

# Engagement:

A Process for Evidence-Based, Culturally Appropriate Program Development

1 Learn

2 Develop

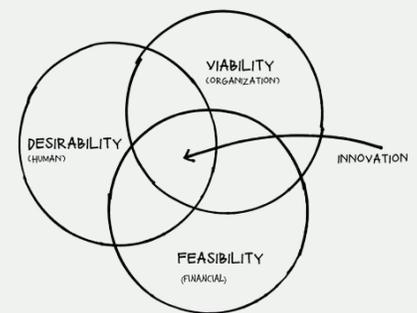
3 Pilot

Engagement between community and academia has been essential in generating community action, public policies, and development of innovative programming. There is no single path for creating an environment for successful and meaningful engagement among community and academia.

## A Case Study in Developing Nutrition Education

In 2010, a community-academic partnership committed to the challenge of creating an evidence-based, community appropriate nutrition education program to complement a pre-existing healthy food access program, the Mobile Market (MM). The collaborative adapted a three-phase process called **human-centered design**. Human-centered design is a process that utilizes various tools or methods

to **learn** about the needs of the community and stakeholders in new ways, **develop** innovative solutions that are based in evidence, build on assets and meet the *desire* of communities, and **pilot** solutions that are community appropriate, organizationally *viable*, and financially *feasible*. A core principle of human-centered design is engagement. This brief highlights one model of how



Adapted from IDEO.com

community can be engaged throughout the life course of a project, and describes the engagement methods used in each phase, including lessons learned over the two-year period.

# Background

SHARE Wisconsin was a non-profit, volunteer-run food-buying club, saving families 30-50% on quality food for 25 years.<sup>1</sup> SHARE established the Mobile Market (MM) program in 2009 to bring healthy, affordable foods into Milwaukee's low-income neighborhoods. The MM program partnered with twenty non-profit community-based organizations that provided venues for monthly, on-site access to healthy, affordable food within underserved communities.

The Center for Urban Population Health (CUPH) collaborated with community and academic groups to advance the goal of reducing food insecurity and increasing healthy food consumption in Milwaukee. Center faculty and staff partnered to create an innovative nutrition education program for MM customers.

Evidence shows that community-based nutrition education that is engaging, specific, and culturally appropriate can create behavior change such as improved eating behaviors.<sup>2,3</sup> Guided by this evidence and a commitment to community engagement, the purpose of the nutrition education project at the MM was to increase access to healthy, affordable foods and evidence-based, community-engaged nutrition education in the lower income neighborhoods of Milwaukee.

## 1 Learn

During the Learning phase, the collaborative created an environment for learning and engaged MM program consumers and future program implementers in three ways: MM consumer surveys, the creation of a Community Advisory Board, and in-depth interviews with one MM site.

**Survey.** Collaborative members created and administered a baseline customer survey to identify interests in nutrition education and to determine population-specific pre-intervention attitudes, beliefs, and self-reported fruit and vegetable consumption. We analyzed 261 surveys to assess MM consumer behavior. In general, this cohort reported that they ate the recommended servings of fruits and

vegetables per day, liked the tastes of fruits and vegetables, and had access to fresh produce, yet felt produce was expensive. Most were interested in nutrition education by receiving recipes or pamphlets or attending group classes with cooking demonstrations. These concepts and the most commonly desired topics for education sessions were applied to the development process.

### **Community Advisory Board.**

Additionally, the collaboration created a Community Advisory Board (CAB) made up of members of Mobile Market host sites and consumers of the markets. This board met monthly to ensure their vision guided

Mobile Market nutrition education programming. Specifically, the CAB's work provided guidance on program components in relation to cultural appropriateness and organizational capacity. The collaborative also engaged faculty and academic staff grounded in the research and literature of nutrition education and community engagement through a multi-institutional Technical Advisory Board (TAB). The TAB and CAB shared their perspectives and observations together.

**In-depth Interviews.** The collaborative was interested in hearing more about potential participants' personal experiences with food. This perspective could provide a valuable lens into promising programs. To this end, twelve in-depth, qualitative interviews were conducted among African-American adult women living at a housing development in Milwaukee. The purpose of the interviews was to better understand the connections between childhood experiences of eating, inter-generational food traditions, and current eating behaviors and attitudes. Questions also focused on perceptions of food access, social support and the ability to make healthy eating choices. The collaborative guided the development of interview questions. Interviews were transcribed and analyzed. Results were shared with the CAB and TAB.

Interview results led to the recommendations to provide demonstrations for **single households** and

to address **concerns about pork** consumption. The participants said they grew up in large families that revolved around large meals. The transition to living alone was difficult, especially in shopping and preparing meals for one. Several participants expressed the desire to learn how to cook pork in a healthier way, others conceptualized pork as an unhealthy food regardless of how it is prepared. Based on these recommendations, the CAB/TAB created and distributed healthy pork recipes and suggestions for "cooking for one" and food safety, including safe storage, at a health fair held at the housing development site where the interviews were conducted.

## Metrics

261 Surveys

12 In-depth Interviews

12 CAB Members

6 Organizations

8 TAB Members

4 Academic Institutions



# 2 Develop

In the Development phase, the collaborative worked together to translate what was learned from the TAB, CAB, and baseline survey into a framework for four pilot nutrition education programs. Programs were built on the individual organization's assets, opportunities and strengths. During this phase, engagement consisted of monthly CAB and TAB meetings, focused on pilot development.

Additionally, a pre-intervention process evaluation was conducted to analyze the engagement process. Specifically, the evaluation aimed to determine effective and appropriate functioning of the CAB in the context of program development, and to understand members' perceptions and expectations of their roles.

A semi-structured interview guide was developed with information from recruitment material and project staff. Six interviews were conducted. The student researcher explained the interview content would be analyzed to identify common

themes with a focus on what was going well, what could be improved and specific recommendations for improvement, and that this would be available to CAB members. Interviews were transcribed and analyzed and results were shared with the CAB and TAB.

The pre-intervention process evaluation provided positive and valuable community perspectives on a successful functioning CAB. Interviewees thought they were appropriately representing their community and had a contributory role within the project, which they expected to be successful and beneficial. CAB members' expectations of the overall project matched the intended goals: to deliver nutrition education within their communities in convenient and relevant ways and to promote healthy choices. They also enjoyed the interaction with the TAB and felt there was a healthy balance of power between program developers. Added benefits for many members were personal: developing rapport with other community organization leaders, and the health knowledge they gained for their own use and were able to share with others. Several members specifically mentioned that **they hoped this pilot would help drive conversation and collaboration between organizations to develop larger, community-wide nutrition interventions.**

## Metrics

10 development meetings

6 Semi-structured Interviews with Community Advisory Board members

4 Sites selected to pilot

12 site planning meetings



# 3 Pilot

The Pilot phase moved the collective solutions through pilot programming. The pilot implemented the developed nutrition education and was an accumulation of what was desirable, what was technically and organizationally feasible, and what was viable. During this phase, the collaborative continued to evaluate the overall process and engagement, and administered a post intervention consumer survey to evaluate participants' knowledge, attitudes, behaviors, and food purchasing patterns.

Additionally, post-intervention interviews focused on identifying benefits and challenges of implementation at four MM sites, and perspectives on the collaborative process. The nutrition education implementation teams included staff from all organizations involved in the planning and delivery of the site-specific education programs.

The collaboration developed an interview guide and a student researcher conducted seventeen interviews. The interview questions prompted participants to give their views on different topics, and were open-ended in order to start a conversation about these topics. Specifically, the questions were designed to 1) gain an understanding of how



## Metrics

143 Participants received at least one nutrition education session across 4 sites.

### Core Elements:

- Tied to Mobile Market (incentive/timing)
- Common labels highlighting healthy choices at MM
- Use of MyPlate
- UW Extension Nutrition Education Program Educator
- Physical Activity/Movement Component
- Consistent Evaluation Approach

248 Post-intervention interviews



## Participant Perspective

### Reported Changes Post Program

- Improve general eating and physical activity behaviors
- Learned more about healthy food choices
- Read food nutrition labels

### MM Shoppers Who Participated

- 85% tried new ways of preparing fruits and vegetables
- 90% reported knowing more about why eating fruits and veggies is important for health
- 91% felt more confident they could eat healthy on a budget
- 93% were more likely to read nutrition labels before buying food

participating organizations felt about the process of planning and implementing the Nutrition Education Program at the MM; 2) identify program successes and challenges; and 3) understand the structure of the CAB and TAB. Interviews were transcribed and analyzed and results were shared with the CAB and TAB.

Interviewees indicated the nutrition education programming added value to their organization or program, specifically the value of working with other project partners. Respondents believed they benefitted from networking opportunities, with several partners planning to continue collaborating on some form of nutrition education in the future. The majority of interviewees believed the leadership of the project was shared across multiple individuals and entities, demonstrating the importance of collaboration in successful

implementation of the nutrition education. Interviewees identified some challenges related to community engagement as they reflected on the project.

Recommendations included involving more members of the communities served in the CAB; combining the CAB and TAB in a joint meeting earlier in the process; and more fully considering the unique needs and concerns of communities (language, accessibility issues related to physical ability, childcare needs, location, and immigration concerns) when developing marketing materials and recruiting participants, as well as more fully considering the logistics involved in meeting these needs, in terms of material resources and person power.

One limitation of the Pilot phase was the impracticality of including every member of the CAB, TAB, and implementation teams in the interviews. The responses therefore may not be representative of all partners' experiences in the project. However, discussion at post-implementation meetings has tended to support these findings.

### How Did We Do?

The education component reached 143 participants through 25 sessions. (Additional community members were exposed to nutritional labels displayed at 12 sites.) After attending classes, participants reported making changes in their eating and shopping. Favorite components included the teachers and learning about healthy choices.

# Recommendations from the Field

## What Worked:

Engaging community actively throughout these three phases helped the MMs to create an environment in which the community voice was heard and valued. Preliminary findings suggest the project was successful in terms of how CAB members and site staff talked about their experiences in collaboratively planning and implementing the education. Further examination of survey results and pre/post tests are needed, however.

One element that was consistent throughout the project was the effort to maintain engagement with the community at all stages. When considering ways to appropriately and actively engage the community in public health programming in the future, it is important to remember that engaging the community at all stages is critical. That means not just generating new knowledge, but also returning that information (and its implications) back to the community. This is something we should always strive for in any discipline working with people and communities.

## What We Learned:

Much was learned about linking nutrition education to food distribution. Even more was learned about community-academic collaboration. The following are some of the key lessons learned across three key areas: planning, programming, and relationship.

### Planning

- Monitor partner expectations as part of the process evaluation to ensure accountability to the participatory process and power balance.
- Consider how a small pilot can be scaled up to larger programs from the beginning. Think concretely and specifically but don't discount how much a small group of community-based organizations can accomplish.
- Provide opportunities for all planning partners to be involved and create environments to 'cross pollinate' or

network among partners, particularly if their organizations don't typically interact.

- Collaborative, engaging processes take time and require that all partners are valued and regularly engaged. Valuing means respecting expertise through financial compensation and equitable treatment.
- Successful and sustainable program development requires more than community input; it also requires strengthening community capacity.

### Programming

- The engagement process during the planning phase was confirmed valuable during the pilot phase.
- Continually revisit program accessibility with participants and modify/adapt as much as possible to ensure full opportunity for as many participants as possible. Engage all partners in this discussion: those implementing, and those who are part of the community. Examples include language, child care, location, and transportation. Planning and budgeting are critical to achieving this.
- Whenever possible, place programs in people lives where they add value and are not distracting or change their natural flow of life.
- Interactive, hands-on activities allow participants to easily see the new behavior in their lives.

### Relationships

- Broader opportunity for collaboration among a variety of partners improves the odds of success.
- Developing open relationships among community and academic partners is critical for the success of evidence-based, community-engaged research. Relationship-building should be tracked and measured.
- Build social capital: Sharing power through a collaborative process will allow for a sense of empowerment that can reach beyond a pilot.
- Respect every partner equally: On-going check-in with all partners helps to ensure that time and resources are being used appropriately and respected.

- Co-creating with all partners is important in building confidence and led to programming that sustained beyond funding.
- Given the importance of relationship building, it is important to be intentional in planning, coordinating, and communicating with all partners across the life of the project. Being intentional includes identifying enough resources to be successful. It also means identifying a strong mix of core project staff skills and time dedicated to this.

### What Now?

Across program areas, CUPH staff and faculty will continue to work with partners in engagement processes that promote learning at every level, bi-directional communication and sharing, equitable and responsive relationships, and provide an environment for relationship building and networking beyond the targeted project outcomes.

### References

1. SHARE Wisconsin. Introducing SHARE. Butler, WI: SHARE Wisconsin, 2012.
2. Devine C, Farrell T, Hartman R. Sisters in health: experiential program emphasizing social interaction increases fruit and vegetable intake among low-income adults. *J Nutr Educ Behav.* 2005 Sep-Oct;37(5):265-70.
3. Kennedy BM, Champagne CM, Ryan DH, et al. The “Rolling Store:” an economical and environmental approach to the prevention of weight gain in African American women. *Ethn Dis.* 2009 Winter;19(1):7-12.



### Community Advisory Board

Dwight Williamson	COA Goldin Center
Stephanie Jones	Locust Court Apartments
Sunny Peete	Next Door Foundation
Diablo Williams	Milwaukee Christian Center
Nancy Castro, Angie Check, and Diana Espino	Southside Health Center, City of Milwaukee Health Department
Krystal Parsons	Policy-Studies Inc.
Anabel Martinez	UMOS
Linda Russell/ Katie Voss	Water Tower View Apartments
Courtenay Kessler, Virginia Zerpa-Uriona, David Frazer	Center for Urban Population Health

### Technical Advisory Board

Yvonne Greer	City of Milwaukee Health Dept./Y-EAT Right, Inc.
Courtenay Kessler, Virginia Zerpa-Uriona	Center for Urban Population Health
David Nelson	Medical College of Wisconsin
Rosamaria Martinez	UW-Extension’s Nutrition Education Program
Amy Harley and Lora Jorgensen	UW-Milwaukee Zilber School of Public Health
Paul Hunter	UW School of Medicine and Public Health

### Brief Authors:

- Kathleen Ratteree
- Michelle Arneson
- Carrie Stehman
- David Frazer
- Courtenay Kessler
- Paul Hunter

Center for Urban Population Health  
Working together to improve the health of communities

