknown.

## States CP

### States Solve – General

#### Agricultural education should be handled at local level – different needs for different communities

LaRose, University of Florida Agricultural Education doctoral graduate student, 16

(Sarah, 3/14/16, The Agricultural Education Magazine. “Teach Local: Incorporating the Local Food Movement into Agricultural Education Curriculum.” ProQuest, Accessed 6/30/17, GDI - JMo)

Over the past ten years, the local food movement has gained signifcant traction in many com- munities across the United States, attracting more consumers to learn about the source of their food, and creating an opportunity for School-Based Agricultural Edu- cation to garner support and com- munity involvement. Likewise, it also creates an opportunity for the local agricultural education program to provide educational outreach to their local community. Since agricultural education pro- grams “should be designed to meet the needs of the local community” (Talbert, Vaughn, & Croom, 2005, p. 86), agriculture education in- structors should regularly evalu- ate the needs of their community to determine if the agriculture ed- ucation program is indeed meet- ing those demands. Agricultural education programs incorporating and addressing aspects of the lo- cal food movement into their cur- riculum and programming have the potential to gain new support and interest in supporting School- Based Agricultural Education and FFA, as well as providing relevant learning opportunities for students preparing for careers in agricul- ture.

#### Majority of ag education funded by states

Mercier, former Senate Agriculture Committee Chief Economist & Farm Journal Foundation Director of Policy and Advocacy, 15

[Stephanie, July 2015, AGree, “Food and Agricultural Education in the United States”, <http://www.foodandagpolicy.org/sites/default/files/AGree_Food%20and%20Ag%20Ed%20in%20the%20US_0.pdf>, p. 8, accessed 6-26-17, AFB]

In terms of funding for Agriculture in the Classroom activities, aside from being eligible for grants under the USDA SPECA grant program described above and $1 million in funding annually for the national organization,40 the bulk of the funds that support these activities come from outside the federal government, from a variety of sources. In most states, financial resources come from a mixture of state monies, some from general revenue and others from dedicated sources like the proceeds from sales of a specialty license plate issued by states such as Idaho 41 and Maine,42 as well as donations from agribusinesses and state or local farm and commodity groups. State AITC organizations typically award grants to teachers and/or schools to conduct activities, with the size of each grant ranging from a few hundred to a few thousand dollars. Data collected from 42 states by the National Agriculture in the Classroom Organization (NAITCO) tallied total funding for the program in 2013 at just over $11.2 million, the most recent year reported.43

### States Solve – Enrollment

#### Additional state funding resolves enrollment problems

Henry, Purdue University Office of Multicultural Programs graduate research assistant, et al, 14

(Kesha A., Brian Allen Talbert, Purdue University College of Agriculture Department of Youth Development and Agricultural Education Professor, Pamala V. Morris, Purdue University College of Agriculture Assistant Dean/Director of the Office of Multicultural Programs, 2014, Journal of Agricultural Education, “Agricultural Education in an Urban Charter School: Perspectives and Challenges.” Volume 55 issue 2, <http://files.eric.ed.gov/fulltext/EJ1122353.pdf>, p. 96, Accessed 6/28/17, GDI - JMo)

SC2: In addition to complementing the school’s core curricula, participants were excited about the ability to access state funding to support Career and Technical Education (CTE) programs such as agricultural education. In [state] a school corporation receives several hundred dollars for each student enrolled in an agricultural education course. These funds are unrestricted, so can be used to pay the agriculture teacher’s salary. Fern Grove’s budget was based on 270 students, but school enrollment only reached 200. To meet budget, administrators released some teachers, but also looked at additional funding streams. Mr. Brooks explained the school’s enrollment and funding problem. “So we are still trying to deal with the repercussions of not having the enrollment that we wanted to have.... looking at what we can do to bring in more income and how we could supplement the science and technology focus of the school...I wanted to bring in more of an agricultural focus....” Mr. Brooks was not only pleased with the additional state funding, but also the impact of the agriculture teacher on the school. “...so she is getting the FFA program started as well and you know she has really been good for the school.”

[Note: FFA = Future Farmers of America]

### States Solve – Partnerships

#### States solve best - local partnerships create immediate impact

Ewing, Pennsylvania State University Agricultural and Extension Education Associate Professor, 16

[John C., Editor of The Agricultural Education Magazine, Nov Dec 2016, The Agricultural Education Magazine, “Preparing our Future Workforce through Agricultural Education,” pg. 2, <https://www.questia.com/library/journal/1P4-1907806536/preparing-our-future-workforce-through-agricultural>, accessed 6.30.2017 ]//TRossow

All agricultural education programs are accountable for student learning, whether at the **local or state level**. State program approvals require that teachers and programs continue to meet the standards set forth within legislation. Often teachers are required to show how their programs are contributing to academic standards, contributing to student career objectives, and ultimately college and career placement. As part of the mission of any Career and Technical Education program, agricultural education programs need to show how they are preparing students that are ready to enter Agriculture, Food, and Natural Resources careers. This focus on career development has always been important to agricultural education. Teachers and programs continue to be asked to provide evidence of student performance on program assessments, as well as certification and credentials that students can take with them following their high school education.

We can all agree that students learn technical skills through their agricultural education program, but they also have opportunities to practice and enhance communication, time management, team work, and leadership skills. Employers want to know that students are being prepared with skills that will benefit their company. Teachers that are able to **partner with local agricultural businesses** are often afforded the opportunity to grow their program, while providing access to potential future employees to the business. Through these partnerships there is an **amazing opportunity** for teachers to learn the **most up-to-date information** that can benefit their students, **immediately**.

#### Local Agricultural education – increases community resources

LaRose, University of Florida Agricultural Education doctoral graduate student, 2016

(Sarah, 3/14/16, The Agricultural Education Magazine. “Teach Local: Incorporating the Local Food Movement into Agricultural Education Curriculum.” ProQuest, P.27, Accessed 6/30/17, GDI - JMo)

Agricultural education pro- grams have the potential to harness new supporters by harnessing the energy and interest of those new- ly interested in food production. Though each program is situated in a unique community, “form- ing key partnerships with parents, knowledgeable individuals, busi- nesses, groups, and other volun- teers is a key to local program success. Partnerships allow the community the privilege of being a part of the agricultural education program and provide resources to make the program stronger” (Tal- bert, Vaughn, & Croom, 2005, p. 110). Capitalizing upon the cur- rent local food movement led to increased community engagement and support for our agricultural education program, as well as new SAE opportunities for students and educational resources for the agriculture education staff. Imag- ine what this approach could do for your program!

### States Solve – Perkins

#### States determine CTE programs now

Dortch, Congressional Analyst in Education Policy, 12

[Cassandria, 12-5-12, Congressional Research Service, Carl D. Perkins Career and Technical Education Act of 2006: Background and Performance, <https://fas.org/sgp/crs/misc/R42863.pdf>, pg 14, Accessed 6-30-17, RK]

Perkins IV provides states considerable flexibility in implementing the funding. The act was designed to increase “state and local flexibility in providing services and activities designed to develop, implement, and improve [CTE], including tech prep education.” To a certain extent, states can determine which CTE programs to implement and how to measure achievement.

#### States decides distribution of Perkins funds going to secondary vs post-secondary

Dortch, Congressional Analyst in Education Policy, 12

[Cassandria, 12-5-12, Congressional Research Service, Carl D. Perkins Career and Technical Education Act of 2006: Background and Performance, <https://fas.org/sgp/crs/misc/R42863.pdf>, pg. Summary, Accessed 6-30-17, RK]

The largest program authorized under Perkins IV is the Basic State Grants program. This program provides formula grants to states to develop, implement, and improve CTE programs, services, and activities. The formula awards proportionally larger grants to states with larger populations that are in the age range traditionally enrolled in high school or within two years of high school graduation and to states with a lower than average per capita income. Incorporated in the formula are certain features that guarantee minimum funding levels. These features are a FY1998 hold harmless and a minimum equal to 0.5% of the total amount available for state grants. Each state is able to decide how much of its federal funds will be dedicated to secondary education and how much to postsecondary education. Once this decision is made, funds must generally be distributed to the local secondary and postsecondary education providers through formulas defined by Perkins IV or the state. Over 12.4 million students enrolled in CTE courses during the 2008-2009 academic year (most recent data available). These courses may or may not be funded with Perkins IV funds.

### Uniformity Fails

#### Uniform approach fails – different communities require different tactics

Henry, Purdue University Office of Multicultural Programs graduate research assistant, et al, 14

(Kesha A. Brian Allen Talbert, Purdue University College of Agriculture Department of Youth Development and Agricultural Education Professor, Pamala V. Morris, Purdue University College of Agriculture Assistant Dean/Director of the Office of Multicultural Programs, 2014, Journal of Agricultural Education, “Agricultural Education in an Urban Charter School: Perspectives and Challenges.” Volume 55 issue 2, <http://files.eric.ed.gov/fulltext/EJ1122353.pdf>, p. 97, Accessed 6/28/17, GDI - JMo)

C2: Participated emphasized instructional methods and curriculum must fit the setting. Ms. James elaborated regarding differing techniques she utilized when teaching agricultural education courses in an urban school as opposed to rural schools. She believed topic selection was a key component for consideration when planning instructional units. She noted topics chosen in urban schools must be applicable to students relative to characteristics of urban communities.

You need to make sure that you get to know the dynamics of the students, their background and what the community is around them and then you have to take the curriculum and approach it to them in their way. So, in the rural school there...were a lot of horse farms and production crops as well so you could take that and apply it and talk to them about that because they understood it because they saw it every day....But, in an urban school you have to make sure that you take the agriculture that they see in the day....And, sometimes they don’t realize that that’s agriculture that they see in the day but then you have to make them realize that that is agriculture that they do see in the day and you have to approach the curriculum and tailor it to their needs because they are completely two different needs....

#### Roadblocks to work based learning means that states and local communities need flexibility to adjust to restrictions.

Schneider, Greensburg Community High School Agriculture Teacher, 16

[Greg, November 16, The Agricultural Education Magazine, “Cultivating Careers through Work Based Learning,” <http://www.naae.org/profdevelopment/magazine/current_issue/Nov_Dec_2016.pdf>, p. 15, 6/30/17, KF]

Even in a perfect scenario, **there are roadblocks and challenges**. The most prevalent one we have found is **age restrictions** on equipment operation. Many companies require employees be 18 years old to operate equipment. In some cases, employees have to be 18 years old to be hired. **We discovered an educational clause in the labor laws here in Indiana that will allow some exemptions**, but even with this information, **it requires an industry partner that sees the value of figuring out how to make things work**. In most cases, these **concerns can be mitigated through student mentorship and effective supervision.** It is also important for the employer to feel like there is communication and support coming from the school. Es**tablishing and maintaining relationships between industry and the WBL supervisor is paramount**.

I believe in the future of agriculture and I am confident that by providing experiences through WBL, **we are insuring a bright future as the next generation of agriculturalists** take on the challenge of feeding the world. Based on my experiences, I offer the following five steps to creating a successful WBL internship program:

1. **Establish relationships with industry partners**.

2**. Identify local employment needs & align with program course offerings.**

**3. Access resources and create a state approved curriculum.**

4. Match proper mentor/ mentee partnerships.

5. **Maintain job site supervision and support.**

[Kailey WBL=Work based learning]

### Indiana Solves

#### Indiana state actions solve ag education and literacy

Miley, Rushville Republican Statehouse Reporter, 17

[By Scott L. Miley CNHI Statehouse Reporter, internally cites India Governor Eric Holcomb and State Legislator Don Lehe, “Plan seeks to grow Indiana agriculture over next decade,” Jun 30, 2017, <http://www.rushvillerepublican.com/news/plan-seeks-to-grow-indiana-agriculture-over-next-decade/article_20d52705-0f1e-5cdd-8c6a-20ddc4509882.html>, accessed 7.1.2017]//TRossow

CARMEL — Plans to implement a **statewide strategy** to promote Indiana’s **57,500 farming** operations over the next 10 years were announced Monday.

The presentation of the plan, made to about 200 agriculture representatives at The Ritz Charles event center in Carmel, also drew Gov. Eric Holcomb and Lt. Gov Suzanne Crouch to the podium.

“Having a plan is critically important. It’s also important to the market so that folks know there is certainty and predictability when they are looking at where to invest,” said Holcomb. “So this plan is right down that strike zone. It will play a critical part in us continuing to grow our ag investments.”

The plan calls for dozens of agencies to promote seven priorities including economic and community development, natural resources, food and agricultural innovation and education and career development

“All of Indiana agriculture came together to develop this plan. There is enough common ground among all those to come together and lift up those core, what turns out to be seven key priorities,” Indiana State Department of Agriculture Director Ted McKinney said.

The plan, which has 86 items requiring action by the state and other agencies, draws on Indiana being home to global agribusinesses and diverse natural resources as among the state’s strengths but also cites as a weakness the public’s perception and lack of understanding of some aspects of agriculture.

The plan has been in the works for 18 months. One component seeks agriculture education curriculum options for K-12. However, a recent bill that would have added agriculture science classes in high schools failed to gain a hearing in the legislature.

The bill’s author, Rep. Don Lehe, R-Delphi, said Monday that he was a “little skeptical” of it passing the legislature and that the concept may have been too new for some legislators.

Lehe said, “I think there was a lot of feeling of, how do you force a school to have an ag class for some of these schools that are very urban? But my response is, we’re seeing some of the largest growth in FFA for example and agriculture in some of these urban schools.”

Holcomb added, “This is an area where I agree with Rep. Lehe, that’s it’s important that our students when they leave high school and they’re holding a ticket to their success in their hand, agriculture education is critically important in a vast part of our state.

“As technology intersects with agriculture of yesterday we have to make sure that we’re equipping our students with the skills they need,” Holcomb said.

Lehe said he might introduce a similar bill next session.

The state Department of Agriculture has plans to work with the state Department of Education in determining **future curriculum.**

“We do believe that we can find a way to introduce more of this curriculum,” McKinney said. “Driving this is the fact that too many of our youth think that milk originally comes from the local retailer. I’m not blaming them. I’m blaming saying we can’t let that happen.”

He continued, “When they find out a cow on the farm produces that milk or a pig on the farm produces that terrific pork chop from the state fair, then there becomes a more profound and deeper appreciation for what goes on on a farm and that’s ultimately what it’s about.”

### Iowa Solves

#### States can implement stem – Iowa proves

Bloom, Curriculum for Agricultural Education Science Education Plant Pathway Coordinator & Eddy, Southeast Polk High School agricultural education teacher, 16

(Melanie and Matthew (Southeast Polk High School in Pleasant Hill, Iowa, 5/16/16, The Agricultural Education Magazine, “Securing STEM Dollars for CASE and Agricultural Education.” ProQuest, P. 25, Accessed 6/30/17, GDI JMo)

Then STEM education became a focus for granting agencies. Visit http://stemconnector. org/state-by-state to see STEM-related projects in each state. Begun in 2012, the Iowa Governor’s STEM Advisory Council is made up of leaders in higher education, business, educators, and govern- ment of cials. The Council’s purpose is to increase student interest and to improve teacher preparation for STEM education. Iowa teachers and youth activity sponsors appreciate supplemental funding from the Iowa STEM Scale-Up grant program.

#### Local supporters provide agricultural funding – Iowa proves

Bloom, Curriculum for Agricultural Education Science Education Plant Pathway Coordinator & Eddy, Southeast Polk High School agricultural education teacher, 16

(Melanie and Matthew (Southeast Polk High School in Pleasant Hill, Iowa, 5/16/16, The Agricultural Education Magazine,” Securing STEM Dollars for CASE and Agricultural Education.” ProQuest, P. 26, Accessed 6/30/17, GDI JMo)

As dozens of Iowa agricultur- al educators attended CASE Insti- tutes, they received supplemental funding for supplies and equip- ment through STEM Scale-Up programs. Many educators also found local funding for additional items. Instructors compile pro- gram data to provide to potential local supporters. Developing a per-course budget helps potential contributors quantify the need and see how their dollars can be leveraged by the local program for the best student experience possible. The Iowa grant writing team calculates both per-course and per-student expenses for grant applications, separating the initial start-up funding required as well as annual consumable bud- gets on a per-student basis and us- ing the recommended 20-student class size. When the start-up costs are provided and per-student con- sumable gures seem reasonable, school districts may be more will- ing to discuss possibilities.

### Kansas Solves

#### Kansas solves – public-private partnerships

Plaschka et al., Kansas Department of Agriculture, 16

[Russ Plaschka, Career and Workforce Development Specialist, Kansas Department of Agriculture, Karry Wefald, Marketing Director, Kansas Department of Agriculture, and Dana Ladner, Compliance Education Coordinator, Kansas Department of Agriculture, November-December 2016, The Agricultural Education Magazine, “Investing in School-based Agriculture Education - A Workforce Solution,” pg. 25, <https://www.questia.com/library/journal/1P4-1907801855/investing-in-school-based-agriculture-education>, accessed 6.30.2017]//TRossow

Agriculture is an industry of variables and unknowns – the weather, operation size and ownership structure, markets and the economy, plant disease, land price, global consumer perception - the list goes on and on. One thing, however, is known: Kansas is making progress in developing **creative approaches** to **bridging public and private resources** for the benefit of agriculture education classrooms.

It is no surprise that **agriculture is big business in Kansas**. The sector’s economic contribution to Kansas is 43% of the total gross regional product. Agriculture, food and food processing supports 12% of the entire workforce in the state. Investing in agriculture education is a proven way to build a solid foundation that supports the agency’s mission of creating a “**best-in-state plus” workforce** and work environments with a positive culture and attitude. Our progress is the result of surveying the workforce, focusing on student supervised agricultural experiences (SAE), and developing an agriculture industry certificate program for agricultural education students in Kansas.

#### Partnerships are essential to the entire industry

Plaschka et al., Kansas Department of Agriculture, 16

[Russ Plaschka, Career and Workforce Development Specialist, Kansas Department of Agriculture, Karry Wefald, Marketing Director, Kansas Department of Agriculture, and Dana Ladner, Compliance Education Coordinator, Kansas Department of Agriculture, November-December 2016, The Agricultural Education Magazine, “Investing in School-based Agriculture Education - A Workforce Solution,” pg. 26-27, <https://www.questia.com/library/journal/1P4-1907801855/investing-in-school-based-agriculture-education>, accessed 6.30.2017]//TRossow

As the Kansas agriculture workforce development initiative continued, funding of a full-time staff position housed in the Division of Agriculture Advocacy, Marketing and Outreach was key. “Our division is tasked with not only supporting agriculture education classrooms but also facilitating business and industry growth and expansion,” said Kerry Wefald, director of the division. “We know that hiring entry-level employees and also recruiting mid-level talent can be challenging for our industry leaders. Many times potential employment networks and resources may be in place; however, business and industry leaders may not have the right connections or relationships.”

KDA continuously seeks **input from farmers**, **ranchers and agribusinesses** that have a **vested interest** in keeping the Kansas agriculture sector healthy. **Public-private partnerships with agribusinesses in the state are essential for the successful growth of the agriculture industry**. The Kansas Department of Agriculture serves as the bridge that **links business and industry with educators** **and students** with the hopes of developing true partnerships. These partnerships are the focus of the workforce development position at the KDA. We are working with our teachers, encouraging them as well as farmers, ranchers and agribusinesses to come together for more than just fundraising. When industry shares equipment, technology, and expertise the agriculture education program receives **invaluable resources and experiences** for their students. Industry needs to benefit as well and we see this through access to the program’s most valuable resource, the students. When industry can come into our classrooms and recruit students early in their high school career it is a win/win - students can see what opportunities await them soon after graduation in their home community and industry has access to a pipeline of skilled workers. When we truly step back and look at what the primary focus of our agriculture education student experiences should be, isn’t it that each of our students have the opportunity to be fully prepared to work in the agriculture industry?

As teachers of agriculture, you can play a pivotal role in creating similar public-private programs in your communities and state. It begins with engaging the agriculture industry, accepting honest feedback stuand making a plan to address current and future needs. Fully understanding the situation and assessing need provides a strong portfolio of information to share with your state department of agriculture, state and local level workforce development contacts, or other elected leaders in positions of influence.

### Vermont Solves

#### Vermont solves – they lead the nation in ag literacy programs

Ross, Vermont Agency of Agriculture, Food, and Markets, Secretary, 13

[Chuck Ross is Secretary of the [Vermont Agency of Agriculture, Food, and Markets](http://agriculture.vermont.gov/). Chuck has a history of civic and agricultural leadership in the state, as a farmer, former state legislator, and former State Director for U.S. Senator Patrick Leahy. June 24, 2013, University of Vermont Food Feed, “Agricultural literacy: How VT is leading the way in food system awareness,” <https://learn.uvm.edu/foodsystemsblog/2013/06/24/agricultural-literacy-how-vt-is-leading-the-way-in-food-system-awareness/>, accessed 7.1.2017]//TRossow

As Secretary of Agriculture for the State of Vermont, I consider it my mission to increase agricultural literacy. I am proud to report we are making great strides. It is happening in our public schools, where more than half of our students experience Farm to School programming in their classrooms, cafeterias, and communities. (In fact, Vermont **leads the nation** in Farm to School initiatives.) It is happening at the point-of-purchase, where more consumers are buying direct from the farm (via CSA shares, farmers’ markets, and farm stands) per capita than any other state in the nation. And it is happening in our hospitals, workplaces, and government institutions, where focused match-making and technical assistance is enabling an increasing number of local producers to secure supplier contracts.

Quite simply, more Vermonters are connecting directly with farmers, which deepens their appreciation for and understanding of agriculture.

### Federalism Link – Meals

#### School meal programs give cede power to the federal government

Bakst, Heritage Foundation Thomas A. Roe Institute for Economic Policy Studies, of the Institute for Economic Freedom and Opportunity Research Fellow in Agricultural Policy, and Sheffield, Heritage Foundation Richard and Helen DeVos Center for Religion and Civil Society of the Institute for Family, Community, and Opportunity Policy Analyst, 16

(Daren and Rachel, 11/3/16, Heritage Foundation, “Getting the Facts Straight on School Meals and Child Nutrition Reauthorization.” <http://www.heritage.org/welfare/report/getting-the-facts-straight-school-meals-and-child-nutrition-reauthorization>, Accessed 7/2/17, GDI - JMo)

The House and the Senate might soon consider child nutrition bills[1] that would reauthorize the infamous Healthy, Hunger-Free Kids Act of 2010.[2]

Both bills would maintain a new provision that gives free meals to students regardless of family income (i.e., universal school meals), leave intact (with some minor tweaks) the prescriptive federal school meal standards, and expand welfare and federal food assistance. As is too often the case, should either bill move forward, many policymakers, including conservatives, would be conceding child nutrition policy to those seeking greater federal control and a larger welfare state.

In considering child nutrition legislation, policymakers should carefully evaluate the many claims made by proponents about major aspects of the child nutrition programs. This paper addresses many of these claims.

## Agriculture Answers

### AT – Low Ag Education Access Now

#### Curricular materials are widespread now

Mercier, former Senate Agriculture Committee Chief Economist & Farm Journal Foundation Director of Policy and Advocacy, 15

[Stephanie, July 2015, AGree, “Food and Agricultural Education in the United States”, <http://www.foodandagpolicy.org/sites/default/files/AGree_Food%20and%20Ag%20Ed%20in%20the%20US_0.pdf>, p. 10-11, accessed 6-26-17, AFB]

For most of the organizations included in Table 3 below, the breadth of topics covered in the materials provided is quite extensive. While the lesson plans for elementary schools are fairly basic and focus on aspects of production agriculture, the material for secondary schools is more sophisticated and explores natural resource and health issues in addition to production agriculture. For example, the Tennessee Farm Bureau provides a 6th through 8th grade curriculum package, developed under a grant with the U.S. Environmental Protection Agency that explores water pollution issues.50 As an example, on the health/nutrition side, the NAITCO matrix contains an elementary school lesson entitled “Who Grew My Soup” and provides lessons on food safety and nutrition for middle school students.

There are additional sources which provide educational curriculum material that focus on sustainable agricultural approaches, such as the website for the Center for Integrated Agricultural Systems at the University of Wisconsin51 and a guide to sustainable agriculture education opportunities assembled under a grant from the Sustainable Agriculture Research and Education (SARE) program.52

#### Status quo solves – Agriculture courses expanding now

Pannoni, U.S. News education digital producer, 14

[Alexandra, 3-31-14, US News, “Agriculture Education Blooms in Urban, Rural High Schools,” <https://www.usnews.com/education/blogs/high-school-notes/2014/03/31/agriculture-education-blooms-in-urban-rural-high-schools>, accessed 6.27.2017]//TRossow

No longer just about cows and plows, the modern agriculture industry encompasses subsectors such as urban forestry and agricultural biotechnology, which includes the genetic engineering of crops. As the industry has grown, so has the interest in teaching teens more about it. About 15 percent of the U.S. workforce is employed in agriculture-related careers, [according to the American Farm Bureau Federation](http://www.fb.org/index.php/index.php?action=newsroom.fastfacts), and more than 54,000 jobs for college graduates in the agricultural, food and renewable natural resources sectors are expected to be created annually from 2010-2015, [according to the U.S. Department of Agriculture](http://www3.ag.purdue.edu/USDA/employment/Documents/USDA_Employ_Op_2010_8.pdf). In addition to many career opportunities in the field, agriculture classes allow students to practice real applications of math, science and English concepts, and is among the reasons why [high schools](https://www.usnews.com/education/best-high-schools) are embracing agriculture education, says Jay Jackman, executive director of the National Association of Agricultural Educators. Agriculture classes can help students who may have a difficult time understanding theories and concepts in a traditional math or science class, Jackman says. "You put them in an agriculture class and you teach them photosynthesis, for example, in the context of agricultural crops and the science becomes real to them," he says. Agriculture education programs are sprouting up in high schools across the U.S., particularly in suburban and urban areas, Jackman says. [Vincent High School](https://www.usnews.com/education/best-high-schools/wisconsin/districts/milwaukee-public-schools/vincent-high-21742) in Milwaukee [reinstated its agriculture education program last year](http://www.jsonline.com/news/education/vincent-high-school-launches-urban-ag-program-jb79lgh-175174321.html); the program was eliminated in the 1990s because of funding problems, says Gail Kraus, an agriculture outreach specialist who works with the school. Agriculture education will eventually become the focus of the school – akin to a magnet school, Kraus says. Career opportunities were one of the reasons why the program was reintroduced. "This region has a high concentration of food science careers," she says. The first class that students take at the school is about urban agriculture; topics include urban soil, urban gardening and greenhouses. Kraus says that although some students are initially uninterested, once they get to experience the interactive aspects of the class, like working in the greenhouse or bee aviary, they tend to become more receptive. "A lot of them come down and get into the greenhouse and say, 'Oh my gosh, this is in the school?'" she says. Despite its rural location, agriculture classes at [Morris Area High School](https://www.usnews.com/education/best-high-schools/minnesota/districts/morris-public-school-district/morris-area-secondary-10954), in Morris, Minn., were not very popular when Natasha Mortenson, an agriculture teacher, started teaching at the school 13 years ago. During her first year teaching at the school, agriculture classes suffered from low enrollment and Mortenson recalls that only a few students in the graduating class planned to pursue agriculture-related careers. Today, agriculture classes are popular at the school; Mortenson teaches 10 different classes each year. The hands-on aspects of classes keep students interested, Mortenson says. In an agriculture processing class students learned how to cut hog carcasses; they also made sausage and jerky. "Just seeing a carcass come in and being able to identify that food system, it makes them excited about it," she says. Conventional farming practices are covered in the curriculum, but Mortenson says that it can be a difficult field for students to get into because of the high price of land, among other reasons. So she teaches her students about sustainable farming, such as producing free-range eggs or chickens, popular products that can be farmed on a relatively small piece of land. In addition to agriculture processing and animal science courses, students can take classes such as woods and welding, horticulture and food chemistry, among others. Mortenson says about a third of graduating students are now interested in pursuing agriculture-related careers. "It's not just the food part of it, it's not just the farming part of it, but everything that supports the agriculture industry is a part of agriculture," she says. "It's like a big web of jobs. There are very few jobs that don't relate back to agriculture."

#### Ag college enrollment growing

Mercier, former Senate Agriculture Committee Chief Economist & Farm Journal Foundation Director of Policy and Advocacy, 15

[Stephanie, July 2015, AGree, “Food and Agricultural Education in the United States”, <http://www.foodandagpolicy.org/sites/default/files/AGree_Food%20and%20Ag%20Ed%20in%20the%20US_0.pdf>, p. 14, accessed 6-26-17, AFB]

As to student enrollment in agricultural science fields in U.S. universities, data collected by the Food and Agricultural Education Information System (FAEIS) at USDA indicates that the number of students enrolling in baccalaureate degree programs in those fields increased by 40 percent between 2004 and 2012, and the number of degrees awarded rose by 36 percent.71

The data covered 22 different fields or majors, including agricultural economics, animal science, natural resource management, and food science and technology.72 Enrollment in these fields for graduate degree programs also rose between these two years, although less sharply, at a rate of 18 percent, and the numbers of graduate degrees awarded rose about 28 percent. The share of U.S. citizens among students in the agricultural disciplines remained fairly stable over the time period, at about 81 percent for baccalaureate programs and about 60 percent for graduate programs.

### AT – Farmer Shortage

#### Ag age increase slowing now

Mercier, former Senate Agriculture Committee Chief Economist & Farm Journal Foundation Director of Policy and Advocacy, 15

[Stephanie, July 2015, AGree, “Food and Agricultural Education in the United States”, <http://www.foodandagpolicy.org/sites/default/files/AGree_Food%20and%20Ag%20Ed%20in%20the%20US_0.pdf>, p. 13, accessed 6-26-17, AFB]

Key Indicators on the U.S. Agricultural Workforce

Given the lack of any broad-based empirical analysis of how well agricultural education works in attracting young people into the U.S. food and agricultural sector, as farmers, to positions in the agribusiness community, or work in the agricultural sciences and food-related professions, we should also take a look at recent trends on entry into those employment areas. Young people’s interest in and preparation for work in U.S. agriculture plays a role in these decisions, but it is likely not the sole determining factor. Recent reports suggest that students’ perception of the financial prospects of the food and agriculture sector and the job openings in the sector probably contribute to their decision making process as well.67,68

With respect to young people entering farming on a full-time basis, the best data available are found in the U.S. Census of Agriculture, which provides a snapshot every five years as to the age composition of farm operators in the United States. According to the 2012 Census, the average age of the principal operator on U.S. farms continues to increase, estimated to be 58.3 years in 2012.69 However, that rate of increase has slowed compared to the last several censuses, suggesting the age composition of the U.S. farm population has begun to stabilize. The Census tracks not only principal operators, but also up to three operators on the farm (if applicable)—in 2012, there were 3.18 million farmers in all categories.70 In that year, 8.1 percent of all operators (not just principal operators) were under the age of 35 years as tallied in the Census, a slight uptick from the 8 percent in 2007. The Census question was worded somewhat differently on this topic in previous Census years, but the 2002 Census recorded only 6 percent of all operators under the age of 35 years.

#### Agriculture jobs opportunities are not increasing – jobs numbers historically static

Hertz, Resource and Rural Economics Division Rural Economy Branch economist, 16

[Thomas, September 27, 2016, United States Department of Agriculture, “Background”, <https://www.ers.usda.gov/topics/farm-economy/farm-labor/background.aspx>, accessed 7-2-17]

According to the Farm Labor Survey (FLS) of the National Agricultural Statistics Service (NASS), hired farmworkers (including agricultural service workers) make up a third of all those working on farms; the other two-thirds are self-employed farm operators and their family members. The majority of hired farmworkers are found on the nation's largest farms, with sales over $500,000 per year.

The average number of hired farmworkers has steadily declined over the last century, from roughly 3.4 million to just over 1 million. Because the U.S. labor force grew, agricultural employment as a proportion of total employment has declined even more sharply. According to the FLS, the annual average number of people employed as hired farmworkers, including agricultural service workers, decreased from 1,142,000 in 1990 to 1,032,000 in 2007. Since then it has held steady at just above one million. In 2012, the total was 1,063,000 of which 576,000 were full-year positions, 199,000 were part-year positions, and an estimated 288,000 were agricultural service workers brought to farms by contractors. Employment is highly seasonal: in January of 2011, there were 808,000 workers, while in July the figure stood at 1,184,000.

#### Farming more efficient– less farmers needed.

Spielmaker, National Agricultural Literacy Curriculum Matrix Project Director, 13

[Debra, 2013, National Agriculture in the Classroom, “National Agricultural Literacy Outcomes”, <https://www.agclassroom.org/get/doc/NALObooklet.pdf>, p. 10, 6/30/17 KW]

According to most historians, the development of agriculture resulted in the beginning of civilization. Agricultural development has relied on evolving scientific understandings, engineering processes, and the application of both to develop innovative technologies to save labor and increase yields. In the early 1900s, 50% of the U.S. population lived in rural areas, and 30% made their living on the farm (U.S. Department of Agriculture, 2014). Technological advancements of the last century have resulted in a nation where just over 1% (Central Intelligence Agency, 2013) of the population make their living on farms and ranches. It may seem that we no longer need to consider agricultural careers as important or relevant; however, it takes 21 million workers, or about 15% of the U.S. population, to support farm and ranch production, processing, and marketing (Goecker, Smith, Smith, & Goetz, 2010). The fact that 1% of the population produces for the other 99% is a real achievement! What has happened to cause this change in 100 years? Science, technology, engineering and mathematical understandings to address labor, and solve production and environmental problems.

#### Robots solve global food security – efficiency and current job shift to robot management

Coren, Quartz, 16

[Michael J. Coren, July 10, 2016, Quartz, “Cheap robots are coming for our farm jobs by taking the most brutal tasks first”, <https://qz.com/726667/cheap-robots-are-coming-for-our-farm-jobs-by-taking-the-most-brutal-tasks-first/>, Accessed 7-2-17, RK]

More than a million people working in America’s fields, and far more globally, are about to face competition from workers who never sleep, get tired or ask for a living wage.

As field robots have gotten cheaper, a steady stream of farm jobs are being automated. Lettuce weeding is one of the first where the cost of robots now matches human labor, reports Lux Research in a new analysis. Although costs remain too high for robots to replace most farm work for low-value crops, it’s a taste of what’s to come.

Weeding lettuce is slow, expensive, and potentially dangerous due to chemical exposure. Farm workers must spray individual weeds from a pesticide-filled backpack. Automated systems like the one designed by Danish firm F. Poulsen Engineering replace this with mechanical weeding and computer vision to distinguish between crops and pests. The company says it can do the job much faster and at no extra cost. That hits the sweet spot for inexpensive machinery to replace high-cost labor.

“Agriculture for hundreds of years has been an intuition business,” says Lux’s lead agricultural analyst Sara Olson in an interview. That will end as “precision agriculture” brings data and automation to traditional tasks, making farming more productive and profitable, she predicts. At first, robots will make existing jobs more productive. But jobs will ultimately be lost as robots assume more and more of the work. “Over time, there would have to be a shift,” says Olson. “It will happen slowly enough that I see an opportunity for people who want to be in the industry to learn how to operate machinery, manufacture the equipment, and service and support these new systems.”

### AT – Food Shortages Now

#### Large food supply now – low demand, high supply

Pitt, Associated Press, 16

(David, 10/5/16, The Associate Press, “Our freezers runneth over: Explaining the US food surplus.” <https://apnews.com/45bf3113bff74ff393a8b35ae54bdbbc/our-freezers-runneth-over-explaining-us-food-surplus>, Accessed 7/3/17, GDI - JMo)

Two years ago, high prices for milk, pork, poultry and eggs encouraged farmers to expand livestock operations. Plus, U.S. consumers were opening their wallets and trade partners were willing to keep buying our products. Add to that the cheap cost of animal feed that encouraged farmers to boost livestock’s weight before taking them to market.

But agriculture is a cyclical business: The relative high value of the dollar makes U.S. products more expensive to importers, so they’ve slowed their buying. Last year’s bird flu crisis also caused many trade partners to stop taking eggs and turkey and chicken meat, and while production of eggs has returned, demand isn’t fully restored.

Those factors and others have suppressed demand, but the cows keep pumping out milk and veggies continue to grow, resulting in a surplus of certain types of food.

#### No shortage – USDA literally has massive stockpiles of food

Pitt, Associated Press, 16

(David, 10/5/16, The Associate Press, “Our freezers runneth over: Explaining the US food surplus.” <https://apnews.com/45bf3113bff74ff393a8b35ae54bdbbc/our-freezers-runneth-over-explaining-us-food-surplus>, Accessed 7/3/17, GDI - JMo)

WHERE DOES IT ALL GO?

Step into the freezer. The 1.24 billion pounds of cheese in refrigerated warehouses is the highest for the month of August since records began in 1921, and includes nearly 770 million pounds of American cheese and 25.7 million pounds of Swiss. Other stockpiles include:

— 322 million pounds of butter (up 52 percent from a year ago)

— 1.52 billion pounds of frozen fruit, including 377 million pounds of strawberries and 313 million pounds of blueberries

— 1.31 billion pounds of frozen poultry (chicken and turkey), up 4 percent from a year ago.

But not everything is being stored. The USDA announced in August it was buying 11 million pounds of cheese for $20 million and sending it to food banks and food pantries through a government nutrition assistance program. Farm organizations also are boosting their efforts to improve U.S. exports and move some of the glut out of the country.

#### Status quo solves – surplus and innovation means food distribution good now

Vitiello University of Pennsylvania Department of City and Regional Planning Associate Professor, et al, 2015

(Domenic, Jeane Ann Grisso, University of Pennsylvania Department of Public Health, & Nursing Professor Emeritus of Medicine, K Leah Whiteside, Dorchester Bay EDC Project Manager, Rebecca Fischman, ‎ NYC Mayor's Office of Recovery & Resiliency Policy Advisor, September 2015, Agriculture and Human Values, “From commodity surplus to food justice: food banks and local agriculture in the United States.” ProQuest, Volume 32, Issue 32, p. 419-420, Accessed 7/3/17, GDI - JMo)

Building off expanding interest in local food and agricul- ture, in recent years food banks1 across the United States have increasingly engaged in gleaning,2 gardening, and farming. Journalists and hunger relief professionals have touted these programs as innovative departures from food banks’ traditional distribution of canned and boxed com- modities (Harris 2005; Bratton 2008; Zezima 2008; Evans and Clarke 2011; Santos 2011; Weise 2011). But are food banks’ links and involvement in local agriculture really transforming the overall quality of food they distribute? And to what extent do these diverse gleaning, gardening, and farming activities signal new roles for food banks in community and regional food systems? Are these programs changing food banks’ relationships with poor people in their cities and regions? Or are gleaning, gardening, and farming programs perpetuating the ironies and inequities of the emergency food system, for which scholars and activ- ists have widely critiqued food banking?

In 2011–2013, we conducted a national survey and fif- teen in-depth case studies documenting patterns and prac- tices of gleaning, gardening, and farming by and for food banks in the United States. Recording how much food these programs were yielding provided a basic measure of how, and how many, food banks are gaining a large share of food from these sources. Visiting and interviewing the people who run these programs allowed us to explore their moti- vations, relationships with constituencies, and other ques- tions related to their aims and operations. In this article, we first review scholars’ and advocates’ critiques of food banking, then discuss our findings, and finally consider their political and practical implications for food banks’ roles in community food systems.3

Our findings suggest that food banks’ gleaning, gar- dening, and farming programs are alternately challenging and reinforcing longstanding patterns of food relief. Most of the local produce obtained through these programs effectively constitutes additional commodity surplus. This enables some food banks to distribute more diverse and nutritionally healthier foods as well as increase the total quantity of food distributed. These programs change food banks’ relationships with their suppliers, but not so much with the recipients of their food. Most gleaning, gardening, and farming programs perpetuate food banks’ reliance on middle class volunteers and charitable donations. However, some food banks are playing new and expanded roles in building community food security and promoting food justice, especially through programs that invest in building poor people’s capacity to garden and farm (and cook) themselves. This represents a significant departure from most food banks’ traditional missions, operations, and politics. It suggests various ways that hunger relief systems have the potential to promote community food security more broadly.

### AT – Food Price Instability

#### Food Prices are generally stable and indicate increasing supplies of key crops

#### FAO 16

(Food and Agriculture Organization of the United Nations, 12-8-16, Food and Agriculture Organization of the United Nations, “Food prices are broadly stable amid record cereal inventories”, http://www.fao.org/news/story/en/item/458033/icode/, accessed 7-3-17, VB)

8 December 2016, ROME--The FAO Food Price Index dipped slightly in November, marking a mild departure from its steady rise over the course of 2016.

The Index declined 0.4 percent from October, averaging 171.3 points in November, as a sharp drop in sugar prices outweighed an increase in palm oil quotations.

FAO's Food Price Index, a trade-weighted index tracking international market prices for five major food commodity groups, is still 10.4 percent higher than in November 2015.

The FAO Sugar Price Index fell 8.9 percent from October, reflecting reports of a higher-than-expected harvest in Brazil, the world's largest sugar producer, and a weakening of the Brazilian real with respect to the U.S. dollar.

The FAO Vegetable Oil Price Index rose 4.5 percent in the month, led by lower-than-anticipated production of palm oil in Southeast Asia as well as below-potential soybean crushing of in South America.

Other commodities were more stable. The FAO Meat Price Index was unchanged from October. The FAO Dairy Price Index rose 1.9 percent, continuing a recent upward trend after a protracted slump. The FAO Cereal Price Index declined 0.6 percent, as global supplies are ample and strong harvest prospects in Argentina and Australia weighed on wheat quotations.

New forecasts eye all-time high for global cereal inventories

FAO updated its forecasts, projecting record global cereal stocks by the end of the 2017 seasons. According to the latest Cereal Supply and Demand Brief, also released today,production prospects, especially for wheat and coarse grains, have improved progressively since the start of the current marketing season.

FAO now expects worldwide cereal stocks to rise to 670 million tonnes, up 1.4 percent from the previous season.

### AT – Food Security Solvency

#### No solvency for food security – climate, soil, and water issues overwhelm

Andenoro, et al., University of Florida Agricultural Education and Communication professor & Challenge 2050 Director, 16

[Anthony, 2016, American Association for Agricultural Education, AMERICAN ASSOCIATION FOR AGRICULTURAL EDUCATION NATIONAL RESEARCH AGENDA 2016-2020, http://aaaeonline.org/resources/Documents/AAAE\_National\_Research\_Agenda\_2016-2020.pdf, page 58, Date accessed 6-28-17, RK]

To meet the needs of 9.725 billion people in 2050, we will need to increase our agricultural production by 70% (Alexandratos & Bruinsma, 2012). However, our current rate of consumption far exceeds our current rate of production. This is happening for three reasons: (a) climate change is increasing the frequency and severity of weather resulting in increased loss of crops internationally; (b) soil degradation and desertification is occurring at an alarming rate due to overgrazing, pollution, intensification of agricultural practices; and (c) water is a critical resource, which has been severely mismanaged and continues to become more scarce due to droughts and overconsumption (Brown, 2012). These problems must be addressed to produce healthy, nutritious, and sustainable food, reduce food insecurity, and mitigate the obesity epidemic for our growing population.

#### Aff can’t solve food shortage – Surplus already exists, plan doesn’t combat distribution issues.

Schiller, Fast Company, Staff Writer and Reporter, 16

(Ben, 8-16-16, Fast Company, “The Real Reason There’s World Hunger: Food Waste, Not Food Shortages”, https://www.fastcompany.com/3062692/the-real-reason-theres-world-hunger-food-waste-not-food-shortages, accessed 7-2-17, VB)

Most people assume hunger exists in poor communities because there’s not enough food. But that’s usually the lesser problem. Really, it’s just about getting food to the people who need it.

“The problem of undernourishment and hidden hunger around the globe is a distribution problem rather than a production one,” says an important new paper on global food waste published in Environmental Science & Technology.

A systematic study, from the Potsdam Institute, says we wasted 510 kilocalories per person per day in 2010, up from 310 kilocalories in 1965. Generally, societies are getting much better at producing food: there’s 20% more food available than the global population strictly needs. Most places, even undernourished places, have a raw surplus of food. The problem is, one third of production is either not used productively, or it’s not used to feed the world’s underfed.

“Undernourishment may prevail in a country with food surplus due to income inequality and poverty, resulting in disparity in food security within the country,” the paper says. For example, India has a nominal food surplus of 210 kcal/per person/day, yet it has the second highest number of undernourished people in the world.

#### Double Bind – either status quo solves or weather is an alt cause to food shortages the aff can’t solve

Daniels, CNBC, Los Angeles Bureau, Coordinating Producer, 17

(Jeff, 1-3-17, CNBC, “Agriculture commodity traders see a good 2017, despite possible demand risks”, http://www.cnbc.com/2017/01/03/agriculture-commodity-traders-see-a-good-2017-despite-possible-demand-risks.html, accessed 7-1-17, VB)

The case for the better outlook comes despite challenges that include a global glut of major ag commodities; bird flu problems outside the U.S. that could hamper feed demand; and the possibility of President-elect Donald Trump changing policy on ethanol, given that a sizable share of the nation's corn and soybean supplies are used to produce biofuels.

"In general, I think the commodity complex is poised to move higher," said Robert Chesler, vice president of the foods group at INTL FCStone, a Chicago-based commodity-risk management company. He sees "more piling into commodities again as an asset class," and also noted that many commodities are generally at "relatively low prices on a multiyear basis."

Some traders remain cautiously upbeat on the ag commodity outlook despite last month's U.S. Department of Agriculture crop production report showing that a global bumper crop is expected of corn, wheat and soybeans; a possible shift in acreage from corn to soybeans this year by American farmers could present additional downward price pressures if soy demand isn't met.

China's appetite for American soybeans was exceptionally strong last year and U.S. exports set a record. China uses some of the soybeans for feeding livestock, including for its growing hog production.

"We're definitely optimistic on grains and oilseeds," said James Cordier, president and head trader of OptionSellers.com, an investment firm in Tampa, Florida. That said, he doesn't expect agriculture to be the big star in the commodity space but is still upbeat on the prospects for corn and soybeans to have a "20 to 25 percent rally this year."

"The very beginning of the year is a telltale sign of where investors think the markets have the most value," said Cordier. "They usually do a good projecting where demand is going to be [later in the year]."

Another determinant of crop prices will be the weather. As always, it can lead to volatile prices during the growing season.

"It's really going to be a weather-dependent market in corn going forward," said Ted Seifried, vice president and chief market strategist with Zaner Ag Hedge in Chicago. "We do have good demand, but supplies are plentiful after three years of record or near-record crops."

## Renewables Answers

### AT – Renewables Low Now

#### National renewable integration happening now – States incorporate

Long, Western Energy Legal Director & Steinberger Climate & Clean Air Program Policy Analyst, 16

[Noah Long and Kevin Steinberger, July 26, 2016, Nrdc, Renewable Energy Is Key to Fighting Climate Change, <https://www.nrdc.org/experts/noah-long/renewable-energy-key-fighting-climate-change>, Accessed 7-3-17, RK]

In addition to the climate benefits that they will help deliver, renewables already provide a wide range of market and public health benefits that far outweigh their costs. A recent report from the Department of Energy and Lawrence Berkeley National (LBNL) Laboratory found that renewable portfolio standards—state policies that mandate that a specific amount of the state’s electricity comes from renewables—provide a wide range of economic, health, and climate benefits. The report concluded that in 2013 alone, renewable standards across the country saved customers up to $1.2 billion from reduced wholesale electric prices and $1.3 billion to $3.7 billion from lower natural gas prices (as a result of lower demand for natural gas across the power sector).

The non-market benefits of renewable energy also are considerable. The LBNL researchers estimated that renewables supported nearly 200,000 jobs, provided $5.2 billion worth of health benefits through improved air quality, and resulted in global climate benefits of $2.2 billion. At the same time, according to a separate report by DBL Investors, the top 10 leading renewable states experienced lower electricity price increases than the bottom 10 states between 2002 and 2013.

The United States must continue—and accelerate—its clean energy growth and the transition to a low-carbon electric grid. There will be technical challenges to completing this transformation, but study after study concludes that integrating high levels of renewables into our electric grid is achievable. This is also being demonstrated in practice, as many states are already incorporating wind and solar, including in Texas, where wind has now supplied over 45 percent of the state’s total energy demand on multiple occasions, and in Iowa, as the state now generates 31 percent of its total annual power from wind.

#### Renewable energy implementation increasing now – cost reductions

Friedman, Former Assistant Secretary for Energy Efficiency and Renewable Energy, 2016

DAVID Friedman, NOVEMBER 14, 2016, Office of Energy Efficiency & Renewable Energy, 4 Charts That Show Renewable Energy is on the Rise in America, <https://energy.gov/eere/articles/4-charts-show-renewable-energy-rise-america>, Accessed 7-3-17, RK]

Solar capacity increased by 36% (5,600 MW), accounting for roughly 40% of all renewable projects completed in 2015. Revolution…Now illustrates that since 2008, the cost of utility-scale solar projects has decreased by 64% and the cost of distributed rooftop solar has decreased by 54%. The dramatic cost reductions continue to drive the deployment of solar technologies in the United States and around the globe.

3. Multiple Regions in the U.S. are Leading the Way on Renewable Installations

The Midwest is experiencing a true wind energy boom. Of the five states with the highest cumulative wind capacity, four of them are located in the Midwest.

Texas: 17,711 MW

Iowa: 6,209 MW

Oklahoma: 5,184 MW

Illinois: 3,842 MW

Adding to the impressive amount of wind capacity already deployed, just last year Texas installed more than 3,600 MW of new wind capacity, followed by Oklahoma which installed 1,400 MW.

Not surprisingly, the Southwest continues to be a hotbed for solar energy deployment. California and Arizona have the most cumulative photovoltaic solar capacity installed, totaling 11,987 MW and 2,020 MW, respectively. But solar deployment is also accelerating into other parts of the country as well.

Last year, five of the top 10 states for solar photovoltaic additions were on the East Coast, with North Carolina in second place nationally with the addition of 1,160 MW. North Carolina and New Jersey now have the third- and fourth-largest cumulative installed solar capacity at 2,087 MW and 1,632 MW, respectively.

Other regions are experiencing their own renewable energy breakthroughs as well. The Northwest continues to be a leader in hydropower deployment and innovation. Geothermal technologies are being steadily deployed in states around the Rocky Mountains, while the Southeast continues to install cutting-edge renewable biomass technologies.

4. Investment in Renewable Energy Continues to Increase

Globally, investment in clean energy in 2015 grew by more than 4%, totaling $329 billion. In the United States, clean energy investment grew by 10%, totaling $45 billion in 2015. It’s clear that the market for clean energy is poised to grow in the years ahead.

### AT – Renewables Solve Climate

#### Renewable energy can’t solve climate change – won’t even reach Paris Standards

Hood, AFP's environment and science reporter, 17

[Marlowe Hood, January 31, 2017, PHYS, Renewables can't deliver Paris climate goals: study, <https://phys.org/news/2017-01-renewables-paris-climate-goals.html>, Accessed 7-3-17, RK]

Expansion of renewable energy cannot by itself stave off catastrophic climate change, scientists warned Monday.

Even if solar and wind capacity continues to grow at breakneck speed, it will not be fast enough to cap global warming under two degrees Celsius (3.6 degrees Fahrenheit), the target set down in the landmark 2015 Paris climate treaty, they reported in the journal Nature Climate Change.

"The rapid deployment of wind, solar and electric cars gives some hope," lead author Glen Peters, a researcher at the Center for International Climate and Environmental Research in Oslo, Norway, told AFP.

"But at this stage, these technologies are not really displacing the growth in fossil fuels or conventional transportation."

Earth is overheating mainly due to the burning of oil, gas and especially coal to power the global economy.

Barely 1C (1.8F) of warming so far has already led to deadly heatwaves, drought and superstorms engorged by rising seas.

The 196-nation Paris Agreement set a collective goal to cap warming, but lacks the tools to track progress, especially at the country level.

To provide a better toolkit, Peters and colleagues broke down the energy system into half-a-dozen indicators—GDP growth, energy used per unit of GDP, CO2 emissions per unit of energy, share of fossil fuels in the energy mix, etc.

What emerged was a sobering picture of narrowing options.

Barely a dent

"Wind and solar alone are not sufficient to meet the goals," Peters said.

The bottom line, the study suggests, is how much carbon pollution seeps into the atmosphere, and on that score renewable have—so far—barely made a dent.

Investment in solar and wind has soared, outstripping fossil fuels for the first time last year. And renewables' share of global energy consumption has increased five-fold since 2000.

But it still only accounts for less than three percent of the total.

Moreover, the share of fossil fuels—nearly 87 percent—has not budged due to a retreat in nuclear power over the same 15-year period.

Even a renewables Marshall Plan would face an unyielding deadline: To stay under 2C, the global economy must be carbon neutral—producing no more CO2 than can be absorbed by oceans and forests—by mid-century.

#### Ethanol – a biofuel provided by agriculture – is backfiring on climate change

Upton, Climate Central Senior Science Writer, 16

[John, 10/3/16, Climate Central, “Ethanol in U.S. Gas Tanks is Backfiring for Climate Change”, <http://www.climatecentral.org/news/ethanol-backfiring-for-climate-change-20760>, 7/3/17, KW]

It may have seemed apparent to members of Congress a decade ago that if a motorist pumped a gallon of fuel made from corn into their gas tank, a gallon of fossil fuel would be left in the ground — hopefully on a foreign shore. But real life is not so simple.

A team of researchers has concluded that for every three gallons of corn ethanol that’s being burned under America’s flagship renewable fuel rules, Americans will avoid burning just one gallon of gasoline made from crude.

Their findings add to evidence that the mandated use of biofuels under the Renewable Fuel Standard, which was approved by Congress and is overseen by the EPA, is making the problem of global warming worse — while doing little to ease fuel imports.

The researchers, from the University of Minnesota, St. Paul, focused their analysis on the “fuel rebound effect.” That’s economist jargon describing an unintended market consequence of rules requiring America’s gasoline industry to blend biofuels into its products.

“The fuel rebound effect is so strong, and the climate benefits of the biofuels are so small, especially for corn ethanol, that emissions increase,” said Jason Hill, an energy and sustainability researcher who led the work, published in the journal Energy Policy. “That’s a big problem.”

#### Wind energy is virtually useless

Ridley, The Spectator, 17

[Matt, 5/13/17, The Spectator, “Wind turbines are neither clean nor green and they provide zero global energy”, [https://www.spectator.co.uk/2017/05/wind-turbines-are-neither-clean-nor-green-and-they-provide-zero-global-energy/#](https://www.spectator.co.uk/2017/05/wind-turbines-are-neither-clean-nor-green-and-they-provide-zero-global-energy/), 7/3/17, KW]

Here’s a quiz; no conferring. To the nearest whole number, what percentage of the world’s energy consumption was supplied by wind power in 2014, the last year for which there are reliable figures? Was it 20 per cent, 10 per cent or 5 per cent? None of the above: it was 0 per cent. That is to say, to the nearest whole number, there is still no wind power on Earth.

Even put together, wind and photovoltaic solar are supplying less than 1 per cent of global energy demand. From the International Energy Agency’s 2016 Key Renewables Trends, we can see that wind provided 0.46 per cent of global energy consumption in 2014, and solar and tide combined provided 0.35 per cent. Remember this is total energy, not just electricity, which is less than a fifth of all final energy, the rest being the solid, gaseous, and liquid fuels that do the heavy lifting for heat, transport and industry.

Such numbers are not hard to find, but they don’t figure prominently in reports on energy derived from the unreliables lobby (solar and wind). Their trick is to hide behind the statement that close to 14 per cent of the world’s energy is renewable, with the implication that this is wind and solar. In fact the vast majority — three quarters — is biomass (mainly wood), and a very large part of that is ‘traditional biomass’; sticks and logs and dung burned by the poor in their homes to cook with. Those people need that energy, but they pay a big price in health problems caused by smoke inhalation.

#### No solvency – estimates assume Carbon and Capture Storage solves but technology extremely underdeveloped – can’t solve climate change

Hood, AFP's environment and science reporter, 17

[Marlowe Hood, January 31, 2017, PHYS, Renewables can't deliver Paris climate goals: study, <https://phys.org/news/2017-01-renewables-paris-climate-goals.html>, Accessed 7-3-17, RK]

Compounding the challenge, other key policies and technologies deemed essential for holding down temperatures remain woefully underdeveloped, the study cautioned.

In particular, the capacity to keep or pull carbon dioxide out of the atmosphere and store it securely—a cornerstone of end-of-century projections for a climate-safe world—is practically non-existent.

Vetted by the UN's top climate science panel, these scenarios presume that thousands of industrial-scale carbon capture and storage (CCS) facilities will be up-and-running by 2030.

As of today, there are only one or two, with a couple of dozen in various stages of construction.

### AT – Climate Solvency

#### No solvency – Climate change irreversible without massive mindset shifts

Andenoro, et al., University of Florida Agricultural Education and Communication professor & Challenge 2050 Director and AgEd professor, 16

Anthony, 2016, American Association for Agricultural Education, AMERICAN ASSOCIATION FOR AGRICULTURAL EDUCATION NATIONAL RESEARCH AGENDA 2016-2020, http://aaaeonline.org/resources/Documents/AAAE\_National\_Research\_Agenda\_2016-2020.pdf, page 58, Date accessed 6-28-17, RK]

Climate change This is the most significant of the five issues, because it is exacerbated by the proceeding four areas. The rise in greenhouse gas levels have reached a tipping point well beyond irreversibility (Carrington, 2013; Gillis, 2013; Jones, 2013; McCoy, Montgomery, Arulkumaran, & Godlee, 2014; Reichstein, et al., 2013). In addition, the introduction of aerosols into the atmosphere and land use changes (i.e. cutting down forests to create farm land) have quite literally created a perfect storm for us to deal with (Adger, Barnett, Brown, Marshall, & O’Brien, 2013; Hsiang, Burke, & Miguel, 2013). The rapid change in our climate has shifted our weather patterns resulting in larger and more severe storms. This leads to floods, hurricanes, tornados, droughts, and earthquakes that present significant problems for our global communities.

The complex adaptive challenges noted previously are widely represented in the strategic priorities of our most trusted philanthropic organizations globally. Specifically, the United Nations Millennium Development Goals, Gates Foundation Grand Exploration Priorities, White House 21st Century Grand Challenges, and USAID’s Grand Challenges all illustrate the urgency of these challenges and the need for interdisciplinary solutions. However, our dynamic and ever-changing global landscape requires innovative solutions that extend beyond traditional ideologies. In the past, technology provided solutions to our most pressing problems. While technology may play a role in the development of solutions that can address these challenges, without massive attitude shifts leading to widespread behavioral change, we will not sustain our global population. This leads us to our final challenge existing as an overarching problem encompassing all of the previously listed issues, public perception.

## Small Farms Answers

### AT – Small Farms Good/Consolidating Farms Bad

#### Industrial farms solve food shortages, biodiversity and greenhouse gas emissions – biotech and precision technology key

Lusk, Oklahoma State University Regents Professor and Willard Sparks Endowed Chair in the Department of Agricultural Economics, 16

[Jayson Lusk, 9-23-16, New York Times, Why Industrial Farms Are Good for the Environment, <https://www.nytimes.com/2016/09/25/opinion/sunday/why-industrial-farms-are-good-for-the-environment.html>, Accessed 7-2-17, RK]

Large farmers – who are responsible for 80 percent of the food sales in the United States, though they make up fewer than 8 percent of all farms, according to 2012 data from the Department of Agriculture – are among the most progressive, technologically savvy growers on the planet. Their technology has helped make them far gentler on the environment that at any time in history. And a new wave of innovation makes them more sustainable still.

A vast majority of the farms are family-owned. Very few, about 3 percent, are run by nonfamily corporations. Large farm owners (about 159,000) numbers fewer than the residents of a medium-size city like Springfield, Mo. Their wares, from milk, lettuce and beef to soy are unlikely to be highlighted on the menus of farm-to-table restaurant, but they fill the shelves at your local grocery store.

There are legitimate fears about soil erosion, manure lagoons, anime welfate and nitrogen runoff at large farms – but it’s not just environmental groups that worry. Farmer are also concerned about fertilizer use and soil runoff.

That’s one reason they’re turning to high-tech solutions like precision agriculture. Using location-specific information about soil nutrients, moisture and productivity of the previous year, new tools, known as “variable rate applicators” can put fertilizer only on those areas of the field that need it (which may reduce nitrogen runoff into waterways).

GPS signals drive many of today’s tracotrs, and new planters are allowing farming to distribute seed varieties to diverse spots of a field to produce more food from each unit of land. They also modulate the amount and type of seed on each part of a field – in some places, leaving none at all.

Many food shoppers have difficulty comprehending the scale and complexity facing modern farmers, especially those who compete in a global marketplace. For example, the median lettuce field is managed by a farmer who as 1,373 football fields of the plat to oversee.

For tomatoes, the figure is 620 football fields; for wheat, 688 football fields; for corn, 453 football fields.

How are farmers able to manage growing crops on this daunting scale? Decades ago, they dreamed about tools to make their jobs easier, more efficient and better for the land: soil sensors to measure water content, drones, satellite images, alternative management techniques like low- and no-till farming, efficient irrigation and mechanical harvesters.

Today, that technology is a regular part of operations at large farms. Farmers watch the evolution of crop prices and track thunderstorms on their smartphones. They use livestock waste to create electricity using anaerobic digesters, which convert manure to methane. Drones monitor crop yields, insect infestations and the location and health of cattle. Innovators are moving high-value crops indoors to better control water use and pests

Before “factoring farming” became a pejorative, agricultural scholars of the mid-20th century were calling for farmers to do just that — become more factorylike and businesslike. From that time, farm sizes have risen significantly. It is precisely this large size that is often criticized today in the belief that large farms put profit ahead of soil and animal health. But increased size has advantages, especially better opportunities to invest in new technologies and to benefit from economies of scale. Buying a $400,000 combine that gives farmers detailed information on the variations in crop yield in different parts of the field would never pay on just five acres of land; at 5,000 acres, it is a different story. These technologies reduce the use of water and fertilizer and harm to the environment. Modern seed varieties, some of which were brought about by biotechnology, have allowed farmers to convert to low- and no-till cropping systems, and can encourage the adoption of nitrogen-fixing cover crops such as clover or alfalfa to promote soil health.

Herbicide-resistant crops let farmers control weeds without plowing, and the same technology allows growers to kill off cover crops if they interfere with the planting of cash crops. The herbicide-resistant crops have some downsides: They can lead to farmers’ using more herbicide (though the type of herbicide is important, and the new crops have often led to the use of safer, less toxic ones.

But in most cases, it’s a trade-off worth making, because they enable no-till farming methods, which help prevent soil erosion.

These practices are one reason soil erosion has declined more than 40 percent since the 1980s.

Improvements in agricultural technologies and production practices have significantly lowered the use of energy and water, and greenhouse-gas emissions of food production per unit of output over time. United States crop production now is twice what it was in 1970.

That would not be a good change if more land, water, pesticides and labor were being used. But that is not what happened: Agriculture is using nearly half the labor and 16 percent less land than it did in 1970.

Instead, farmers increased production through innovation. Wheat breeders, for example, using traditional techniques assisted by the latest genetic tools and information, have created varieties that resist disease without numerous applications of insecticides and fungicides. Nearly all corn and soybean farmers practice crop rotation, giving soil a chance to recover. Research is moving beyond simple measures of nitrogen and phosphorus content to look at the microbe8y79s in the soil.

New industrywide initiatives are focused on quantifying and measuring soil health. The goal is to provide measurements of factors affecting the long-term value of the soil and to identify which practices — organic, conventional or otherwise — will ensure that farmers can responsibly produce plenty of food for our grandchildren.

#### Turn - small farms raise food prices - consensus

Haspel, food and science writer, 14

[Tamar Haspel farms oysters on Cape Cod and writes about food and science, also internally cites Marc Bellemare, an assistant professor in the University of Minnesota’s department of applied economics, Tim Griffin, director of the Agriculture, Food and Environment program at Tufts University’s Friedman School of Nutrition Science and Policy, and John Ikerd, professor emeritus of agriculture and applied economics at the University of Missouri. September 2, 2014, Washington Post, “Small vs. large: Which size farm is better for the planet?” <https://www.washingtonpost.com/lifestyle/food/small-vs-large-which-size-farm-is-better-for-the-planet/2014/08/29/ac2a3dc8-2e2d-11e4-994d-202962a9150c_story.html?utm_term=.3a01883248e5>, accessed 7.1.2017]//TRossow

1. Small, diversified farms are less efficient than large ones. **Which means that food grown on them is more expensive**. Marc Bellemare, an assistant professor in the University of Minnesota’s department of applied economics, calls [farmers market](http://www.washingtonpost.com/wp-srv/special/lifestyle/dc-farmers-markets-interactive-map/) produce “luxury goods,” and Tim Griffin, director of the Agriculture, Food and Environment program at Tufts University’s Friedman School of Nutrition Science and Policy, explains the dynamic simply: economy of scale. “As the farms get larger, it’s easier to invest in labor-saving machinery, technology and specialized management, and production cost per unit goes down,” he says. It’s Econ 101.

Even John Ikerd, professor emeritus of agriculture and applied economics at the University of Missouri and an outspoken advocate of the idea that small organic farms ought to feed the world — an idea Bellemare calls “**wishful thinking**” — acknowledges that we’d need many more farmers to make that happen, and that **food would be more expensive**. How much more expensive is tough to estimate. Advocates of small-and-local tend to say not much (Ikerd guesses 6 to **8 percent**), and skeptics tend to say **quite a bit**. It would undoubtedly vary significantly by region; areas that are densely populated, where land is expensive, or that have lousy weather, where food is hard to grow, would have higher prices.

### AT – Sustainability/Environment

#### Small farms are unsustainable – worse for ecology, harm animals, and poor economics

McWilliams, Texas State University Professor of History, 12

[James, APRIL 12, 2012, New York Times, “The Myth of Sustainable Meat,” <http://www.nytimes.com/2012/04/13/opinion/the-myth-of-sustainable-meat.html>, accessed 7.1.2017]//TRossow

For all the strengths of these alternatives, however, they’re ultimately a poor substitute for industrial production. Although these smaller systems appear to be environmentally sustainable, **considerable evidence** suggests otherwise.

Grass-grazing cows emit **considerably more methane** than grain-fed cows. Pastured organic chickens have a **20 percent greater impact** on [global warming](http://topics.nytimes.com/top/news/science/topics/globalwarming/index.html?inline=nyt-classifier). It requires 2 to 20 acres to raise a cow on grass. If we raised all the cows in the United States on grass (all 100 million of them), cattle would require (using the figure of 10 acres per cow) almost **half the country’s land** (and this figure excludes space needed for pastured chicken and pigs). A tract of land just larger than France has been carved out of the Brazilian [rain forest](http://topics.nytimes.com/top/news/science/topics/forests_and_forestry/rain_forests/index.html?inline=nyt-classifier) and turned over to grazing cattle. **Nothing about this is sustainable.**

Advocates of small-scale, nonindustrial alternatives say their choice is at least more natural. Again, this is a dubious claim. Many farmers who raise chickens on pasture use industrial breeds that have been bred to do one thing well: fatten quickly in confinement. As a result, they can suffer **painful leg injuries** after several weeks of living a “natural” life pecking around a large pasture. Free-range pigs are routinely affixed with nose rings to prevent them from rooting, which is one of their most basic instincts. In essence, what we see as natural doesn’t necessarily conform to what is natural from the animals’ perspectives.

The economics of alternative animal systems are similarly problematic. Subsidies notwithstanding, the unfortunate reality of commodifying animals is that confinement pays. If the production of meat and dairy was somehow decentralized into small free-range operations, common economic sense suggests that it wouldn’t last. These businesses — no matter how virtuous in intention — would gradually seek a larger market share, cutting corners, increasing stocking density and aiming to fatten animals faster than competitors could. Barring the strictest regulations, **it wouldn’t take long for production systems to scale back up to where they started.**

### Small Farms Fail

#### Small farms fail - unsustainable – turns poverty

Moyer, writer and vegetable farmer, 15

[Jaclyn, internally cites USDA data, February 9, 2015, Salon, “What nobody told me about small farming: I can’t make a living,” <http://www.salon.com/2015/02/10/what_nobody_told_me_about_small_farming_i_cant_make_a_living/>, accessed 7.1.2017]//TRossow

I wondered how many small farmers actually made a living. Before I set out trying to answer this question, I had to define what constitutes “a living.” I decided making a living meant three things: 1) The farmer had to pay herself a weekly wage that equaled what a person working full-time would make on minimum wage, which in my town would be $360 per week. 2) The farmer had to abide by labor laws, meaning no unpaid workers or interns doing essential farm tasks. 3) The farmer had to earn her income from farming, which meant nonprofit farms that survived on grants and donations didn’t count; neither did farms that sustained themselves on outside income sources.

I talked to all the farmers I knew, considered farms I or my partner had worked at in the past, farms I’d visited, friends’ farms. Most farmers I talked to worked outside jobs to keep their farms above water, others skirted by on an income they calculated to be $4 per hours, and most depended on interns, volunteers or WWOOFers for labor. I did not encounter a single farmer who met my requirements.

Then I looked into national statistics. According to USDA data from 2012, intermediate-size farms like mine, which gross more than $10,000 but less than $250,000, obtain **only 10 percent of their household income from the farm**, and 90 percent from an off-farm source. Smaller farms actually **lost money farming** and earned 109 percent of their household income from off-farm sources. Only the largest farms, which represent just 10 percent of farming households in the country and most of which received large government subsidies, earned the majority of their income from farm sources. So, **90 percent of farmers in this country rely on an outside job, or a spouse’s outside job, or some independent form of wealth, for their primary income**.

One day late into my second season owning the farm, a customer walked in while I stood behind the counter spraying down bins of muddy carrots. The man asked how things were going. Financially, I mean. He held a head of lettuce in the crook of his arm, a bundle of pink radishes dangled from his hand.

I looked at the man and instead of replying with my usual “great,” I said, We’re getting by. He nodded, Well, you may not be making lots of money, but you’re rich in other ways. I opened my mouth to reply, but the man had already turned away and was gazing dreamy-eyed out at my fields, each row buttered in late-afternoon sun. I turned back to the heap of carrots, not sure what I would have said anyway.

I wanted to ask the man which “other ways” did he mean, exactly. But I knew what he meant. I heard this kind of thing all the time: You must love what you do, or not much profit in farming, but what a great lifestyle, or, well, you’re not in it for the money, right?Customers repeated these aphorisms warmly in an attempt to offer me some consolation or encouragement. But watching this man gaze out at my fields, I couldn’t help wondering if it was the customer who was the one being consoled.

Surely many farmers enjoy what they do, as I often find pleasure in my daily tasks, but ultimately farming is work, an occupation, a means of making a living that must fulfill the basic function of a job: to provide an income. Does the notion that farming is lovable work excuse the fact that the entire industry relies on underpaid labor? Does it somehow make it OK that in 2014 it’s forecast to be $–1,682? I had to wonder if this notion works only to assuage a collective discomfort provoked by an unsettling fact, a fact that should enrage us, that should disgrace us as a society: the fact that **the much celebrated American small farmer can’t even make a living.**

### AT – Biodiversity Solvency

#### Plan not key – Multiple alt causes to biodiversity loss – Land use, Exotic species, nutrient enrichment, and climate change

#### Isbell, University of Minnesota, Department of Ecology, Evolution & Behavior, Assistant Professor, 10

(Forest, 2010, The Nature Education Knowledge Project, “Causes and Consequences of Biodiversity Declines”, https://www.nature.com/scitable/knowledge/library/causes-and-consequences-of-biodiversity-declines-16132475, accessed 7-2-17, VB)

Human actions have resulted in multiple changes on a global scale that often drive contemporary biodiversity declines. In particular, land use changes, exotic species invasions, nutrient enrichment, and climate change are often considered some of the most ubiquitous and influential global ecosystem changes (Vitousek et al. 1997, Chapin et al. 2000, Benayas et al. 2009, Butchart et al. 2010). Unfortunately, the mechanisms by which global ecosystem changes influence biodiversity and ecosystem processes, and the combined effects of multiple changes, are often unclear**. This greatly reduces the ability to predict future changes in biodiversity and ecosystem processes.** Therefore, further investigation is needed to predict the consequences of global ecosystem changes.

## Food Justice Answers

### AT – Low Urban Ag Education Access Now

#### Status quo solves – agricultural literacy increasing in urban programs

Henry, Purdue University Office of Multicultural Programs graduate research assistant, et al, 14

(Kesha A., Brian Allen Talbert, Purdue University College of Agriculture Department of Youth Development and Agricultural Education Professor, Pamala V. Morris, Purdue University College of Agriculture Assistant Dean/Director of the Office of Multicultural Programs, 2014, Journal of Agricultural Education, “Agricultural Education in an Urban Charter School: Perspectives and Challenges.” Volume 55 issue 2, <http://files.eric.ed.gov/fulltext/EJ1122353.pdf>, p. 89-90, Accessed 6/28/17, GDI - JMo)

The past two decades have shown increased interest from communities for programming in urban agricultural education. Although urban agricultural education program development is not a new concept nationwide, heightened interest has pulled it to the forefront of discussions among agricultural educators and stakeholders (Brown & Kelsey, 2013; Nelson, 2002; Russell & Trede, 1999). Expansion of high school agricultural education programs in urban areas, including nontraditional urban high schools, provides multiple benefits to students and the future of agriculture in general. Tarpley & Miller (2004) reported that one way to address a growing need to diversify collegiate student recruitment pools is through recruitment of students from urban schools. In turn, this expansion of agricultural education programs in urban schools can serve to promote agricultural literacy among entire urban populations (Warner, 2006). Agricultural literacy throughout communities is critical in today’s society due to increasing demand for competent knowledgeable workers in agricultural, food and natural resources industries (Borck & Bell, 2010; Bowen, 2002; Warner & Washburn, 2007).

The National Council for Agricultural Education (NCAE) established a target goal of increasing agricultural education programs to 10,000 by the year 2015. By including agricultural education courses in non-traditional urban high schools’ curricula (Warner & Washburn, 2007) the attainment of this goal could be advanced. Talbert et al. (1997) suggested higher education institutions, particularly colleges of agriculture, should aim to expand recruitment efforts to include underrepresented students. Urban school districts provide opportunities for an increased applicant pool with larger populations of students from diverse ethnic backgrounds. Expansion and development of urban secondary agricultural education programs would significantly increase agricultural awareness among urban students and in turn recruitment opportunities for higher education.

### AT – Nutrition Gap

#### School Meal programs lead to healthy diets – specifically for socioeconomically disadvantaged children

Haynes-Maslow, Union of Concerned Scientists Food and Environment Program PhD, MHA food systems and health analyst, and O’Hara, Union of Concerned Scientists PhD agricultural economist, 15

(Lindsey and Jeffrey K. February 2015, Union of Concerned Scientists, “Lessons from the Lunchroom.” <http://www.ucsusa.org/sites/default/files/attach/2015/02/lessons-from-the-lunchroom-report-ucs-2015.pdf>, p.2-3, Accessed 7/1/17, GDI - JMo)

Taxpayer-supported school food programs have improved the diets of socioeconomically disadvantaged children who otherwise might not have access to healthy food. We analyzed data from a U.S. Department of Education survey that tracked the eating habits of a nationally repre- sentative cohort of children during fifth grade (in 2004) and again in the eighth grade (in 2007). Our analysis of the dietary behaviors of children both inside and outside of school prior to the HHFKA demonstrates that participation in FRP meal programs can have a positive impact on dietary patterns of socioeconomically disadvantaged children.

In particular, our analysis revealed that students who received FRP lunches at school ate fruits and vegetables more often than students not in the program (both lower-income children not enrolled in the program and higher-income children who were ineligible). Comparing the two groups, our analysis shows that:

• Fifth-grade FRP meal participants consumed fruits and vegetables three more times per week than non-participants.

• Eighth-grade FRP meal participants consumed fruits and vegetables 1.5 more times per week than non-participants.

[FRP: Free and reduced-price]

[Note: HHFKA= Healthy, Hunger-Free Kids Act]

#### Schools key to access food - specifically for low socioeconomic children

Haynes-Maslow, Union of Concerned Scientists Food and Environment Program PhD, MHA food systems and health analyst, and O’Hara, Union of Concerned Scientists PhD agricultural economist, 15

(Lindsey and Jeffrey K. February 2015, Union of Concerned Scientists, “Lessons from the Lunchroom.” <http://www.ucsusa.org/sites/default/files/attach/2015/02/lessons-from-the-lunchroom-report-ucs-2015.pdf>, p. 8-9 Accessed 7/1/17, GDI - JMo)

Schools are particularly important venues for increasing healthy food access among children from low socioeconomic backgrounds. Studies have shown that the FRP meal program increases fruit and vegetable intake among participants (Ishdorj, Crepinsek, and Jensen 2013; Howard and Prakash 2012). Conversely, unhealthy food access can have negative dietary effects on children from low socioeconomic back- grounds. For example, students from these backgrounds are more likely to consume sugar-sweetened beverages or pur- chase snacks from school vending machines instead of pur- chasing school lunch (Park et al. 2010; Briefel, Wilson, and Gleason 2009; Fernandes 2008). To take a closer look at the importance of school meals for lower-income and racial or ethnic minority children, UCS performed our own analyses.

[FRP: Free and reduced-price]

#### Increasing nutrition standards leads to increase in fruit and vegetable consumption

Haynes-Maslow, Union of Concerned Scientists Food and Environment Program PhD, MHA food systems and health analyst, and O’Hara, Union of Concerned Scientists PhD agricultural economist, 15

(Lindsey and Jeffrey K. February 2015, Union of Concerned Scientists, “Lessons from the Lunchroom.” <http://www.ucsusa.org/sites/default/files/attach/2015/02/lessons-from-the-lunchroom-report-ucs-2015.pdf>, p. 14, Accessed 7/1/17, GDI - JMo)

The updated school meal standards were only fully imple- mented in the 2014–2015 school year; therefore, researchers are still in the early stages of evaluating their effectiveness at improving children’s diets. But the early evidence is promis- ing. One study analyzed national data from 2005 for schools that had voluntarily adopted nutrition standards that match the updated federal fruit and vegetable requirements for school meals. Results from this study showed that the avail- ability of a greater quantity and wider variety of fruits and vegetables in the cafeteria led to their increased consumption by students. Students were also more likely to try vegetables that were new to them. However, many students did not sample any fruits and vegetables, suggesting that additional strategies, such as nutrition education, are needed to achieve recommended levels of fruit and vegetable consumption for all children (Newman 2013).

## Nutrition Answers

### Status Quo Solves Nutrition

#### Status quo solves - increased fruit and vegetable portions good for nutrition - no throw away

Storrs, CNN Specialist Science and Health Writer, 16

(Carina, 1/4/16, CNN, “Rules to make school lunches healthier are working, study finds.” <http://www.cnn.com/2016/01/04/health/healthier-school-lunch-study/>, Accessed 7/1/17, GDI - JMo)

Johnson and her colleagues did not look at whether students actually ate the healthier lunches they chose, or if those servings of fruits and veggies ended up in the trash bin. However, they cited previous research that found that the amount of plate waste has not changed since meal changes were introduced. And if plate waste hasn't increased while portions of healthy foods have gone up, it probably means that kids are eating more of these foods, Johnson said.

The researchers found that the improvements in nutritional quality of school lunches were due mostly to the increases in portion size and variety of fruits and vegetables. These changes will hopefully inspire better eating habits among students.

"We tend to eat more if larger portions are put in front of us and if there's more variety," Johnson said. "We can use that to our advantage to nudge people along to make good choices."

#### Squo solves - current USDA meal standards increasing nutrition

Storrs, CNN Specialist Science and Health Writer, 16

(Carina, 1/4/16, CNN, “Rules to make school lunches healthier are working, study finds.” <http://www.cnn.com/2016/01/04/health/healthier-school-lunch-study/>, Accessed 7/1/17, GDI - JMo)

(CNN)Ever since new meal standards went into effect in schools across the United States in 2012, experts have worried that the changes would result in fewer students eating school lunches. A new study of a Washington state school district suggests this has not been the case.

The meal standards, which are part of the United States Department of Agriculture Healthy, Hunger-Free Kids Act of 2010, made sweeping changes to the breakfasts and lunches served at U.S. schools. They put a cap on the number of calories per meal and required that meals contain at least one serving of fruits and vegetables.

Researchers examined the impact of these changes at three middle schools and three high schools in an urban, racially diverse Washington state school district that enrolls about 7,200 students. The researchers looked at the nutritional value of lunches the schools prepared, as well as what the students selected, in the 16 months before the changes and 15 months after.

The researchers found increases in the levels of six nutrients -- calcium, vitamin A, vitamin C, iron, fiber and protein -- in the meals after the changes were introduced. (Unhealthy components such as fat and sodium were not included in the analysis.) They also found that nearly as many students in the school district participated in the meal program before the Healthy, Hunger-Free Kids Act took effect as after, 47% compared with 46%.

### AT – Obesity Increasing

#### Obesity research is inconclusive - rhetoric of the obesity epidemic is false

Hensley, Syracuse University Composition and Cultural Rhetoric Program PhD Candidate, 2015

(Anna, January 2015, Syracuse University Surface, “"The Terror Within:" Neoliberalism and the Rhetoric of the Obesity Crisis.” <http://surface.syr.edu/cgi/viewcontent.cgi?article=1320&context=etd>, Accessed 7/2/17, GDI - JMo)

In her book Weighing In: Obesity, Food Justice, and the Limits of Capitalism, Julie Guthman argues that while “[i]t is incontrovertible that Americans on average have gotten bigger over the past thirty years,” there is actually very little that is truly understood about what the increase in average weight means (24).4 We do not, Guthman believes, have a firm sense of whether people are now more prone to illness or whether they will actually experience lower mortality rates. We do not know the precise environmental factors at play in the increased average weight of Americans and thus cannot really determine what might be the best intervention or even whether wide-scale intervention is necessary. Guthman goes on to argue that the “obesity epidemic” is “an artifact of particular measures, statistical conventions, epidemiological associations, and rhetorical moves” that ultimately limit the way the issue of weight is conceptualized and represented (25). In other words, Guthman argues that the “obesity epidemic” as we have come to commonly understand it in American culture is shaped by research and writing that all too often assumes more than it proves and is powerfully shaped by existing biases against fat bodies.

### Solvency Answers

#### Education doesn’t solve - upstream factors are the main problem

Perry, MinnPost consumer health writer, and Wallinga, [Institute for Agriculture and Trade Policy](http://www.iatp.org/), Food and Health Program, Director, 10

[By [Susan Perry](https://www.minnpost.com/author/susan-perry), interview with David Wallinga, MD, director of the Food and Health Program at the Minneapolis-based [Institute for Agriculture and Trade Policy](http://www.iatp.org/). March 15, 2010, “How U.S. agriculture policies contribute to childhood obesity,” <https://www.minnpost.com/second-opinion/2010/03/how-us-agriculture-policies-contribute-childhood-obesity>, accessed 7.1.2017]//TRossow

Nutrition education is important, but the other, **upstream factors can’t be ignored**. I would argue that in many cases, people are making perfectly rational food choices now. **Our farm policies have made unhealthy calories the most affordable ones**. So if you’re on a limited budget and you’re trying to get the biggest calorie bang for your buck, you’re going to supersize your meal at a fast-food restaurant and get a lot of corn- and soy-derived calories.

In inflation-adjusted terms, the calories in soda pop and in French fries fried in soy oil and in chicken nuggets made with corn meal and corn starch … have all decreased in price in real terms over the past 35 years. What’s gone up dramatically in real terms is the price of fruits and vegetables, especially fresh fruits and vegetables — exactly the kinds of foods that kids don’t eat enough of.

Those are the upstream choices we’ve made. The other thing that’s maybe worth mention is marketing. The USDA budget for marketing healthy foods like fruits and vegetables is miniscule compared to even one company’s budget for marketing soda pop. **We could do all the education we want, but if there are huge marketing campaigns promoting unhealthy foods, what kind of an environment can we create for healthy choices?**

#### No solvency – local pushback

Storrs, CNN Specialist Science and Health Writer, 16

(Carina, 1/4/16, CNN, “Rules to make school lunches healthier are working, study finds.” <http://www.cnn.com/2016/01/04/health/healthier-school-lunch-study/>, Accessed 7/1/17, GDI - JMo)

There has been pushback from groups such as the School Nutrition Association, which argues that the meal changes mandated by the Healthy, Hunger-Free Kids Act has driven up costs and resulted in more food waste.

In October, the School Nutrition Association and the School Superintendents Association wrote a letter to Congress stating that school districts do not receive full reimbursement from the USDA for the increased costs associated with the new school meal standards. (The letter states that the requirements added 10 cents to the cost of a lunch and 27 cents to the cost of a breakfast, but schools were only given an additional 6 cents per lunch and no additional money for breakfasts.)

#### Subsidies take out solvency – unhealthy food

Sankin, Huffington Post San Francisco, Associate Editor, internally cites a report by the California Public Interest Research Group, 13

[[By Aaron Sankin](http://www.huffingtonpost.com/author/aaron-sankin), July 18, 2013, Huffington Post, “Agriculture Subsidies Promote Obesity, Charges New Study,” <http://www.huffingtonpost.com/2013/07/18/agriculture-subsidies-obesity_n_3607481.html>, accessed 7.1.2017]//TRossow

In its report, titled “[Apples to Twinkies: Comparing Federal Subsidies for Fresh Produce and Junk Food](http://calpirg.org/sites/pirg/files/reports/Apples%20to%20Twinkies%202013%20vCA%20c4_4.pdf),” the California Public Interest Research Group argues that too much of the nearly $300 billion the government has given in agricultural subsidies since 1995 has **gone to the crops that are used to create junk food.**

“The U.S. Department of Agriculture...recommends that fruits and vegetables make up half of the food on Americans’ plates,” reads the report. “Yet there is a **huge discrepancy** between what the government suggests we eat and what they subsidize.”

In addition to supporting the country’s agricultural industry, farm subsidies are, at least in theory, designed to keep food cheap enough so Americans don’t go hungry. However, as the report argues, by giving the majority of agricultural funding to commodity crops like corn (about $84 billion in subsidies since 1995), wheat ($35 billion) and soy ($28 billion), all of which are primarily fed to livestock or used as sweeteners or other additives, **the government makes unhealthy food comparatively more attractive to consumers than healthy food.**

#### Alt Cause – Vending machines - disproportionally harm low income Hispanic children

Haynes-Maslow, Union of Concerned Scientists Food and Environment Program PhD, MHA food systems and health analyst, and O’Hara, Union of Concerned Scientists PhD agricultural economist, 15

(Lindsey and Jeffrey K. February 2015, Union of Concerned Scientists, “Lessons from the Lunchroom.” <http://www.ucsusa.org/sites/default/files/attach/2015/02/lessons-from-the-lunchroom-report-ucs-2015.pdf>, p. 11-12, Accessed 7/1/17, GDI - JMo)

In addition to school meals in the cafeteria, students often have access to vending machines, student stores, or con- cession stands that sell food and beverages. Researchers have investigated the influence of these other food options, but previous studies reported mixed findings and did not report differences among subgroups of children classified by their gender, race/ethnicity, and socioeconomic status (Datar and Nicosia 2012, Van Hook and Altman 2012; Anderson and Butcher 2006). In order to better understand the influence of unhealthy food access, we examined the impact of vending machines in schools on BMI by subgroup of children. We calculated changes in BMI and vending machine access for children in the fifth grade and then again in the eighth grade to determine the effects of vending machines on their BMI. By following the same group of children, we were able to attribute changes in BMI specifically to vending machines.

Major findings follow (technical details are provided in an online appendix at www.ucsusa.org/lunchroomlessons):

• In the fifth grade, approximately 30 percent of students had access to vending machines in school. This access increased to 60 percent by eighth grade.

• Among the entire school population, BMI was not a ected by access to vending machines in school. However, in examining these impacts for children of speci c races and ethnicities, we found that access to vending machines led to an increase in the BMI of Hispanic boys by almost 0.5 units, or approximately a 5 percent increase in a child’s body-mass-index-for-age percentile (refer to Table 1 (p. 6) for percentile ranges and weight status). This increase in BMI was even greater among Hispanic boys who were from families with incomes of less than185 percent of the federal poverty level (0.8 units or approximately a 7.5 percent increase in a child’s body- mass-index-for-age percentile).

The reasons that Hispanic children from lower-income families might be more likely to experience increased BMI due to their use of school vending machines are numerous, including challenges their parents confront preparing healthy meals, likely in part due to a shortage of time for purchasing and preparing food (Lindsay et al. 2009), and language barriers that impede both children’s and parents’ dietary education (Gray et al. 2005). Since Hispanic children already have the highest incidence of obesity (Ogden 2014), it is imperative that we understand how vending machine access among these children can reinforce existing weight disparities.

### AT – Health Care Cost Solvency

#### Wasteful spending contributes to rising health care costs

Mack, Government Finance Officers Associations Department of Researching and Consultation Senior Consultant, 16

[Mark, August 2016, Government Finance Officers Association, “What Drives Rising Health-Care Costs”, <http://www.gfoa.org/sites/default/files/GFR081626.pdf>, pg. 28, accessed: 7/2/17, SK]

Wasteful health-care spending generally takes the form of redundant, inappropriate, or unnecessary tests and procedures that are recommended by physicians (and also frequently requested by patients). Some believe physicians “over-prescribe” in an effort to avoid litigation or to appease demanding patients, while others believe the goal is simply to increase profitability. The reasons believed to be driving patient’s demands for high-priced care also vary. Value-based insurance design, which steeply reduces or eliminates the cost of preventive care, might help combat this challenge. The approach seeks to decrease the frequency of expensive procedures, thereby reducing overall cost. Activities such as wellness visits and some treatments such as blood pressure medication would be provided at no charge or a drastically reduced rate

#### Prescription drug spending contributes to rising health care costs

Mack, Government Finance Officers Associations, Department of Researching and Consultation, Senior Consultant, 16

[Mark, August 2016, Government Finance Officers Association, “What Drives Rising Health-Care Costs”, <http://www.gfoa.org/sites/default/files/GFR081626.pdf>, pg. 28, accessed: 7/2/17, SK]

U.S. prescription drug spending doubled between 1995 and 2000, reaching $122 billion, according to a 2003 report by the National Institute for Health Policy.3 Despite significant efforts to control cost (e.g., encouraging employees to purchase generic drugs), prescription drugs remain among the top three cost growth categories, along with hospital usage and physician services. The causes for rising prescription drug cost are twofold: 1) purchasing habits, or the propensity of patients to select brand-name drugs; and 2) the type of drugs being consumed. What’s striking about the first cause is that the cost difference between brand-name-drugs and their less expensive generic counterparts is so well known that some studies categorized the cost difference between the two as “waste” because this cost difference should be avoidable. Programs aimed at changing purchasing behavior help by educating employees about the similarities and differences between brand-name and generic drugs. According to the AARP’s Public Policy Institute, plan participants who “viewed generic and brand name price comparisons were 60 percent more likely to select a generic drug than those who did not conduct price comparison exercises.” The study also cited a 22 percent increase in plan participants switching to generic drugs because of direct-mail educational efforts.4 Web-based shopping tools have also increased the likelihood of selecting less expensive drugs by making that option simpler and more user-friendly. Tools such as tiered prescription drug benefits, which charge plan participant’s different co-pay amounts depending on the tier their drug is in, may offer a viable cost control option as well.

#### Advances in medical technology leads to rising health care costs

Mack, Government Finance Officers Associations, Department of Researching and Consultation, Senior Consultant, 16

[Mark, August 2016, Government Finance Officers Association, “What Drives Rising Health-Care Costs”, <http://www.gfoa.org/sites/default/files/GFR081626.pdf>, pg. 28-29, accessed: 7/2/17, SK]

Congressional Budget Office (CBO) testimony pointed to advances in medical technologies as a primary driver of increasing health-care costs.5 Advances in medical technology are obviously important, but there is no requirement that effectiveness be demonstrated before a technology is adopted in the U.S. health-care market. This may be due in part to a large appetite for innovation among U.S. health-care consumers. Eagerness for innovation, however, seems to have created a culture where medical technologies are adopted prematurely and new medical technology is employed for additional uses beyond the original intent. In some instances, technologies that offer only marginal improvements over existing treatments — but with dramatically higher price tags — are adopted broadly and rapidly. The average patient wants the most modern care available, often regardless of price.6 This creates an inherent problem from a cost-control perspective because people usually view their health as their most valuable asset. Complicating the matter further is that the consumers setting the fair market value for such advances in medical technology — by being willing to pay for them — often aren’t willing to bear the full cost burden. Purchasers do not typically pay for the services they consume at the time of consumption. Payment for care is almost exclusively a function of insurance companies, with the consumers paying a fraction of the actual cost in the form of a co-payment. This would distort the value assignment in a buying transaction under any circumstances, but when a patient’s health is in jeopardy, he or she is more motivated than usual to make the purchase (i.e., procure treatment), leading patients to seek advanced treatments or technology. An approach that could help here is evidence-based medicine, which was pioneered by Oxford University with the goal of going beyond empirical “support” to encourage the use of only the strongest types of empirical “evidence” such as meta-analyses, systematic reviews, and randomized control trials for medical treatment recommendations.

#### An aging workforce is a key contributor to rising health care costs

Mack, Government Finance Officers Associations, Department of Researching and Consultation, Senior Consultant, 16

[Mark, August 2016, Government Finance Officers Association, “What Drives Rising Health-Care Costs”, <http://www.gfoa.org/sites/default/files/GFR081626.pdf>, pg. 29-30, accessed: 7/2/17, SK]

Workers who are 55 or older will likely make up approximately 26 percent of the labor force by 2022, compared to 21 percent in 2012 and just 14 percent in 2002, according to the Bureau of Labor Statistics. This aging population is expected to play a large role in the increased cost of Medicare, percent of patients who account for 20 percent of all health care spending in the United States. The extent to which an employer endorses health improvement initiatives can play a significant role in an employee’s lifestyle choices.7 Employers can make a difference here by supporting healthy lifestyles among employees; one strategy is implementing a formal wellness program. If employer support can truly reduce addiction, obesity, or inactivity, then it would seem reasonable to assume that doing so might lead to a reduction in the medical costs associated with these conditions. One approach to curbing unhealthy behavior is an addiction (e.g. tobacco) cessation program, coupled with cost-sharing programs like HDHPs. Still, simply offering incentives or passing costs along to employees is not sufficient. Studies on monetary incentives for smoking cessation demonstrate that a one-dimensional approach can fall short. This is because without multidimensional and sustained involvement from the employer, employees typically relapse shortly after the incentive ends. On the other hand, multidimensional approaches such as wellness programs and onsite clinics, coupled with incentives or cost sharing, yield sustained results.8

#### Plan not key – Alt causes to health care spending – diabetes, heart disease, and back/neck pain

Dieleman, Institute for Health Metrics and Evaluation PhD et al., 16

[Dieleman JL, Baral R, Birger M, Bui AL, Bulchis A, Chapin A, Hamavid H, Horst C, Johnson EK, Joseph J, Lavado R, Lomsadze L, Reynolds A, Squires E, Campbell M, DeCenso B, Dicker D, Flaxman AD, Gabert R, Highfill T, Naghavi M, Nightingale N, Templin T, Tobias MI, Vos T, Murray CJL, 12/27/16, The JAMA Network, http://jamanetwork.com/journals/jama/fullarticle/2594716, accessed: 7/2/17, KW]

From 1996 through 2013, $30.1 trillion of personal health care spending was disaggregated by 155 conditions, age and sex group, and type of care. Among these 155 conditions, diabetes had the highest health care spending in 2013, with an estimated $101.4 billion (uncertainty interval [UI], $96.7 billion-$106.5 billion) in spending, including 57.6% (UI, 53.8%-62.1%) spent on pharmaceuticals and 23.5% (UI, 21.7%-25.7%) spent on ambulatory care. Ischemic heart disease accounted for the second-highest amount of health care spending in 2013, with estimated spending of $88.1 billion (UI, $82.7 billion-$92.9 billion), and low back and neck pain accounted for the third-highest amount, with estimated health care spending of $87.6 billion (UI, $67.5 billion-$94.1 billion). The conditions with the highest spending levels varied by age, sex, type of care, and year. Personal health care spending increased for 143 of the 155 conditions from 1996 through 2013. Spending on low back and neck pain and on diabetes increased the most over the 18 years, by an estimated $57.2 billion (UI, $47.4 billion-$64.4 billion) and $64.4 billion (UI, $57.8 billion-$70.7 billion), respectively. From 1996 through 2013, spending on emergency care and retail pharmaceuticals increased at the fastest rates (6.4% [UI, 6.4%-6.4%] and 5.6% [UI, 5.6%-5.6%] annual growth rate, respectively), which were higher than annual rates for spending on inpatient care (2.8% [UI, 2.8%–2.8%] and nursing facility care (2.5% [UI, 2.5%-2.5%]).

### School Meals Turn

#### School meal program children more likely to be obese

Haynes-Maslow, Union of Concerned Scientists Food and Environment Program PhD, MHA food systems and health analyst, and O’Hara, Union of Concerned Scientists PhD agricultural economist, 15

(Lindsey and Jeffrey K. February 2015, Union of Concerned Scientists, “Lessons from the Lunchroom.” <http://www.ucsusa.org/sites/default/files/attach/2015/02/lessons-from-the-lunchroom-report-ucs-2015.pdf>, p. 11-12, Accessed 7/1/17, GDI - JMo)

Recognizing that the FRP meal program is designed to benefit many lower-income children, we compared the food intake between FRP meal participants and non-FRP meal participants to determine how well the program was working. As shown in Table 3, after examining the diets of children in and out of school we found that:

• FRP participants ate more fruits and vegetables than non-participants. Fifth-grade FRP meal participants consumed fruits and vegetables more frequently than non-participants (22.2 versus 18.9 times per week). As students aged, children in both groups consumed fruits and vegetables less frequently. However, eighth-grade FRP meal participants continued to eat fruits and vegetables more frequently (19.2 times per week) than non-FRP meal participants (17.6 times per week).

• FRP participants ate more unhealthy foods than non-participants. Fifth-grade FRP meal participants ate fast food more frequently than non-FRP meal participants (3.6 versus 2.6 times per week). They also drank sugary beverages such as soda, sports drinks, fruit drinks, and 100-percent fruit juice more frequently than non-FRP meal participants—13.2 versus 10.6 times per week. In eighth grade, children in both groups consumed sugary bever- ages less frequently (10.6 times per week) than in fifth grade (12.2 times per week).

At first glance, it may not seem that one additional fast food meal and sugary drink per week is a significant difference. However, each fast food meal is associated with consuming as many as 310 extra calories for adolescents (Powell and Nguyen 2013), and each sugary beverage is associated with 150 calories. Together, that is approximately 460 added calories per week.

Since FRP meal participants ate more healthy and un- healthy foods than non-FRP meal participants, we examined whether their BMIs differed. Among all children (both FRP and non-FRP participants), from fifth to eighth grade, the percentage of overweight students (BMI ≥ 85th percentile) increased from 25 percent to 35 percent and the percentage of obese students (BMI ≥ 95th percentile) increased from 12 percent to 19 percent. Examining only FRP meal participants, we found that they were more likely to be overweight and obese than non-participants (see Table 4). During the fifth grade, 32 percent of FRP meal participants were overweight and 16 percent were obese, whereas only 23 percent of non- participants were overweight and 10 percent were obese. This disparity only widened by the eighth grade: nearly 50 percent of FRP meal participants were overweight and 30 percent were obese, compared to 30 percent and 17 percent of non-participants, respectively.

[FRP: Free and reduced-price]

### Obesity Rhetoric Turns

#### Obesity Bad Rhetoric leads to a “War on obesity” that pits it as a threat to national security

Hensley, Syracuse University Composition and Cultural Rhetoric Program PhD Candidate, 2015

(Anna, January 2015, Syracuse University Surface, “"The Terror Within:" Neoliberalism and the Rhetoric of the Obesity Crisis.” <http://surface.syr.edu/cgi/viewcontent.cgi?article=1320&context=etd>, Accessed 7/2/17, GDI - JMo)

During a 2003 National Public Radio interview, then Surgeon General Richard Carmona identified obesity as the greatest threat facing the US. At the time of the interview, less than two years had elapsed since the September 11th terrorist attacks and the US had since invaded both Afghanistan and Iraq under the justification of fighting continuing terrorist threats. Despite these ongoing military campaigns, and despite persistent fear of further attacks on the US, Carmona told NPR, “I’ve come to refer to [obesity] as the terror within because it’s every bit as devastating as terrorism.” Like so much post-9/11 rhetoric, Carmona’s framing of fat as the “terror within” clearly plays on and deepens public fears and anxieties over the specter of terrorist threats. But it also implies that the bodies of citizens either are or have the potential to become a grave threat to the strength and security of the nation.

In the years following Carmona’s NPR interview, the idea that obesity rates present a serious danger to the US as a nation has gained speed. In 2010, for example, a group of retired military personnel called “Mission: Readiness” began advocating for reforms to school lunch programs—reforms they argued were necessary in order to curb childhood obesity rates so that more of America’s youth would meet the physical requirement for military service. Earlier in the same year, First Lady Michelle Obama launched the “Let’s Move” campaign, a campaign dedicated to increasing education about exercise and nutrition while also advocating reforms to national nutritional standards and public school lunch programs. While Obama’s campaign does not voice “Mission: Readiness’s” explicit concern for the future of national defense, the “Let’s Move” campaign has been referred to again and again in the news media as “Michelle Obama’s War on Childhood Obesity.” News sources across the US now make reference to the “war on obesity” on a daily basis, working to pull readers in by drawing on the militarized, panic-stricken language of headlines like “Cash as Weapon in the War Against Obesity,”1 “New Tactic in War on Obesity: Attack Portion Size,”2 and “No Twinkies Please, We’re Dying.”3

The “battle of the bulge” has been a common phrase thrown around dieting discourses for a long time. But the current rhetoric of the “war on obesity” marks a shift from a focus on the individual struggle to slim down to a desired weight to a national struggle to normalize and discipline the citizen body as a way of strengthening the collective whole. In the rhetoric of the “war on obesity,” nationalist and militarized language is not being employed as a purely convenient metaphor—it’s being used to posit the size and health of the individual citizen body as a threat to the national identity and global standing of the US. In this dissertation, I offer a rhetorical analysis of a variety of sites where a militarized and nationalist rhetoric of the “obesity crisis” emerges in order to better understand the diverse purposes it serves, the variety of cultural and political values with which it is embedded, and the lived consequences of its circulation.

#### Obesity rhetoric leads to domestic militarization and construction a nationalistic identity while fearing threats to the nation

Hensley, Syracuse University Composition and Cultural Rhetoric Program PhD Candidate, 2015

(Anna, January 2015, Syracuse University Surface, “"The Terror Within:" Neoliberalism and the Rhetoric of the Obesity Crisis.” <http://surface.syr.edu/cgi/viewcontent.cgi?article=1320&context=etd>, Accessed 7/2/17, GDI - JMo)

One way in which the rhetoric of obesity as a national crisis works to organize and discipline citizen bodies is through the production of fear. In her article, “The Terror Within: Obesity in Post-9/11 U.S. Life,” Charlotte Biltekoff argues that the war against obesity and the war against terror converged in the years following 9/11 to produce a heightened sense of threat in the U.S., collapsing fear of a dangerous Other that exists beyond national borders with a deepening fear of unseen threats at home. The production of fear and anxiety through a crisis- laden rhetoric works in a post-9/11 era to normalize the militarization of daily life while also encouraging citizens to discipline their bodies through diet and exercise as a show of patriotism and civic pride. By positioning obesity as a grave threat to the nation, the crisis rhetoric surrounding obesity also works to create a “by whatever means necessary” attitude towards nullifying the threat posed by fatness. The result is a willingness on the part of individual citizens to allow greater surveillance and restriction of individual bodies, such as school programs that monitor student BMIs or corporate programs that track employee weight and health indicators.

But even more than drawing on and reinforcing the circulation of anxiety as a vehicle for disciplining bodies, the rhetoric of obesity as a national crisis tells us a story about who we are as a nation and defines national borders. In other words, as we “war on obesity,” we construct a particular image of ourselves as U.S. citizens and, in the process, we define who belongs as part of our citizen body, we decide what makes us strong as a collective, and we determine who among us is good and who among us poses a threat. The image we construct through the narrative lessons of the “war on obesity” does not develop in isolation, but amid the specificities of our current economic and political context. As we construct ourselves in this moment, we work to make sense of ever-growing anxieties about ongoing military campaigns in the Middle East, about the troubled U.S. economy, about the changing class and racial makeup of the country, and about the position the U.S. occupies in the global market.

#### Obesity research is inconclusive - rhetoric of the obesity epidemic is false

Hensley, Syracuse University Composition and Cultural Rhetoric Program PhD Candidate, 2015

(Anna, January 2015, Syracuse University Surface, “"The Terror Within:" Neoliberalism and the Rhetoric of the Obesity Crisis.” <http://surface.syr.edu/cgi/viewcontent.cgi?article=1320&context=etd>, Accessed 7/2/17, GDI - JMo)

In her book Weighing In: Obesity, Food Justice, and the Limits of Capitalism, Julie Guthman argues that while “[i]t is incontrovertible that Americans on average have gotten bigger over the past thirty years,” there is actually very little that is truly understood about what the increase in average weight means (24).4 We do not, Guthman believes, have a firm sense of whether people are now more prone to illness or whether they will actually experience lower mortality rates. We do not know the precise environmental factors at play in the increased average weight of Americans and thus cannot really determine what might be the best intervention or even whether wide-scale intervention is necessary. Guthman goes on to argue that the “obesity epidemic” is “an artifact of particular measures, statistical conventions, epidemiological associations, and rhetorical moves” that ultimately limit the way the issue of weight is conceptualized and represented (25). In other words, Guthman argues that the “obesity epidemic” as we have come to commonly understand it in American culture is shaped by research and writing that all too often assumes more than it proves and is powerfully shaped by existing biases against fat bodies.

### Healthism Turn

#### Healthism Turn -- their Williams evidence describes obesity as an “epidemic” and assumes obesity is a personal choice -- this willfully obscures structural and biological factors that cause obesity, which causes discrimination and shapes public policy – also turns their ethics framing

Eller, Syracuse University, Philosophy, Graduate Student, 14

[G. M. Eller, September 2014, Project Muse, “On Fat Oppression,” Kennedy Institute of Ethics Journal, Volume 24, Number 3, pp. 233-238, (Article), <https://muse.jhu.edu/article/559681/pdf>, accessed 7.2.2017]//TRossow

4. OBJECTIONS AND REPLIES I have argued that fat oppression fulfills jointly sufficient conditions for some phenomenon to count as oppression. So, one might respond to my argument that fat people are oppressed by claiming that my account of oppression is inadequate, and that I have left out some condition necessary for oppression. I don’t find this objection compelling because, as I argued in section 2, a phenomenon that consists in unjust, systematic, groupbased harms counts as oppression. For example, I claimed that women are oppressed in virtue of their suffering unjust, systematic harms qua women. So, these conditions taken together are at least sufficient for oppression. A set of minimally sufficient and necessary conditions for oppression must be among the conditions I’ve given. Thus, fat oppression needn’t fulfill any conditions other than the ones I’ve already given. To be compelling, the rejection of my account of oppression must be accompanied by a counterexample: a phenomenon that fulfills all of our conditions yet does not count as oppression. Until a counterexample is presented, I hold that my account of oppression is adequate.

I also argued that fat oppression is unjust, systematic, and group-based. One who rejects that fat people are oppressed must therefore reject that one of these conditions is fulfilled. I’ll first consider one who argues that the harms suffered by fat people are just. One might either accept FEO and argue that the inequalities created in virtue of one’s fatness still don’t count as unjust, or one might reject FEO. I’ll deal with each objection in turn.

Suppose one accepts FEO. Recall that FEO says that an inequality is just only if it doesn’t exist in virtue of some X’s possessing a trait assigned by the natural lottery. For one to accept FEO and hold that the inequalities created in virtue of one’s being fat are just, one must therefore hold that fatness is not a trait assigned by the natural lottery. I claimed in the previous section that body shape is determined by genetics and environment. This claim is supported by empirical evidence. Since genetics and environment are traits assigned by natural lottery, so too is body weight. Consequently, with respect to the requirements of justice given FEO, body weight viz. fatness is relevantly analogous to traits like race and sex.

However, many believe that weight, unlike race and sex, is “flexible.” A widely-held view in Western society called **healthism** claims that one’s weight is causally related to one’s health, and one’s weight is one’s own personal and moral responsibility. Healthism persists because of official government endorsement (recall the Center for Disease Control’s claims about the “**obesity epidemic**” and their recommendations for personal efforts one can take to control obesity), as well as a diet and fitness industry that profits from the view’s dogmatic status (Campos 2004, xix; Heyes 2007). On healthism, violating the thinness norm is a vice and a personal moral failing (cf. Guthman 2011; Crawford 1980).18 Healthism in the media, according to Dworkin and Wachs (2009, 11), “operates to promote neoliberal ideologies that **obscure the impact of government and structural contributions to health disparities**.” If that’s right, then healthism obscures the actual level of responsibility an individual has for her own health (including her body weight). Not only are there **institutional and social forces** at work on one’s health that go beyond the scope of one’s own efforts, there are **biological forces** that keep one’s weight out of one’s control. Because of a widespread belief in healthism, many think weight is flexible, but this simply is not the case.

I will concede that weight is flexible in one sense. It seems to be the case that people who are fat can lose weight in the short term. However, even so, they tend to gain it back over the long term (Andersen et al. 2001). Given the genetic and environmental influences on one’s weight, and the tendency towards a particular body size over time, we can conclude that fatness is a **trait assigned by the natural lottery**. Claims to the contrary either wrongly reject the empirical evidence that supports our conclusion, or overestimate the amount of influence one has over one’s own weight in the long-term.

Suppose one instead rejects FEO. One might hold, for example, that no natural variations in human traits are intrinsically just or unjust; rather, it is how society responds to these variations that is just or unjust. In light of this, we could accept a modified Fair Equality of Opportunity principle: Fair Equality of Opportunity\* (FEO\*): Society’s response to an inequality is just only if the inequality doesn’t exist in virtue of some X’s possessing a trait assigned by the natural lottery OR the inequality does exist in virtue of some X’s possessing a trait assigned by the natural lottery and correcting or compensating for that inequality is unreasonable.

This principle corresponds well to our intuitions about disability and other traits that naturally vary in humans (like skin color, race, and fatness). It doesn’t seem intrinsically unjust that some people have different abilities than others, but the fact **that society is structured in such a way as to provide those with certain abilities advantages, and disadvantage those without those abilities does seem unjust** (Andersen et al. 2001, 331).

However, society’s being structured in that way might be just if it is unreasonable to accommodate those with some natural variation in a trait. For example, suppose the very tall were worse off for being tall, and in order to make everyone equally well off, everyone had to be made worse off, or the cost of making everyone equally well off was exceedingly high. We might conclude that in such a case, the inequality between the very tall and everyone else was justified and therefore just.

On FEO\*, what justice requires will depend on what’s reasonable to demand of people, and what people can reasonably demand of others. What’s reasonable will depend on weighing costs and benefits in particular cases. Consider Peter Singer’s argument on consequentialist grounds that “obesity is an ethical issue, because an increase in weight by some imposes an increase in costs on others” (2012). Singer gestures at some potential costs, like an increase in the amount of fuel needed to fly an airplane a particular distance when carrying fat versus thin passengers, and he also references a study that claims that fat people are partly responsible for global warming because they have a larger carbon footprint.19 Other potential costs are increased health care costs; fat people are thought to require more frequent and more expensive care than thinner people. Singer explicitly claims that these costs justify differential treatment of fat people with respect to airline tickets; they should pay more, because they cost more. He further claims that we ought to have public policies aimed at discouraging weight gain.

If we assume FEO\*, one might think that Singer’s claim that fat people ought to pay more is reasonable given that they cost more, and therefore the inequality is just, despite the fact that fatness is a trait assigned by the natural lottery. One might also maintain that because weight is flexible in a relevant way (because it is possible for fat people to lose weight in the short term), it is reasonable for us to discriminate on the basis of weight. However, **I do not think that it is reasonable in most cases to discriminate against fat people in virtue of the economic and social costs they purportedly impose**. We do not hold people in wheelchairs financially responsible for building appropriate accommodations like ramps in new buildings. It might be reasonable to make some accommodations and not others for those in wheelchairs, but still, for the accommodations we do make, we make them because society should have been structured as not to disadvantage those in wheelchairs in the first place.20 Similarly, in cases in which, e.g., amusement park rides must be retrofitted for larger seating, or larger clothing sizes must be made available in greater quantities, fat people should not bear the costs of these accommodations, because society **should not have been structured in such a way as to disadvantage fat people in the first place.**

Moreover, as in the case of gender, although some traits assigned by the natural lottery can be changed, we should not (in most cases) reasonably expect people to change these traits when it would require great and unusual effort. In the case of fat people, while it’s true that fat people could lose weight in the short term, the costs of doing so are too high to reasonably demand it. We might demand that fat people repeatedly diet for fleeting weight loss, but due to re-gained weight, repeated weightloss dieting often results in illness and metabolic problems (Brownell et al. 1986; Brownell and Rodin 1994; Campos et al. 2006). Furthermore, permanent weight loss is possible through the use of elective surgery, but it is dangerous. There are complications that arise from surgery, and operative mortality is more than 1 percent for some procedures (Buchwald et al. 2004). So, because of the risks and great burdens that weight loss imposes on the fat, it seems that demanding they either lose weight or suffer is unjust, even on FEO\*. There might be some cases in which fat people suffering an inequality is reasonable and therefore just, but this must be determined by a careful cost and benefit analysis. Generally, it isn’t actually the case that inequalities suffered by the fat are just and therefore these inequalities count as unjust harms.

Essentially, the point regarding FEO and FEO\* can be summed as follows: if you think it’s unjust that people are suffer inequalities based on traits like race and sex, you ought to think it’s unjust that people suffer inequalities based on weight, because race, sex, and weight are all relevantly analogous. With respect to FEO\*, some inequalities might be justified, but in most actual cases of fat people experiencing inequalities, they are unjust inequalities.

Instead of rejecting that fat people suffer unjust harms, one could reject that fat people are oppressed by claiming that fat people aren’t oppressed qua fat (i.e., one who rejects that fat oppression is group-based and targets fat people qua fat). For example, Fikkan and Rothblum (2012) argue that anti-fat bias is gendered to such a degree that there is an absence of empirical evidence that men suffer harms for being fat. They conclude that fat women suffer a disproportionate amount of harm compared to fat men, and indeed, that while women suffer for being fat in a variety of domains, men suffer only in the workplace, to a lesser degree, and only at the highest of weights. One who rejects the existence of fat oppression might therefore argue that since fat men don’t suffer as much or in as many domains compared to women, it’s not the case that fat people are oppressed; rather, fat women are oppressed qua women, while fat men happen to suffer some harms. (Recall that just because someone suffers an unjust harm, that doesn’t make that person oppressed. We don’t want to say that white men are oppressed qua men.)

I cannot adequately adjudicate an empirical dispute here, but I will say that Roehling (2012) provides compelling responses to Fikkan and Rothblum’s analyses of the supposedly problematic data. Roehling claims that while the studies they cite do support the idea that “fat is a feminist issue” (i.e., anti-fat bias is a concern for feminism), anti-fat bias is actually a more complicated phenomenon than it appears. The empirical data require subtle analysis, which shows that anti-fat bias affects both women and men. According to Roehling, in most areas of life, men have a broader range of acceptable body types, but they still suffer harms economically (in the workplace and employment) and socially (in the dating marketplace, for example). Roehling notes that Fikkan and Rothblum’s review demonstrates that fat women, and to a lesser extent, fat men, are vastly underrepresented and treated poorly in their media portrayals. The Western culture does, indeed value a slender build in women. It is therefore not surprising that women are “punished” more than men for violating societal standards of beauty. (596)

However, it is consistent with my claim that fat people are oppressed qua fat that fat women suffer more than fat men. Analogously, racialized men and women can both be oppressed in virtue of being members of the racialized group, while suffering unequal consequences. (For example, in many cases, black men and women suffer in virtue of being black, but black women suffer more than black men.) Similarly, fat men and women are oppressed in virtue of being members of the group of fat people, even if they are also oppressed in virtue of being members of other groups. Thus, for my reply to the objection above to succeed, it is enough that fat men suffer in virtue of being fat, even if they suffer less than fat women. There is a group—fat people—that suffers qua fat, and that group contains both men and women. Fat may be a feminist issue, but fat oppression affects men and women both.

5. WHY FAT OPPRESSION MATTERS

So, what’s at stake with respect to fat oppression? Why should we care? Obviously, **there are political implications given fat oppression**. Denying that fat people are personally responsible and morally culpable for their weights has **ramifications for how we ought to shape public policy**. Furthermore, concluding that there is fat oppression can raise awareness about anti-fat bias and why it’s wrong.

Moreover, what seems most important in my view is that fat people can develop more autonomy with respect to their relationships with their bodies, dieting, and exercise. Fat people suffer psychologically in virtue of deformed desires: desires formed within an oppressive framework. By exposing oppressive body-type norms, we see that complex societal forces at work cause people to internalize the thinness norm, and can thereby undermine the norm.

I have argued that certain conditions are jointly sufficient for a phenomenon to count as oppression, and that fat oppression fulfills these conditions. I have also considered some objections and offered replies. In brief, fat people needn’t, and oughtn’t, suffer because of the thinness norm. The positive case that fat oppression occurs helps us to move towards positive social change, better public policy, and at the individual level, a healthier self-image and lifestyle.

#### The impact is psychological oppression -- either a. obese people do not try to lose weight and suffer stigmatization or b. obese people do try to lose weight, but fail because of biological factors -- either way, healthism makes obese people feel self-loathing and internalize the thinness norm

Eller, Syracuse University, Philosophy, Graduate Student, 14

[G. M. Eller, September 2014, Project Muse, “On Fat Oppression,” Kennedy Institute of Ethics Journal, Volume 24, Number 3, pp. 230-232, (Article), <https://muse.jhu.edu/article/559681/pdf>, accessed 7.2.2017]//TRossow

Recall that on our account, some phenomenon counts as oppression if the phenomenon is unjust, systematic, and harms members of a group as members of that group. On this account, it will turn out that fat people are oppressed.

Firstly, the harms suffered by fat people are unjust. We appeal to FEO to find out which harms are unjust. On our view, inequalities that are caused by traits assigned by a natural lottery are unjust, and when those inequalities harm people, those inequalities are unjust inequalities. Fat people experience many inequalities in virtue of being fat, but why should we think that fatness is a trait assigned by the natural lottery? Because of **empirical evidence**. In short, **genetics and one’s environment** play a significant role in weight gain and loss (Bouchard et al. 1990; Stunkard et al. 1986; Kolata 2007). Since genetics and one’s environment are determined in virtue of a natural lottery, so too is one’s ability to gain or lose weight.15 Consequently, one’s being fat and one’s ability to conform to the thinness norm are the result of a natural lottery. So, it follows that any inequalities that are experienced in virtue of one’s being fat are unjust inequalities. These inequalities harm fat people, making these unjust inequalities unjust harms.

Many would reject the claim that fatness is a trait assigned by natural lottery, or at least hold that whatever body shape one is assigned at birth is irrelevant to one’s ability to conform to the thinness norm later. In fact, there are powerful social institutions at work that obfuscate the amount of control one has over one’s own weight. We’ll return to this objection in the next section, and our reply will reveal why the claim that fatness is a trait assigned by the natural lottery is so controversial.

We’ll now consider how fat oppression is systematic. Farrell claims that the various forms of discrimination that fat people experience, **in schools,** at doctors’ offices, in the job market, in housing, and in their social lives, mean that, effectively, their life chances—for a good education, for fair and excellent health care, for job promotion and security, for pleasant housing, for friends, lovers, and life partners . . . in other words, for a good and safe life—are effectively reduced (2011, 7).

There is ample empirical evidence to support Farrell’s claim.16 Fat stigma and its resulting shame begin in childhood, and extend through adulthood. What’s more surprising is that the consequences suffered for being fat in childhood and adolescence aren’t merely social. Fat kids are bullied more and are lonelier and more anxious about their futures than their thinner peers (Rimm 2004), but there are also economic costs to fat children and teens. Parents are willing to pay less for a car for a fat teen compared to a thinner teen, and parents pay less for college for fat kids, even when controlling for income and grades (Kraha and Boals 2011; Puhl and Brownell 2001). These economic and social harms continue into adulthood. For example, fat women earn on average less money over a lifetime than women of average weight, who themselves earn less money over a lifetime than women who are 25 pounds under the average weight. Similarly, fat men earn less money than men of average weight (Judge and Cable 2011). This might be linked to the social costs of being fat; negative characteristics associated with being fat can prevent people from getting raises or promotions comparable to their thin peers (Finkelstein et al. 2007). And social costs extend to the dating market (Solovay 2000, 101–2). In one study, men rated “obese” women as less attractive than women who were in a wheelchair, missing a limb, had a mental illness, or had a sexually transmitted disease (Chen and Brown 2005).

The discrimination faced by fat people is systematic because its presence in one aspect of their lives can extend its influence to another, distinct aspect of their lives. Fat prejudice begins early in life and continues throughout it. Earlier harms beget and compound later ones. Reduced self-esteem in adolescent years might induce greater weight gain or depression, affecting success. Being a fat teen might cause one to attend a less prestigious college than one would have otherwise, leading to an even more reduced income later in life. Moreover, the harms suffered by fat people extend to every aspect their lives. Not only is there **pervasive and obvious discrimination** (that is, discrimination that isn’t intended to be subtle, as when the CEO of Abercrombie and Fitch publicly claimed that he didn’t want fat kids wearing his company’s clothes) there are “all the little things nipping at one’s heels”: difficulty fitting into airline seats or rides at an amusement park, unaccommodating restrooms, or having to shop at a specialty store to find clothes that fit. All of these harms are connected and omnipresent in the fat person’s life.

Fat people are also in the **double bind**. People in the double bind can’t act in the “right” kind of way, i.e., according to a norm. In the case of fat people, this means that if they don’t try to lose weight, they suffer **ridicule and discrimination**, as we saw above. Fat people can try to lose weight, but **because weight is governed by the natural lottery**, these attempts are **unlikely to succeed**, and if they do, people who lose weight are likely to regain it (or become ill as a result).17 So, for fat people, **the other side of the double bind is to attempt to lose weight, fail, and endure reduced self-esteem, and accompanying feelings of failure and self-loathing due to the internalization of the thinness norm.** Thus, although fat people are harmed by oppressive institutions and other people, fat people are also psychologically oppressed. It’s important to note this because it accounts for phenomena like repeated weight-loss dieting (and therefore, why people keep trying in spite of failure to conform to the thinness norm). People who fail to adhere to a diet, or fail or re-gain lost weight, are subject to immense anguish and shame. Thus, fat people **self-police and** thereby **become their own oppressors**.

Furthermore, oppression harms members of the group of fat people as members of that group. We saw above empirical evidence that controls for other factors and shows that fat people suffer harms in virtue of having fat bodies. In other words, in the cited studies, the only thing that makes a difference between the experiences of two people who have thin and fat bodies respectively is that they differ in their body types. There is a causal connection between having a fat body, and e.g., making less money, and when placed within the context of the other harms suffered by fat people (i.e., when observed within the system of oppression) we can see that the causal link is nonaccidental; it’s the right kind of causal link.

I have argued that fat people suffer unjust systematic harms qua fat people. Therefore, our account of oppression counts fat people as oppressed. In the next section, I’ll consider some objections and replies to the claim that fat people are oppressed.

### AT – Obesity Increasing

#### Federal Action and the Child Nutrition Promotion and School Lunch Protection Act solves gaps in existing policy

Fried, New York University Department of Nutrition, Food Studies & Public Health AND Simon, University of California Hastings College of the Law Assistant Professor & Marin Institute Research and Policy Director, 7

(Ellen and Michele, 7/20/2007, Duke Law Journal, “THE COMPETITIVE FOOD CONUNDRUM: CAN GOVERNMENT REGULATIONS IMPROVE SCHOOL FOOD?” <http://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=1324&context=dlj>, Volume 56: 1491, Accessed 7/1/17, GDI - JMo)

The obesity and diabetes epidemics are swinging the pendulum back toward federal control under which a mandate of congressional authority and effective USDA regulation could quickly be applied nationwide. To understand whether federal efforts can improve school food, we analyze resulting federal legislation seeking to do just that.

As of March 2007, federal efforts to establish consistent nationwide nutrition standards for all competitive foods and beverages sold in schools were embodied in the Child Nutrition Promotion and School Lunch Protection Act of 2007. First introduced in both houses in May 2006,124 the bill was reintroduced in the 110th Congress and continued to enjoy bipartisan support from numerous cosponsors.125 Although a plethora of bills have sought to improve school food over the years, none have been as specific: the bill targets gaps in NSLP statutory authority identified by the appellate court decision in National Soft Drink Association v. Block, and the USDA’s failure to update the definition of FMNV.

[Note: FMNV = Foods of Minimal Nutritional Value]

## Solvency Answers

### Curriculum Turn

#### Curriculum will be self-serving and students won’t learn about environmental destruction – turns bio-diversity

Doerfert, Texas Tech University Agricultural Communications Associate Chair & Professor, 11

[Doerfert, D. L. (Ed.) (2011). American Association for Agricultural Education, “National research agenda: American Association for Agricultural Education’s research priority areas for 2011-2015,” pg. 13, Lubbock, TX: Texas Tech University, Department of Agricultural Education and Communications. <http://aaaeonline.org/resources/Documents/AAAE%20National%20Research%20Agenda.pdf> Accessed 6.28.2017]//TRossow

In the midst of this, a major issue with past, current, and probably future agricultural literacy programs is the question, “Who is the authority on curriculum or program content?” Activist groups who oppose factory farms, grazing, pesticides, hormones, etc., point to science as the problem and not the source of authority on these matters. The urbanization of the planet is overwhelming and direct ties to farming are becoming rare. When they do occur, the settings are often bucolic and unrealistic to modern farming techniques. It is imperative that research that links environmental, socio-cultural, and agricultural factors occur in the future (Elliot, 2007; Wals, 2010). Another primary issue with agricultural literacy programs is the educational impact of such efforts. Should research be focused on agricultural knowledge, pedagogy enhancements, communication channels, or something else? Depending upon the audience, the answers differ. The “something else” may be a new, open-minded way of thinking (Wals, 2010). It may be developing strategies for individuals to determine their own informed conclusions, the creation of autonomous thinkers. Opportunities to Respond Previous research efforts by the profession related to this priority have established a foundation for future disciplinary and interdisciplinary efforts including the use of systems-based approaches and research methodologies. This foundation has increased our understanding of related message and curriculum development, delivery method preferences and effectiveness, and the extent of change in audience knowledge, attitudes, perceptions and behaviors after experiencing an educational program or consuming produced information and messages. In spite of more than twenty years of agricultural literacy research success, changes within agriculture and our society have increased the need for further research. Currently, educational programs and products that focus on educating people about sources of food are often perceived as self-serving to the agricultural industry and seldom do they emphasize agriculture’s environmental impact and interaction. In spite of some national efforts such as “Ag in the Classroom,” most efforts are sporadic in quality, delivery mechanisms, and effectiveness (Jepsen, Pastor, & Elliot, 2007). How agriculture affects the environment and our natural resources and how the environment affects agriculture are critical issues that need more attention in many agricultural literacy programs (Wals, 2010).

### Gardens Turn/DA – 1NC

#### Racial achievement gaps are declining now, but more progress is needed

Diepenbrock, Kansas University News Service, public affairs officer, 17

[George Diepenbrock, KU News Service, June 6, 2017, “[Grant to study school funding's effect on racial achievement gap](http://news.ku.edu/2017/06/01/grant-study-school-fundings-effect-racial-achievement-gap),” <http://news.ku.edu/2017/06/01/grant-study-school-fundings-effect-racial-achievement-gap>, accessed 7.2.2017]//TRossow

"In his work, Professor [Sean Reardon](https://cepa.stanford.edu/content/widening-academic-achievement-gap-between-rich-and-poor-new-evidence-and-possible) found that racial gaps in educational achievement **shrank** over the last half of the 20th century," said Rauscher, who examines intergenerational inequality. "However, the recession and rising inequality could alter that trend. Furthermore, the fact that racial gaps in education remain suggests we **need to do better**."

She said the funding will allow her research to move beyond a long-standing debate about whether funding matters to instead examine whether and in which contexts particular types of funding could help reduce racial and ethnic achievement gaps. For decades, educators and policymakers have grappled with the disparity in academic performance between groups of students.

The analysis will use data for school districts throughout the country to examine whether particular types of funding hold more potential to reduce achievement gaps. Mostly because of availability of data, her investigation of effects of facilities funding on achievement gaps will be limited to California school districts. Rauscher will also limit the most rigorous analyses to districts on state borders, which are more comparable.

After the Great Recession in 2008, states reduced school funding across the nation, but researchers know little about how the cuts might have affected K-12 achievement gaps.

"Reardon’s study found that **racial achievement gaps have declined while income gaps have increased**," Rauscher said. "Learning more about what contributes to these contrary trends is important for reducing inequality in education."

#### School gardens hijack curricula by focusing on gardening learning instead of core math and English standards -- this creates a racial achievement gap between students -- California proves

\*Note – King School = California high school with extensive school garden programs

Flanagan, Atlantic contributor, 10

[Caitlyn, B.A. and an M.A. in [Art History](https://en.wikipedia.org/wiki/Art_History) from the [University of Virginia](https://en.wikipedia.org/wiki/University_of_Virginia). Before becoming a writer, Flanagan was an English teacher and college counselor at the [Harvard-Westlake](https://en.wikipedia.org/wiki/Harvard-Westlake) school. January/February 2010 Issue, The Atlantic, “Cultivating Failure,” <https://www.theatlantic.com/magazine/archive/2010/01/cultivating-failure/307819/>, accessed 7-3-17, TR]

Of course, Waters herself is guilty of nothing more terrible than being a visionary and a woman of tremendous persuasive abilities. It’s the state’s Department of Education that is to blame for allowing these gardens to hijack the curricula of so many schools. But although garden-based curricula are advanced as a means of redressing a wide spectrum of poverty’s ills, the animating spirit behind them is impossible to separate from the haute-bourgeois predilections of the Alice Waters fan club, as best expressed in one of her most oft-repeated philosophies: “Gardens help students to learn the pleasure of physical work.” **Does the immigrant farm worker dream that his child will learn to enjoy manual labor, or that his child will be freed from it?** **What is the goal of an education, of what we once called “book learning”?** These are questions best left unasked when it comes to the gardens.

Hispanics constitute 49 percent of the students in California’s public schools. Ever since the state adopted standards-based education (each child must learn a comprehensive set of skills and material) in 1997—coincidentally, at the same moment that garden learning was taking off—**a notorious achievement gap has opened between Hispanic and African American students on the one hand, and whites and Asians on the other**. Indeed, Hispanic students do particularly poorly at King Middle School. According to the [2009 Federal Accountability Requirements](http://www.cde.ca.gov/ta/ac/ay/documents/overview09.pdf), statewide, more than 39 percent of Latinos are proficient in English and 44 percent in math, but at the King school, those numbers are a dismal 30 percent and 29 percent, respectively. **Where do Berkeley’s African American and Hispanic middle-schoolers do well? At a gardenless charter school called Cal Prep**, where 92 percent of the students are black or Latino, where the focus is on **academic achievement**, and where test scores have been rising steadily.

The garden-based curriculum has good news for the state’s catastrophically underachieving students: a giant team of volunteers is ready to help them. Here is how our garden-loving, home-cooking, recycling superintendent of instruction describes one of the program’s principal advantages in the introduction to [A Child’s Garden of Standards](http://www.cde.ca.gov/Ls/nu/he/documents/childsgarden.pdf), a gargantuan compendium of charts and lesson plans intended to link the beloved method of gardening with the hard-ass objectives of the state standards:

Some families, particularly those from other countries, may feel uncomfortable when asked to help out at school because their English skills or educational background do not give them a solid classroom footing. For these families, the living classroom of a garden can be a much more inviting environment in which to engage in their children’s education.

If this **patronizing agenda** were promulgated in the Jim Crow South by a white man who was espousing a sharecropping curriculum for African American students, we would see it for what it is: a way of **bestowing field work and low expectations on a giant population of students who might become troublesome if they actually got an education.**

Here is the essential question we must ask about the school gardens: What evidence do we have that participation in one of these programs—so enthusiastically supported, so uncritically championed—improves a child’s chances of doing well on the state tests that will determine his or her future (especially the all-important high-school exit exam) and passing Algebra I, which is becoming the make-or-break class for California high-school students? I have spent many hours poring **over the** endless research on the positive effects of garden curricula, and in all that time, **I have yet to find a single study that suggests classroom gardens help students meet the state standards for English and math**. Our kids are working in these gardens with the promise of a better chance at getting an education and a high-school diploma but without one bit of proof that their hard work will result in either. We should remember, by the way, that the California high-school exit exam, which so many are failing, is hardly onerous: it requires a mastery of eighth-grade math (students need to score a mere 55 percent on that portion of the test) and 10th-grade English language and composition (on which they need to score 60 percent or higher). And so I would say this to our state’s new child farm laborers: ¡Huelga! Strike!

#### Cyberattacks are a threat now – achievement gap insures escalation

Levy, Jack Kent Cooke Foundation, executive director, & Plucker, University of Connecticut Neag School of Education professor, 15

[Harold O. Levy, Jonathan A. Plucker, 6-5-2015, US News & World Report, "Brains, Not Brawn," <https://www.usnews.com/news/the-report/articles/2015/06/05/lack-of-stem-students-is-bad-for-national-security>, accessed 7-3-17, TR]

The country's defensive capabilities often depend on brains, not brawn. Development of nuclear weaponry is but one example. And the biggest contemporary threat – one that could surface at any time and on an unfathomable scale – is the likelihood of a massive cyberattack. Study after study warns that our dependence on advanced technology in almost every aspect of communication, commerce and transportation makes us highly vulnerable to the armies of hackers in countries that wish us harm.

[SEE: Political Cartoons on the Economy]

Recent mini-attacks make clear the scope of the threat: It ranges from China's compromising our banks, critical pipelines and military to North Korea's recent disruption of Sony Pictures. Nor have we been able to bring the hackers to justice using traditional means. The Department of Justice actually indicted three members of the Chinese military for hacking. There have been recent hints that the hackers who stole data from JP Morgan Chase affecting tens of millions households were about to be extradited.

Yet too few students choose to study engineering, physics, computer science and mathematics, all necessary areas to shore up our cyberdefenses. One traditional solution for our shallow talent pool has been to import talent, but this strategy is showing considerable strain. Even when we still use this strategy – for example, by issuing H-1B visas (85,000 this year) or encouraging foreign university students (just shy of 900,000) to stay in the country upon graduation – it does not improve our national security: Government, defense, and aerospace companies can't hire foreign citizens for jobs requiring a domestic security clearance, yet increasing numbers of jobs in these fields require such clearances. It is literally impossible for us to "talent import" our way to a well-defended nation. As long as national security clearance is required for data warriors (and we think it should be), an army of mercenaries can't defend us from a cyberattack.

The way to start to deepen the American talent pool is to acknowledge that, for far too long, American education policy has primarily focused on basic proficiency, not academic excellence. The U.S. produces advanced students at a much lower rate than other developed countries, according to international assessments. The graduate programs in engineering and the hard sciences in our elite colleges are dominated by foreign students; government subsidies for these departments, properly understood, should be classified as a form of foreign aid. If it's true that "bright students can take care of themselves," then our bright students are doing a particularly poor job of it.

Meanwhile, we are overlooking a major source of home-grown talent. Thousands of innovative minds are sitting on the sidelines; they are the nation's high-ability, low-income children. Because we do not provide basic support programs, far too few of them are attending selective universities, earning advanced degrees or acquiring security clearances.

There is a measurable difference among lower-income versus higher-income students who reach advanced levels of academic performance – an "excellence gap." For example, 2 percent of low-income students scored at the highest level on a recent national math test in fourth grade, compared with 13 percent of higher-income students. High-ability, low-income students have difficulty pulling themselves up by their bootstraps, and often they backslide as they plod – largely ignored – through our schools. If they aren't given the support they need, we've lost them for good.

The lost potential is staggering. Even small improvements in the excellence gap will yield many more high-performing students who can form the next generation of innovators, leaders and home-grown cybersecurity scientists. Closing the excellence gap in math by just half would mean an additional 85,000 high-performing students entering high school each year. Put another way, over 1 million students in grades K-12 today could be moved from proficiency to excellence, flooding our society and economy with world-class thinkers, some of whom could help improve our cybersecurity.

#### Cyber attacks cause critical infrastructure failure and nuclear war

**Tilford, Graduate US Army Airborne School, 12**

[Robert, Graduate US Army Airborne School, Ft. Benning, Georgia, Examiner, "Cyber attackers could shut down the electric grid for the entire east coast", 7-12-12, Examiner, <http://web.archive.org/web/20120812000707/http://www.examiner.com/article/cyber-attackers-could-easily-shut-down-the-electric-grid-for-the-entire-east-coa>, accessed 7-3-17, AFB]

To make matters worse **a cyber attack** that **can take out a civilian** power **grid**, for example could **also** cripple **the** U.S. **military**.

The senator notes that is that **the same** power **grids** that **supply** cities and towns, stores and gas stations, cell towers and heart monitors also power "**every military base in our country**."

"**Although bases would** be prepared to **weather a short** power **outage** with backup diesel generators, **within hours**, not days, fuel **supplies** would **run out**", he said.

Which means military **c**ommand **and c**ontrol centers **could go dark**.

**Radar systems that detect air threats** to our country **would shut Down completely**.

"Communication between commanders and their troops would also go silent. And **many weapons systems would be left without** either fuel or electric **power**", said Senator Grassley.

"So in a few short hours or days, the mightiest military in the world would be left scrambling to maintain base functions", he said.

We contacted the **Pentagon and officials confirmed the threat** of a cyber attack is something very real.

Top national security officials—**including the Chairman of the Joint Chiefs,** the Director of the National Security Agency, the Secretary of Defense, **and the CIA Director**— have said, "preventing a cyber attack and improving the nation~’s electric grids is among the most urgent priorities of our country" (source: Congressional Record).

So **how serious is the Pentagon** taking all this?

**Enough to start**, or end **a war over it**, for sure (see video: Pentagon declares war on cyber attacks http://www.youtube.com/watch?v=\_kVQrp\_D0kY%26feature=relmfu ). **A cyber attack today** against the US **could** very **well be seen as an "Act of War"** and could be **met with** a "**full scale"** US military response.

That could include the use of "**nuclear weapons**", if authorized by the President.

[Note – The senator = Senator Chuck Grassley, R-IA]

### Gardens Turn Uniqueness

#### School achievement gaps are narrowing now, but further progress is needed -- best data

Westervelt, NPR Education Correspondent, and Reardon, Stanford Poverty and Inequality in Education Professor, 16

[Eric Westervelt, NPR Education Correspondent, interview with Sean Reardon, a professor of poverty and inequality in education at Stanford University and author of the aforementioned study. August 28, 2016, NPR, “Surprise! Amid Rising Inequality, One School Gap Is Narrowing,” <http://www.npr.org/sections/ed/2016/08/28/491260896/surprise-amid-rising-inequality-one-school-gap-is-narrowing>, accessed 7.2.2017]//TRossow

Recent studies and [government reports](https://www.cbo.gov/sites/default/files/114th-congress-2015-2016/reports/51846-Family_Wealth.pdf) continue to highlight what many Americans know by their wallets: Rising income differences, debt and stagnant real wages are among the biggest problems besetting the nation.

That economic inequality is reflected in America's schools, right? Absolutely.

But [a study just out](http://www.aera.net/Newsroom/Recent-AERA-Research/Recent-Trends-in-Income-Racial-and-Ethnic-School-Readiness-Gaps-at-Kindergarten-Entry) shows that the gap in school readiness between rich and poor children entering kindergarten **closed significantly** — **by 10 to 16 percent** — from 1998 to 2010. **Some ethnic/racial achievement gaps declined as well.**

I spoke with the study's lead author, Sean Reardon, a professor of poverty and inequality in education at Stanford University.

Your study's results are kind of surprising given the widening income inequality over the same period, no?

Yeah, actually really quite surprising. Certainly it wasn't the finding we expected when we started the study. We thought because income inequality continued to grow and because achievement gaps had been growing for several decades, we thought we would just see that they had continued to grow, but the data say otherwise.

Why do you think the gap has narrowed? More parents more engaged, doing more at the pre-K level across all incomes? Or are there other factors?

I think the two most likely explanations are improvements in the quality of preschool available to low-income families and more engagement of families across the income distribution, but particularly low-income families, in sort of cognitively enriching activities with their kids.

Give us some examples. Reading consistently to your child, taking them to museums, that kind of thing?

Yeah. We looked at the data to sort of see what parents say they have been doing with their kids over the last year. In the 2010 cohort, parents say they're doing more reading to their kids, they have more books at home. They're taking them to zoos, libraries, museums, places like that more. Their kids are doing more, playing more with computer games that are designed to teach them literacy and early numeracy skills, shapes, colors, sounds, letters, stuff like that. All of those things together we know are likely to help kids get ready for kindergarten.

What's interesting is the increase in those kinds of activities is more pronounced among low-income families over this 12-year period than it is among high-income families.

That is interesting. How was school readiness defined in the study?

These are studies where, in 1998 and 2010, the [National Center for Education Statistics](https://nces.ed.gov/) sent trained early-childhood assessors out to 1,000 kindergartens around the country. In each kindergarten they sat down one on one with about 15 to 25 kindergarten students. And they asked them a structured set of questions to see if they could recognize letters, sound out words, count, recognize shapes, recognize colors and a variety of things like that. These were all sophisticated, kind of one-on-one assessments of kids: pre-literacy skills, pre-numeracy skills, as well as some of their behavioral skills. They asked the teachers to report on student's behavioral skills. It's a **pretty sophisticated and quite intensive** study of tens of thousands of kids. **So it's good data.**

Well, so, isn't this study yet another indication of the importance and power of [quality early-childhood](http://www.npr.org/sections/ed/2014/04/22/304563233/what-exactly-is-high-quality-preschool)education?

I think a lot of research and a lot of evidence shows that focusing on early childhood is really important if we want to create equal opportunities for kids. I think these studies show that the emphasis over the last decade or two in early childhood that we've seen most in public policy, the expansion of preschool stuff, but also in kind of messaging to parents and public information campaigns about the importance of doing these kind of things with their kids, has really started to pay off.

Your study covered 1998-2010. It would be interesting to compare a line graph of the readiness gap from '98 onward to a graph of early-childhood spending and investment over the same period. Your thoughts on that correlation, if there is one?

If you look at the data on spending, public state spending on preschool has doubled over that period more or less. The rate of enrollment in state-funded public preschools has also doubled over that time period, so there's been a big increase in the number of kids that are going to preschool and the amount that we're spending on it. That corresponds with the same timing where we see this narrowing gap. Now, that might be because preschools are getting better as well as more kids going to them.

What, if anything, do we know about what portion of the sites in the study that could be considered [high-quality pre-K](http://www.npr.org/sections/ed/2015/09/08/438354999/10-years-in-tulsas-pre-k-investment-is-paying-off)? At what sites did children get a big dose of[early-childhood services](http://www.npr.org/sections/ed/2014/04/23/303797060/one-approach-to-head-start-to-help-kids-help-their-parents)? Because then you might be able to see if the gap closed even more in those sites, no?

Right. We can't tell that from the data we used, but there are some other data from about 10 years ago where there were surveys done and people went out and observed preschools all around the county and measured their quality. A striking finding from those studies is that there's real variation in quality, and high-income communities tend to have public preschools — not just the private ones but the public ones — that are very high quality. Low-income and predominantly minority communities typically have much lower quality preschools. And that's a thing we've really got to address if we're going to continue to improve the quality of early-childhood opportunity for low-income kids.

Yes, while the gap has narrowed significantly — 10 to 15 percent is significant — it still has a long way to go. Talk about that.

Yeah, I mean, it's narrowed and that's great. **But it's still huge**. The low-income kids are coming in about six to nine months in readiness behind the high-income kids still. So that's a big difference, knowing how fast kids learn in kindergarten. If the rate continued at which it is now, it would still take something like 60 to 110 years, we calculated, for the gap to be eliminated. It's narrowing at a measurable rate. But it's **not narrowing fast enough** that it's going to reduce this to nothing in our lifetimes.

The gap by race, the gaps between white and black, and white and Hispanic children, also declined over this period, according to this study, correct?

That's right. The gap between white and Hispanic students declined about the same amount, roughly 14 to 15 percent. The gap between black and white students also declined roughly the same amount, though there's more uncertainty in the estimates there, so we can't say for sure how much it declined but it looks like it declined. That's good news because we're seeing both racial gaps and socioeconomic gaps declining over this time period.

I'm just curious, why the uncertainty in the white-black data?

Well, all these estimates have some margin of error around them. The change in the black-white gap is not quite big enough that the margin of error rules out the fact there's a possibility that it didn't change at all. The Hispanic-white gap looks like it's a little bit bigger, and that's just enough to sort of put its margin of error over the limit where we can say for sure that it really changed. It's one of those gray statistical areas that frustrate people like me.

Big-picture question: In American education, per-pupil spending is used as a proxy for an almost absurd number of things: quality, adequacy, political commitment and more. [See our recent series [School Money: The Cost of Opportunity](http://www.npr.org/series/473636949/schoolmoney).] It seems like a crude measure that can miss nuance, including teacher quality, oversight and teacher training especially at the pre-K level. Your thoughts on that.

Certainly schools with more resources, on average, can hire more experienced teachers, better teachers; they can have better facilities and whatnot. But spending by itself is, as you say, a pretty crude proxy for quality. It's possible to have better and worse schools that are spending the same amount of money. While it's important that we make sure we spend enough to pay teachers enough to make the teaching profession attractive to the most skilled people, spending alone is probably not sufficient to make sure we have high-quality schools.

Do you think your study might lend itself to a closer look at a kind of "who got what, and how much?" And digging deeper into how much the gap narrowed?

Yeah, I think you could think of this study as a starting point. I mean, it certainly shows that it's possible for us to make progress on these achievement gaps even in a time of rising income inequality, but it really raises as many questions as it answers in that regard. That is, what is it about some places that showed more narrowing than other places? What can we provide in communities? What can we do to support families? What kind of preschool environments are going to be most successful for kids? We have a lot to learn yet about how to think to optimize opportunity for low-income students.

How to close the achievement gap in our lifetime.

Exactly.

### Gardens Turn – Turns Case

#### DA turns case – school gardens indoctrinate children on the virtues of gardening rather than focusing on college readiness, which prevents students from achieving the economic status necessary to actually afford healthy food in the first place

\*Note – King School = California high school with extensive school garden programs

Flanagan, Atlantic contributor, 10

[Caitlyn, B.A. and an M.A. in [Art History](https://en.wikipedia.org/wiki/Art_History) from the [University of Virginia](https://en.wikipedia.org/wiki/University_of_Virginia). Before becoming a writer, Flanagan was an English teacher and college counselor at the [Harvard-Westlake](https://en.wikipedia.org/wiki/Harvard-Westlake) school. January/February 2010 Issue, The Atlantic, “Cultivating Failure,” <https://www.theatlantic.com/magazine/archive/2010/01/cultivating-failure/307819/>, accessed 7-2-17, TR]

Why are obesity and Type 2 diabetes so closely related to low incomes in this country? Surely a good part of the answer lies in a heartrending truth about the experience of poverty that many conservatives (and not a few liberals) either don’t know or choose not to know, and it is something I see at my volunteer job in a Los Angeles food bank, where the clients scoop as many candies out of the basket on my desk as I’ll let them have (if I didn’t set a limit, only the first person would get any) before glumly turning to the matter of filling out their food order form, which offers such basic and unexciting items as tuna, rice, and (yes) fresh fruits and vegetables, often including delicious oranges, pears, and peaches that people with fruit trees donate the day they’re picked. The simple truth is expressed clearly by George Orwell in [The Road to Wigan Pier](http://www.amazon.com/exec/obidos/ISBN=0156767503/theatlanticmonthA/ref=nosim/), his book about the grinding poverty experienced in the North of England in the 1930s:

The peculiar evil is this: that **the less money you have**, the less inclined you feel to spend it on wholesome food … When you are unemployed, which is to say when you are underfed, harassed, bored, and miserable, you don’t want to eat dull wholesome food. You want something a little bit “tasty.” There is always some cheaply pleasant thing to tempt you. Let’s have a three pennorth of chips! Run out and buy us a two-penny ice cream! Put the kettle on and we’ll all have a nice cup of tea … Unemployment is an endless misery that has got to be palliated.

The **suicidal dietary choices** of so many poor people are the **result of a problem, not the problem** **itself**. **The solution lies in an education that will propel students into a higher economic class, where they will live better and therefore eat better.**

I started to ask Michael Piscal, founder and CEO of the Inner City Education Foundation Public Schools, which runs 15 successful charter schools in South Los Angeles, what he thought about the Edible Schoolyard and school gardens in general, but he cut me off. “I ignore all those e-mails,” he told me bluntly. “Look,” he said, when pressed, “there’s nothing wrong with kids getting together after school and working on a garden; that’s very nice. But **when it becomes the center of everything—as it usually does—it’s absurd**. The **only question** in education reform that’s worth anything is this: **What are you doing to prepare these kids for college?** If I can get a kid to read Shakespeare and laugh at the right places, I can get him to college. That’s all that matters to me.”

With the Edible Schoolyard, and the thousands of similar programs, the idea of a school as a venue in which to advance a social agenda has reached rock bottom. This kind of misuse of instructional time began in the Progressive Era, and it has been employed to **cheat kids out of thousands of crucial learning hours over the years**, so that they might be **indoctrinated** in whatever the fashionable idea of the moment or the school district might be. One year it’s hygiene and another it’s anti-Communism; in one city it’s safe-sex “outer-course,” and in another it’s abstinence-only education. (Sixth-graders at King spend an hour and a half each week in the garden or the kitchen—and that doesn’t include the time they spend in the classroom, in efforts effective or not, to apply the experiences of planting and cooking to learning the skills and subjects that the state of California mandates must be mastered.) But with these gardens—and their implication that one of the few important things we as a culture have to teach the next generation is what and how to eat—we’re mocking one of our most ennobling American ideals. Our children don’t get an education because they’re lucky, or because we’ve generously decided to give them one as a special gift. Our children get an education—or should get an education—because they have a right to one. At the very least, shouldn’t we ensure that the person who makes her mark on the curricula we teach be someone other than an extremely talented cook with a highly political agenda?

### No Solvency – 21st Century Skills Prerequisite

#### 21st Century skills development is prerequisite to solve modern agriculture

Stripling, University of Tennessee Department of Agricultural Leadership, Education and Communications Assistant Professor and Ricketts, Tennessee State University Department of Agricultural and Environmental Sciences Professor, 16

[Christopher, John, 2016, American Association for Agricultural Education, AMERICAN ASSOCIATION FOR AGRICULTURAL EDUCATION NATIONAL RESEARCH AGENDA 2016-2020, http://aaaeonline.org/resources/Documents/AAAE\_National\_Research\_Agenda\_2016-2020.pdf, page 30-31, Date accessed 6-28-17, RK]

In addition to global competency, “the modern workplace requires workers to have broad cognitive and affective skills” (National Research Council, 2011), and as a result, employers are demanding employees have soft skills, often referred to as 21st century skills, upon entering the workforce (National Research Council, 2012). Furthermore, the National Research Council’s (2009, 2012) reports entitled, Transforming Agricultural Education for a Changing World and Education for Life and Work: Developing Transferable Knowledge and Skills in the 21st Century called for the development of 21st century skills among U.S. students. Agricultural education must determine the most effective means for incorporating and assessing soft skills development (National Research Council, 2009) in both formal and nonformal settings.

Addressing the complex economic, social, and environmental challenges related to agriculture is dependent upon our ability to prepare a sufficient scientific and professional workforce that understands the multidisciplinary nature of agriculture and is diverse, globally competent, and possesses 21st century skills.

### No Solvency – Nutritional Food

#### No healthy food solvency – Past federal enforcement of school lunches failed – no accountability

Fried, New York University Department of Nutrition, Food Studies & Public Health AND Simon, University of California Hastings College of the Law Assistant Professor & Marin Institute Research and Policy Director, 7

(Ellen and Michele, 7/20/2007, Duke Law Journal, “THE COMPETITIVE FOOD CONUNDRUM: CAN GOVERNMENT REGULATIONS IMPROVE SCHOOL FOOD?” <http://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=1324&context=dlj>, Volume 56: 1491, Accessed 7/1/17, GDI - JMo)

Federal and local officials have grappled with the impact of competitive foods on their children’s health and school finances virtually since the inception of the NSLP. For forty years, the USDA and local school officials, by congressional mandate, traded the authority to first define and then regulate the sale of competitive foods. Table 1 outlines the evolution of NSLP laws and regulations. A broad pattern emerges: grants of congressional power, intended to rein in unfettered sales of junk food, are diminished either by compromise due to political pressure or regulations that leave too much discretion to school districts. The districts in turn wind up beset by financial pressures and soon return to junk food sales. The USDA then finds itself in the diminished role of information clearinghouse, rather than effective enforcer of NSLP regulations.

[Note: NSLP = The National School Lunch Program]

### No Solvency – Schools Say No

#### Schools say no – testing focus is preferred

Doerfert, Texas Tech University Agricultural Communications Associate Chair & Professor, 11

[Doerfert, D. L. (Ed.) (2011). American Association for Agricultural Education, “National research agenda: American Association for Agricultural Education’s research priority areas for 2011-2015,” <http://aaaeonline.org/resources/Documents/AAAE%20National%20Research%20Agenda.pdf>, p. 13-4 Accessed 6.28.2017]//TRossow

Because of the high stakes testing emphasis from the No Child Left Behind legislation, many public schools have closed their doors to outside influences. Many administrators are so consumed with improving test scores that they resort to “more of the same” types of delivery, and alternative and effective means to achieve those goals are not considered (Franklin, Haverland, & Elliot, 2006). Therefore, even effective agricultural literacy programs such as “Ag in the Classroom” are not allowed in the schools because of the perceived notion that the program won’t aid in improving students’ test scores. However, such programs engage more senses in the teaching process, and the authentic delivery of the material results in retention of key scientific, math, and other principles. Studies demonstrate that test scores improve when teachers teach using the world around them as the context (Elliot, 1999; Jepsen, Pastor, & Elliot, 2007). The emergence of social media technologies, message formats, and strategies will also have an influence on public and policy maker understanding about agriculture and natural resources. Research is only beginning to reveal the impact of social media and its potential to inform and persuade the user towards desired thoughts, attitudes, and behaviors. Additional research will expose the potential of these digital technologies and strategies in realizing a citizenry capable of making agriculture-related informed decisions.

### AT – Urban Agriculture Solvency

#### Urban agriculture education more difficult than rural agriculture education - difficulty relating to content

Henry, Purdue University Office of Multicultural Programs graduate research assistant, et al, 14

(Kesha A., Brian Allen Talbert, Purdue University College of Agriculture Department of Youth Development and Agricultural Education Professor, Pamala V. Morris, Purdue University College of Agriculture Assistant Dean/Director of the Office of Multicultural Programs, 2014, Journal of Agricultural Education, “Agricultural Education in an Urban Charter School: Perspectives and Challenges.” Volume 55 issue 2, <http://files.eric.ed.gov/fulltext/EJ1122353.pdf>, p. 97, Accessed 6/28/17, GDI - JMo)

C1: Participants recognized teaching agricultural education is different based on whether the program was in a rural or urban school. Mrs. James, the agriculture teacher, indicated encountering more challenges teaching agricultural education classes in an urban versus rural school. She noted agricultural education courses and activities were interesting for urban students, but they had difficulty relating to content and activities. In contrast, rural students typically have personal agricultural experience and generally have agricultural related activities in their communities providing needed familiarity to the subject matter. She noted:

In the urban setting it is more challenging because it’s not a natural flow to the kids...at the rural school it’s all around them, it was kind of second nature to them.... Most of the students were involved in farming either they had a farm at their family home or they work for a farmer during summer months, so it was more of an easy transition and an easy flow for them....But here at the urban school it’s more of a challenge because agriculture is not all around them and they don’t realize what it all entails so you have to go back to the basics and back all the way to square one so you have to break things down more for them....

[Note: Ellipses in original]

#### No solvency – More research is needed for secondary agricultural education programs

Henry, Purdue University Office of Multicultural Programs graduate research assistant, et al, 14

(Kesha A., Brian Allen Talbert, Purdue University College of Agriculture Department of Youth Development and Agricultural Education Professor, Pamala V. Morris, Purdue University College of Agriculture Assistant Dean/Director of the Office of Multicultural Programs, 2014, Journal of Agricultural Education, “Agricultural Education in an Urban Charter School: Perspectives and Challenges.” Volume 55 issue 2, <http://files.eric.ed.gov/fulltext/EJ1122353.pdf>, p. 90, Accessed 6/28/17, GDI - JMo)

Previous research has examined issues relative to urban agricultural education however; more research at the secondary level is needed (Esters, 2007; Pense et al., 2006; Talbert, 1999). Multiple studies have highlighted socio-cultural factors such as influences from parents, peers and persons close to students that affect enrollment in secondary agricultural education programs (Hoover & Scanlon, 1991; Marshall, Herring, & Briers, 1992; Reis & Kahler, 1997; Sutphin & Newsom-Stewart, 1995; Talbert & Larke, 1995). Additionally, Borck and Bell (2010) identified marketing as a vital component for consideration when developing successful urban agricultural education programs. However, research is needed to explore what effect curriculum plays in enrollment and how the curriculum should be marketed to urban students. An added benefit of a successful agricultural science program is its ability to be utilized contextually for teaching in established core courses.