Engaged Cornell Cooperative Extension Student Projects (2016) | Candidate Projects from Association Proposals

Erie County
Buffalo Farm-to-School Project

The Project
CCE of Erie County (CCE Erie) brings local experience and research-based solutions together to build stronger communities by providing educational programs in agriculture, 4-H youth development, nutrition, and consumer horticulture. CCE Erie prioritizes the development of cross-disciplinary programs such as our Buffalo Farm-to-School project.

The Buffalo Farm to School project teams the CCE Erie agriculture, 4-H, and nutrition staff with the Buffalo Public School District (BPS) and other community partners. This project incorporates multiple CCE Erie program areas to address many challenges in the local food system: improving healthy food options and educating food service staff and students about these options, while building connections to farmers in the western New York region and expanding market opportunities for these farmers. This Engaged Cornell project will support CCE Erie and community partners in a project to advance and evaluate the value of Farm to School's work with BPS in the following two multi-disciplinary ways: 1) The development and evaluation of various types of research-based interventions delivered in classrooms, the community, and cafeteria; 2) The degree of farm-level impact through sourcing local produce, as well as the economic impact to the local community.

The Need
In December 2014, BPS was awarded a USDA Farm to School (F2S) Planning Grant to copartner with CCE Erie, as well as the Massachusetts Avenue Project (MAP) and the Buffalo Niagara Medical Campus (BNMC), to develop a sustainable F2S Plan for the 34,000-student school district. The plan is two pronged: provide healthy food options to students, with education about these new local foods; and expand market opportunities for farmers in western New York.

Some of the statistics that drive this programming are:

- 39 percent of households with children in the City of Buffalo are food insecure, considerably higher than New York state and U.S. figures of 14.8 percent and 16.2 percent respectively. (Neuner, Kailee, and Samina Raja. 2010. Healthy Eating and Active Living for Children in the City of Buffalo);
- Many households with children have poor healthy food access and less than 50 percent of Buffalo neighborhoods with a high percentage of children are located within a 5-minute walk from the nearest healthy food retail, coupled with low rates of car ownership in Buffalo. (Delgado, Cristina, Travis Norton, and Samina Raja. 2013. Indicators for a Healthy Food and Built Environment in the City of Buffalo);
- 39.2 percent of students district wide were overweight. (2012–14 Student Weight Status Category Reporting System https://health.data.ny.gov/Health/Student-Weight-Percent-Obese-by-School-District-Ma/i9hu-ki7z);
- In the 11 westernmost counties of New York state, 88 percent of the 8,879 farms are small farms as defined by the USDA — annual gross cash farm income is less than $250,000 (USDA 2012 Census of Agriculture).
Addressing the Need
The educational component (classroom, cafeteria, and farm tours) of the Buffalo F2S project serves as an opportunity to combat some of these alarming statistics while also benefitting regional farmers by opening access to a large wholesale market. Currently, the Buffalo F2S project is working with Eden Valley Growers (a 10-member grower cooperative), the Western New York Food Hub, and eight other farms on procurement and education via farm tours.

Bridget O'Brien-Wood, BPS food service director, and Cheryl Thayer, Harvest NY ag development specialist, lead the Buffalo F2S coordinating committee, a team comprised of CCE Erie agriculture, nutrition, and urban 4-H staff, BPS food service staff, and MAP and BNMC staff. The result of the USDA planning grant will be a written plan for instituting F2S best practices in BPS.

As the coordinating committee worked through planning, it identified a need for student engagement and education, which grew into a small-scale three-month pilot called the Harvest of the Month (HOTM) program that ran from September through December 2015 in 11 pilot schools. Students were introduced to a specific food, in the classroom and the cafeteria, based on the month’s local farm harvest. HOTM is now set to expand based on recent grant funding to BPS from New York state’s F2S program (NYS F2S). HOTM expansion will include development of a 10 month HOTM toolkit to ultimately use in all 65 schools in the district, adapted for grades pre-K through 12.

The coordinating committee will continue to conceptualize the HOTM program but there is a gap to fill in order to implement, deliver, and ultimately evaluate the value of the HOTM program. This gap is where Cornell faculty and student support can have a significant impact on the Buffalo F2S project.

Given BPS’s size, limited resources, and diverse student population, the Buffalo F2S coordinating committee believes that testing a series of interventions in the pilot schools is the most effective way to determine program activities with the highest correlation to the primary goal of increasing awareness, familiarity, and acceptance of the new HOTM items by BPS students. The interventions being deployed by the coordinating committee are time consuming and not feasible for either district-wide roll out or execution without additional personnel time – which is not available from coordinating committee members. The interventions that will serve as best practices for district-wide roll out need to be both scalable and attainable by schools within the district, utilizing largely in-house human capital and the toolkits developed through the USDA and the NYS F2S grants. The expertise required for additional design, testing, and evaluation of the interventions is beyond what coordinating committee members possess.

Assessing the Benefit to the Buffalo Public School Community
The opportunity to partner with Engage Cornell is welcomed, as the Buffalo F2S coordinating committee has been brainstorming a two-pronged approach to long-term program evaluation; first the research-based interventions as detailed in this application, and second an economic analysis of the presumed benefits to the local economy through the sourcing of local and regional farm goods.
Cornell Involvement

Research-based Interventions

Cornell faculty expertise is needed to assist in applied research in two ways: First, by developing research-based interventions in the following three categories, with suggested interventions listed. While these interventions have been delivered during the small-scale three-month pilot, information concerning which are the most effective is missing, and altering and adding interventions is also possible:

1. Classroom interventions: food system lessons in the classroom, school garden lessons, farm field trips, and morning announcements about HOTM items.
2. Cafeteria interventions: Know your Farmer information on the lunch line, promotion of F2S recipes during lunch, having recipes served as samples and as a full serving, larger signage in cafeteria, recipe demonstrations in the cafeteria.
3. Community interventions: community-oriented F2S events, recipe contests for Harvest of the Month recipes, recipes sent home with families.

Cornell student involvement, with faculty guidance, in developing, delivering, and evaluating these interventions would not only improve the experience for BPS, but could also elevate the value of the Buffalo F2S program as a replicable model for other schools that are interested in procuring local farm products and educating students about new, local foods.

Local Agriculture Impact

And second, Cornell faculty and student expertise is needed to measure the actual economic impact that sourcing local farm products has on both the individual farms and the surrounding local community. It has been argued that connecting farms with new wholesale market opportunities benefits both the farm and the local economy, but empirical data to support that claim specific to our region is missing. There has been considerable research from Cornell's Dyson School about the multiplier effects of local food purchasing, but it would be useful to have more than anecdotal evidence that there is a positive impact at the individual farm level. Possible research questions could include, but certainly are not limited to:

1. Has the BPS Farm to School project increased sales to our partner farms?
2. What level of purchasing is required to have an impact on the local food system?
3. What are the varying levels of impact depending on the farm size?
4. What is the local economic multiplier effect as a result of the farm to school project in Buffalo?

The research derived from this economic analysis could serve as a case study to other regions that are considering investing resources into developing a farm to school project, putting Cornell at the forefront of research-based evidence to assist in developing a more impactful farm to school program.

Students

Cornell students will be expected to spend June through December 2016 in Buffalo working on the Buffalo F2S project. During the summer months while school is not in session, the students will work with the Buffalo F2S coordinating committee and Cornell faculty to develop and design all components and evaluations for the interventions for grades pre-K through 12. Diane Held, CCE Erie executive director and Cheryl Thayer, Harvest NY ag
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development specialist, will have primary responsibility for supervising the Cornell students’ work on a day-to-day basis. Becky O’Connor, CCE Erie Eat Smart New York project manager, and Sara Jablonski, Urban 4-H educator, will work with the students on specific aspects of the project.

To further enhance the student learning experience, the Engaged Cornell students will participate with 20 other Cornell students in the Cornell University-Partnership for the Public Good’s (PPG) High Road Fellowship days each Friday in June and July. High Road fellows learn about the entire social economy of the City of Buffalo and Erie County which will put the BPS work into a broader community context and extend the reach of current grants and Cornell ILR’s applied research activities in Buffalo.

Through the High Road Fellowship, students are placed at an individual project with a variety of community partners affiliated with PPG. On Fridays the students meet as a group to discuss their work and explore topics related to economic development through speakers, tours and other activities. One theme during last summer’s program was “Education and Urban Revitalization,” during which students met with a range of stakeholders in local secondary and higher education institutions to understand the challenges and opportunities facing public education and its connection to the economy and larger community.

Once the BPS year begins in September, Cornell student will facilitate implementation and evaluation of the pre-K through grade 12 interventions in the 11 pilot schools in BPS with the guidance and support of the Buffalo F2S coordinating committee. Economic analysis would be developed and performed throughout the entire seven-month timeframe, and would need to consider the district as a whole, not just the 11 pilot schools.

**Diversify Cornell’s Participation with the Association**
The Buffalo F2S project could build on the existing effort out of Cornell University’s Division of Nutritional Sciences, Farm to School Outreach by utilizing extension’s outreach expertise and experience to link Cornell applied research with the HOTM program in BPS. This project could also be an extension of local and regional food system research from the Dyson School. Including Cornell University ILR and PPG as partners in this effort further connects Cornell and CCE Erie through the work that each is currently doing in Buffalo and Erie County.

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