Introduction

Over the past year and half, Boulder Food Rescue and researchers from CU have been working together to explore the issue of food insecurity in Boulder. Through a community-based participatory research process, we co-developed a research agenda to understand the experiences of people facing food insecurity. This research aims to identify ways that we can take action to improve food access in our community and engage people who experience food insecurity in developing food sovereignty for themselves and their community.

Previous study activity 1: Multimedia-elicitation interview (MEI) study
In the first phase of our research project, we conducted multimedia elicitation interviews (MEIs). In this activity, we asked people who self-identified as having experienced food insecurity to record their experiences accessing food using camera phones. Participants took photos and recorded videos of their experiences for two weeks. Afterwards, we discussed these media recordings with them during individual, semi-structured interviews.

Previous study activity 2: Participatory data analysis workshops (PDAWs)
Following this activity, we transcribed the individual interviews and selected fragments of them to include in a group-based participatory data analysis workshop. In this workshop, people who self-identified as experiencing food insecurity, a number of whom also participated in the MEI study, worked together to group related fragments from the interview transcripts into common themes. They then worked to consolidate and label these themes.

The next step: Participatory design workshops
We identified a number of themes from these research activities, which included barriers to food access, the tools that participants use to help them access food, the negative experiences encountered in accessing food, among others. We wanted to select one of these themes to explore further through a workshop format. Specifically, we hoped to move towards action by exploring potential ways that participants could envision addressing the problems they face around that theme.

Our group decided to focus on the theme of "participation" and explore how we could provide greater opportunities to improve participation for people who experience food insecurity with the community food system and food access resources. For us, increasing opportunities for people to participate in the governance, development, and ongoing operations of community food resources has the greatest potential to have broad reaching, long-term positive impacts on improving food access.

For one, we believe that increased participation can influence other issues by allowing people affected by food insecurity to identify the most pressing issues they face and co-construct solutions aimed to address them. For example, we identified transportation as a major barrier to food access. By increasing the space for people to have a voice in program development and

operations, they can work to raise the issue of transportation as a problem and contribute towards creating systems that address it. The same thing could occur across any number of issues that we identified in earlier phases of our research ranging from a lack of cooking utensils to challenges dealing with all the red tape and paperwork to receive benefits.

Furthermore, we believe that our community has greater control over and efficacy in changing the way participation is constructed and performed. For example, an issue like the cost of food as a barrier to food access is, to a significant degree, outside the control of individual organizations or our community as a whole and is affected by huge, global systems. However, our community, and the organizations within it, have much greater control, if not complete control, over how they engage with the people they aim to serve.

Lastly, focusing on participation places greater ownership, sovereignty, and control of resources into the hands of people who are affected by and using them, which, we believe, is where it belongs. It creates opportunities for people to affect the change they want to see through their own actions and voices, as opposed to relying on our research team or other community organizations to make that change. This moves us towards greater justice within our community food system.

In the following sections, we describe the form that these participatory design workshops took and the detailed considerations in conducting them. We conducted these workshops in early May 2017.

High-level workshop outline

I. Introduction/Warm-up (20 minutes)
    A. Personal introductions (real name optional)
        1. Including icebreaker
            a) A really quick, simple, and fun question to try to increase comfort within the group.
    B. Introduction to the workshop
        1. Explain the background of the research project and findings around participation
        2. Explain the purpose of the workshop
            a) Provide framing to get people thinking about the topic of participation within the context of food security and community food resources
            b) We really need to have a succinct description of what we mean by "participation", "involvement", and "have a voice" that is grounded in people's experiences, but not too limiting.
    C. A demographic/pre-workshop survey
        1. How did participants hear about this workshop?
        2. What food access resources do participants use?

II. Critiquing (60 minutes)
   A. Guided brainstorming around the current weaknesses or limitations for people experiencing food insecurity to participate in the community food system (the resources designed to support food access present in our community)
   B. We will prepare a few prompts for this brainstorm that are open, but specific, so that participants can easily formulate responses and ideas. We will also allow the conversation to follow where the participants direct it.
      1. Have you ever offered feedback or input to a program or resource you used to for food access? What happened?
      2. What kinds of opportunities do you wish you had for participating or having your voice reflected in the programs and resources you use?
      3. What makes it hard for you to ("have a voice" or "be involved") in the resources you use?
   C. Before opening the brainstorm to the group as a whole, we will ask participants to take some time on their own to think about and write down or draw out their ideas related to each of the prompts. We will give participants 6 minutes to do this and will provide 2 minute and 1 minute warnings.
   D. The group brainstorm will proceed with one question at a time, to focus the conversation. The facilitator will allow the conversation to diverge at times, but try to gently bring it back if it diverges too far or for too long.
   E. We plan to use a round robin approach where we ask for someone to start the brainstorm by sharing their experience/ideas with regard to one of the prompts and then we proceed around the circle by having each person share. If someone isn't ready to share or unsure what to share, we can skip them and come back to them.
   F. We will ask if a participant wants write ideas that emerge on stickie notes that go on either a whiteboard or piece of butcher paper. If a participant agrees to, we will make sure they are called on during the facilitated brainstorm. If nobody wants to take notes, a researcher will do it.
   G. During the brainstorm, we will transfer notes to cards for the Instant Card technique (used in the envisioning phase) to supplement to original list we will develop prior to the workshop. We will get consent from participants on the cards generated before moving into Envisioning.
   H. It's important, at the beginning, to discuss the time limits of the activity and explain why we have to limit that phase of the activity. We will let the group know that if someone is taking too long, we may have to ask them to finish their thought in order to give others space to speak.
III. Envisioning (80 minutes)
   A. Transition from critiquing
   B. Instant card technique
      1. Introduction to the instant card technique
      2. *Finding a common basis:* This involves reviewing cards that were developed by the research team (before prior to the workshop and during

the critiquing phase) and then co-creating cards that the research team missed based on the expertise of the participants.

3. *Scenario development:* The *"cards, which facilitate the development process, are handed out to the sub-groups. The participants use the cards, to brainstorm about ideas which could improve the current status quo. ... The cards which describe this idea are compiled as a scenario on a poster."* The "scenarios" are developed by taping the select cards to a poster board and then annotating those cards to develop a cohesive scenario of what an ideal participation interaction would look like. For example, one group might create a scenario where the actors are "food pantry owners" and "food pantry users" and the location is "at the participant's' home" and the time cards are "a few minutes" and "every month" and the activity card could be "sends a text message" and the goal card could be "to identify preferred foods that are missing." This would create a specific scenario with actors, locations, goals, and actions, which we could use to implement solutions.
   a) During scenario development, we will provide participants with blank cards so that they can create additional cards that they feel are missing or that are inspired by the scenario development exercise.
   b) Participants can also use the blank cards to create duplicates of cards that are already present in the set so that they can use those cards to develop multiple scenarios.
   c) Each researcher present will sit with one of the break-out groups to support them during the scenario development process and act as the primary ethnographer for the discussions and interactions of the group (taking detailed field notes about the interactions).
4. *Participant presentations:* After the scenario development phase, the full group will reconvene and each of the sub-groups will present their scenarios. The whole group will briefly discuss the idea with light facilitation from researchers.
   a) We will ask the groups to select only one of their scenarios to present, for the sake of time.
   b) We will capture the details of the other scenarios with pictures, field notes, and by collecting the physical scenarios that participants create.
   c)
C. Card types for the activity (card categories):
   1. Actors: These are the people who are involved with the different interactions around participation, which we might call "food system actors", such as "food pantry users," "food pantry staff," "food pantry leadership," "SNAP," etc. We can also annotate the cards with more detailed attributes describing them. It may be important to add this

information in case participants are not familiar with all the specific actors. Thus, we will have general and specifics ("EFAA" and "Food pantry")

2. Location cards: The spatial locations where interactions will take place (participant home, food pantry, SNAP office, grocery store, etc)
3. Time cards: The temporal dimension of interactions, the when and how long types of cards - time, duration, frequency
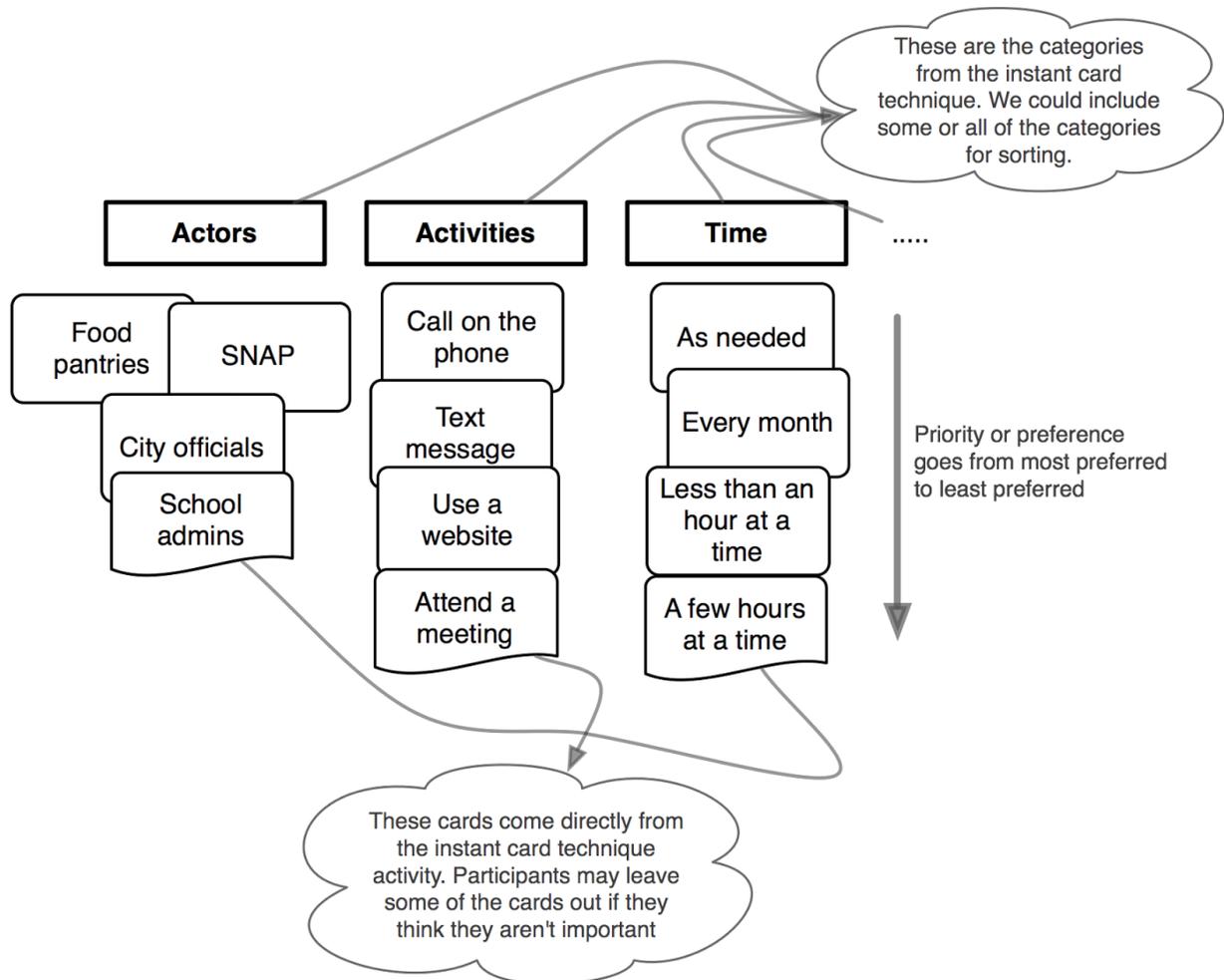
4. Tools and technologies cards: We may or may not include technology cards, we may introduce them later or not at all, but these capture different types of technologies that could be engaged
5. Activity cards: What types of interactions will people engage in, what types of tasks they might do in relation to participation
6. Goal cards: Explicitly capture the goals participants are trying to accomplish

D. During the presentation phase, we will want one researcher to take detailed field notes and also video record that segment of the activity. We will also collect the

scenario "collages" that participants create by taping the cards to the paper we provide.

IV. Implementing (70 min)

  A. Card sorting prioritization activity (45 min)

    1. **Illustration of the activity:**

      a) The above image aims to illustrate what a card sort might look like after participants have engaged in the activity. The clouds and arrows are annotations to describe the image, while the other shapes represent an example card sort. This example card sort would be interpreted in the following ways:

        (1) This group believes that the two most important actors to facilitate participation with are food pantries and the SNAP program. In their opinion, we should be prioritizing work to engage these organizations in creating more opportunities for participation. Following those organizations, we should work with city officials and the school administrators. There may be other cards below these, which would be lower priority actors to engage with in our efforts.

        (2) The group believes that facilitating interactions through phone calls would be the best or most preferred way to interact, so we should work towards creating solutions around that first and foremost. Following that, they would want to text an organization to participate, followed by using a website, followed by actually attending some form of in-person meeting.

        (3) The group believes that the most preferred timing for participation is as needed, or whenever they have ideas or feel like participating. Following that, they think that a monthly level of participation is a preferred way to participation. In terms of the amount of time in one sitting, they feel that less than an hour is preferred to over an hour.

        (4) In this example, the "....." implies that we could have the other categories from the

          (a) By categories I mean the card types described in the instant card technique above (i.e., actors, activities, locations, etc)

    2. **Overview of the activity:**

      a) Participants will break into small groups and work to organize and prioritize the cards from the instant card technique. The cards will be prioritized within the category they are from.

(1) That means that for each category (actors, activities, etc) they will try to identify which things are the most preferred or highest priority. For example, which actors are the most important for us to develop greater opportunities for participation with?

(2) Not every category might make sense to prioritize. *Actors* probably does since it would be helpful for us to know who participants are most interested in participating with. However, *time* cards might not make sense, since its dealing with abstract concepts. But maybe not.

(3) The researchers will identify one category at a time for which the groups will be conducting the sorting activity. For example, we might tell the groups to first sort the "goal" cards.

(4) We will provide a specific prompt for each category that the participants can use to guide their sorting activity.

  (a) Actors - Here is a set of different people and organizations we could work with to improve the opportunities they provide for participation. Sort them by the priority in which we should work with them. (Prioritize)

  (b) Location - Which of these locations are accessible and desirable for you to visit? (Sort into 2 piles - accessible and desirable in one pile and a not accessible or desirable in another pile.)

  (c) Time - What amount of time or time frames would be feasible for you to engage in participation activities? (e.g., one card says "monthly" (frequency) while another says "less than an hour at a time" (duration). This could be a sort into two piles.

  (d) Activities - Which of these activities are you more to less likely to do? (Prioritize)

  (e) Tools and Technology - Which of these tools are you more likely and less likely to use when trying to have a voice in efforts to improve food access? (Prioritize)

  (f) Goals - Sort these goals in order of greatest to least importance. (Prioritize)

b) Participants will physically move those cards around and sort them relative to each other physically and then tape the cards in the final position.

   c) We will inform the participants that if their group is unable to agree on the relative sorting of certain cards then they should make note of the disjunct ideas and can put those cards at the same level or just leave them out if they are unable to resolve it in any way.

   d) Depending on time, the groups would share their organization and prioritization. This likely would mean sharing their top priority (or top 3) across the topics.

 B. Brainstorm about concrete action steps (25 min)

  1. The research team will facilitate a conversation to identify a small number of concrete actions to move forward the agenda of action identified during the workshop.

  2. As a starting point, members of the research team will point out some common patterns in the scenarios and the sorting activities that they have observed. Specifically, the research team will highlight specific activities, actors, goals, or tools that were highly prevalent and prioritized from the earlier activities. The group can then discuss specific steps or actions they could envision towards engaging with them.

   a) We suggest the research team start out with call outs because they have had visibility across all of the activities and with all of the teams. We also likely will not have time for all the groups to share their prioritized lists, so the participants will not have visibility across all of the card sort results.

   b) For example, if we saw that multiple groups had prioritized "Food pantries" as a top actor and the "Food pantries" card was prevalent amongst the scenarios developed (and ranked at a high priority), we may start the conversation by asking the group how we should start engaging with food pantries or ways that they could envision themselves taking action to engage with food pantries to improve opportunities for participation.

   c) The researchers will have some backup ideas prepared to discuss in case there is not obvious agreement. Researchers will also prepare to ask participants how they would like to be followed up with by organizations themselves.

  3. This will also be an opportunity for participants to tell us what they'd like to see from us. We will ask how would they like to interact with us in the future.

  4. Ideas that are developed by the group will be written on stickies and added to a piece of poster paper to document the conversation.

V. Closing (10 minutes)

 A. Debrief

 B. Post-workshop questionnaire

  1. What did participants think about the workshop?

  2. What do they feel like they took from the workshop

3. How do people want to participate going forward?
4. How do people want to be involved in this project moving forward (the meta question)?

VI. Total time: 20 min + 60 min + 80 min + 70 min + 10 min = 240 min => 4 hours
   A. The time will be split across two, 2 hour workshops