

# **From Seeds to Shovels to Stories: Using Community-based Participatory Research for Health**

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2009 ADA FNCE  
Denver, Colorado  
October 20th 2009

# Program Session Objectives

- Describe the basic principles and values of community-based participatory research (CBPR) and strategies for applying them to build community food security and the health promotion capacity of communities.
- Utilize specific CBPR resources, methods and tools for building community food security and the health promotion capacity of communities.

# Definitions of Community-based Participatory Research (CBPR):

- Israel and colleagues<sup>1</sup> define CBPR as, “a partnership approach to research that equitably involves community members, organizational representatives, and researchers in all aspects of the process.”
- The National Institute of Environmental Health Sciences (NIEHS)<sup>2</sup> defines CBPR as “a methodology that promotes active community involvement in the processes that shape research and intervention strategies, as well as in the conduct of research studies.”

## **Six Principles of CBPR<sup>3</sup>**

- 1.) Promotes active collaboration and participation at every stage of research;
- 2.) Fosters co-learning;
- 3.) Ensures projects are community-driven;

## **Six Principles of CBPR<sup>3</sup>**

- 4.) Disseminates results in useful terms;
- 5.) Ensures intervention strategies are culturally appropriate; and
- 6.) Defines community as a unit of identify.

## Numerous Name Variations Exist<sup>4,5</sup>

- *Community-based participatory research (CBPR)*
- *Participatory action research (PAR)*
- *Participatory research*
- *Action research*
- *Participatory rural appraisal (PRA)*
- *Mutual inquiry or Collaborative research*

# CBPR: Common Characteristics<sup>4,5</sup>

- Is “participatory”
- Is cooperative, engaging community members and researchers in a joint process in which both contribute equally;
- Is a co-learning process;

## CBPR: Common Characteristics<sup>4,5</sup>

- Involves systems development and local community capacity building;
- Is an empowering process through which participants can increase control over their lives; and
- Achieves a balance between research and action.



# Distinguishing Features of CBPR<sup>6</sup>

- Involves a commitment to action as part of the research process/endeavor.
- By understanding policy change as a potential “action component,” CPBR has the potential to improve the health of large numbers of persons, beyond those persons and partners involved in the project.

# Community-based Participatory Research (CBPR) & Dimensions of Community and Partnership Capacity<sup>7</sup>

- Leadership
- Participation
- Skills
- Resources
- Social & Organizational Networks

# CBPR & Dimensions of Community and Partnership Capacity<sup>7</sup> (cont'd)

- Sense of Community/Partnership
- Understanding of Community History and Partnership
- Community/Partnership Power
- Shared Values
- Critical Reflection

# Behavioral Manifestations of Community and Partnership Capacity<sup>7</sup>

- Leaders mobilize populations
- Residents acquire & use resources, skills and power
- Research partners take action

These steps can lead to.....

- Health-promoting public policy (proximal outcome)
- Improved environmental health (distal outcome)

# Outcomes of CBPR:

## Does CBPR Lead to Action?<sup>8</sup>

- In 14 of 20 studies reviewed, CPBR led to action to improve the health & well-being of community members.
- Nine of the 14 studies that led to community-level action were initiated by members of a community-based organization (CBO).
- Source: Cook WK. Integrating research and action: a systematic review of community-based participatory research to address health disparities in environmental and occupational health in the USA. *J Epidemiol Community Health*. 2008;62:668-676.

# Outcomes of CBPR:

## Does CBPR Lead to Action?<sup>8</sup>

- CBPR projects initiated or prompted by government agencies also led to action to improve conditions within a community (e.g., U.S. EPA, ATSDR, State or City Departments of Health, Environmental Protection and Housing)
- Only two CBPR projects that led to action were initiated by university researchers.
- Source: Cook WK. Integrating research and action: a systematic review of community-based participatory research to address health disparities in environmental and occupational health in the USA. *J Epidemiol Community Health*. 2008;62:668-676.

# Example #1 - CBPR Partnership<sup>6</sup>

## *Literacy for Environmental Justice*

Partnership Name & Primary Partners -	<i>Literacy for Environmental Justice</i> (non-profit youth empowerment and environmental justice organization), San Francisco Department of Public Health (Tobacco Free Project), and an External Evaluator
Research Aim -	To describe specific local food security policy efforts of a CBPR partnership in the Bayview Hunters Point community of San Francisco.

# What is Community Food Security?

- “Measured at the community level, food security concerns the underlying social, economic, and institutional factors within a community that affect the quantity and quality of available food and its affordability or price relative to the financial resources available to acquire it.”<sup>9</sup>



# What is Community Food Security (cont'd)?

- “A situation in which all community residents obtain a safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes self-reliance and social justice.”<sup>10</sup>

# Example #1 - CBPR Partnership<sup>6</sup>

## *Literacy for Environmental Justice*

Research Methods -	Semi-structured in-depth interviews Focus groups with youth Semi-structured phone interviews Document review Survey Store mapping research GIS mapping
Policy/Educational Approach (Strategies) -	Community organizing/forums Development of “Good Neighbor Program” Build alliances w/ other organizations Memorandum of understanding

# Good Neighborhood Program Incentives for Corner Store Merchants<sup>6</sup>

<u>Responsible Party</u>	<u>Incentives</u>
Literacy for Environmental Justice	Store branding, product promotions, community outreach & education, healthful food “tastings”
San Francisco (SF) Power Co-Op	Grants for energy efficient “upgrades”
San Francisco Department of Environment	Funds SF Co-op, networking, outreach

# Good Neighborhood Program Incentives for Corner Store Merchants<sup>6</sup>

<u>Responsible Party</u>	<u>Incentives</u>
San Francisco (SF) Department of Health	In-kind training, technical assistance, and resources
SF Redevelopment Agency	Improvements to existing buildings
Neighborhood Economic Development Organizations	Free business development training

# Good Neighborhood Program Incentives for Corner Store Merchants<sup>6</sup>

<u>Responsible Party</u>	<u>Incentives</u>
Mayor's Office on Economic Development	.25 FTE for Good Neighbor Program
Rainbow Grocery	Collective buying of whole foods
San Francisco Produce Market	Facilitate purchase & instruction in care of organic produce
Verifiable Vegetable	Collective bulk purchasing of organic produce

# Example #1 - CBPR Partnership<sup>6</sup>

## *Literacy for Environmental Justice (LEJ)*

<p>Policy/Educational Approach (Strategies) -</p>	<p>Build relationships with local policy makers and merchants</p> <p>Conduct in-store press events, tasting tests, and promotional giveaways</p> <p>Develop media campaign</p> <p>Send out press advisories</p>
<p>Policy Outcomes -</p>	<p>LEJ partnership worked with an Assemblyman and California Food Policy Advocates on legislation (AB 2384) to support the “Good Neighbor” program across the state of California.</p>

# CBPR Resources

- NIEHS - Environmental Justice & CBPR
- National Institute of Health (NIH) Office of Behavioral and Social Sciences Research (OBSSR)
- Environmental Protection Agency (EPA)

# Examples of Funded Research (Environmental Justice & CBPR - NIEHS)

Institution	Project Title	PI = Principal Investigator
Mount Sinai School of Medicine	Building Food Justice in East New York	Morland, Kimberly
Occidental College	Healthy Food, Healthy Schools and Healthy Communities	Gottlieb, Robert



# Examples of Funded Research (Environmental Justice & CBPR - NIEHS)

Institution	Project Title	PI = Principal Investigator
University of North Carolina – Chapel Hill	Community Health Effects of Industrial Hog Operations	Wing, Steve
Wake Forest University School of Medicine	JUSTA: Justice and Health for Poultry Workers	Quandt, Sarah

# Example of Funded Research (EPA, National Center for Environmental Health Research)

Institution	Project Title	PI = Principal Investigator
Mount Sinai School of Medicine	Growing Up Healthy in East Harlem (Community-Based Participatory Research) (EPA Grant Number R831711C011)	Brenner, Barbara

# Keys to Successful CBPR<sup>1,11</sup>

- Develop relationships within the community;
- Value diverse cultural perspectives;
- Place equal emphasis and importance on community and academic perspectives and;
- Allow for flexibility in research methods

# Example CBPR Methods & Tools – 12-15

- Risk mapping
- Mapping social and environmental influences on health (may include risk mapping)
- Asset mapping
- “Photovoice” (may be used in asset mapping)

# What is Photovoice?

- A methodology that combines photography with grassroots social action.
- Often used among marginalized groups (e.g., rural women, homeless adults, indigenous peoples); it is intended to give insights into how they conceptualize their circumstances.
- A highly flexible method – can be adapted to different goals (e.g., participatory needs assessment, asset mapping and participatory evaluation). Source: [www.photovoice.com](http://www.photovoice.com)

# Goals of Photovoice<sup>16,17</sup>

- *To enable people to:*
  - 1.) record and reflect upon their personal and community strengths & concerns through taking photographs
  - 2.) promote critical dialogue & knowledge about important issues through discussion of their photographs
  - 3.) reach policymakers & decision makers who can influence social change - through public forums & the showing of their photographs in exhibitions

# Major Phases of (Community-based Participatory Research) CBPR Projects<sup>15</sup>

“Training the Trainers”

Recruiting Participants

Conducting Workshops

Sharing Information with Policymakers, Journalists  
and the Broader Community

Evaluation

# Involving Community Members in a Three-Stage Photovoice Process

1. Selecting – choose photographs that most accurately reflect the community's concerns and assets
2. Contextualizing – tell stories about what the photographs mean
3. Codifying – identify the issues, themes, or theories that emerge

Source: [www.photovoice.com](http://www.photovoice.com)



## Example #2: Using Photovoice in Participatory Evaluation<sup>18</sup>

<p>Project (Program) Name &amp; Primary Partners -</p>	<p><i>Snap Peas: A Fifth-Grade Photovoice Project in the Williamsburg School Garden;</i></p> <p>Fertile Ground (non-profit organization) and University of Massachusetts – Amherst, Department of Anthropology and Center for Public Policy and Administration (CPPA)</p>

# Fertile Ground (non-profit organization)

## Mission:

To empower children, youth and families to make smart food choices, and to work together across race, class, and difference, improving their communities through school gardens, food celebrations and caring for the land.

Source: [www.fertilegroundschools.org](http://www.fertilegroundschools.org)

# *The Program - Snap Peas: A Fifth-Grade Photovoice Project in the Williamsburg School Garden*

- A program in which sustainability, organic gardening, healthful eating, cultural appreciation and social justice are learned experientially from grades Pre-K-6.
- The children grow produce from seeds started indoors in the winter under grow lights, plant them out, tend, harvest and cook a community harvest feast in the fall.

Example #2: Using Photovoice in Participatory Evaluation: Snap Peas Project<sup>18</sup>(cont'd)

Research Question	<i>“Do the garden programs increase understanding of foodways and health?”</i>
Sample	n = 16 (of 24 5 <sup>th</sup> graders)
Methods	Photography with photovoice journaling Focus group discussions Peer-interviews Photo exhibition

Example #2: Using Photovoice in  
Participatory Evaluation: Snap Peas Project<sup>18</sup>  
(cont'd)

Emergent Themes –

**1.) The Relationship between Soil and the Food  
We Eat**

*“Mmmmm. Lots of stuff goes into making a batch of soil. You add the ingredients to the soil to make it rich...We make soil out of greensand, rock phosphate, peat moss, potting soil, and cotton seed, and perlite. It was really cool how you need all that stuff.”*

# SOIL SOUP

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## RECIPE

	PER CLASS	TOTAL
• <b>ADD:</b> Peat moss..... <small>for moisture</small>	12 Cups	96 Cups
• Perlite..... <small>for air</small>	4 Cups	32 Cups
• Compost.....	12 Cups	96 Cups
• Fertilizer blend..... <small>1 part • Green sand (for potassium)</small> <small>1 part • Cotton seed (for nitrogen)</small> <small>1 part • Rock phosphate (for strong roots)</small>	$\frac{1}{4}$ Cup	2 Cups

MIX WELL AND SERVE TO SEEDS

### • SOIL PARTS •

By: Mrs. Millette

PEAT MOSS									
PERLITE									
COMPOST									

### • SOIL PARTS •

CLASS: Pre

PEAT MOSS									
PERLITE									
COMPOST									

Photo: "Soil Soup"

Example #2: Using Photovoice in  
Participatory Evaluation: *Snap Peas  
Project*<sup>18</sup>(cont'd)

Emergent Themes –

**2.) Developing Inquiry and Observation Skills**

*“I’m a taster so I write it down. First I’ll take a piece of sorrel and I’ll eat it and then I’ll write what it tastes like, and I’ll smell it and I’ll write what it smells like, and I’ll write what it looks like.”*

## Example #2: Using Photovoice in Participatory Evaluation: *Snap Peas Project*<sup>18</sup> (cont'd)

Emergent Themes –

### **3.) Understanding Local Foodways and Local Economies**

*“I would rather get one [vegetable] from the garden because I know it’s fresh, and because I grew it myself.”*

*“You might want to eat local foods because it costs less and helps the town.”*





*Photo: Planting Potatoes*





*Photo: Sampling Greens from the School Garden*

## Example #2: Using Photovoice in Participatory Evaluation: *Snap Peas Project*<sup>18</sup> (cont'd)

Emergent Themes –

### **4.) Leadership and Critical Thinking**

*“We chose not to [ build a tipi] because it would be stereotyping Native Americans. [Tipis] are usually temporary structures and they’re used as places of spiritual stuff so we wouldn’t do that.”*



*Photo: Students Building a Ramada*



## Example #2: Using Photovoice in Participatory Evaluation: *Snap Peas Project*<sup>18</sup> (cont'd)

Broader Public – Policy Implications

- Student Led Workshop:

*“Students Tell it Like it Is: Snap Peas: A Discussion of Photovoice and School Gardens”*

*(Northeast Regional Farm-to-School Conference)*

- Photo Exhibition Taken to Boston State House:

*(Hosted by Representative Stephen Kulik)*

# Photo Exhibition at Boston State House:



*Photo: Students Meet with Massachusetts Secretary of Education, Paul Reville*

# CBPR - Partnering with Academic Researchers: What to Look For<sup>11</sup>

- Researchers begin their discussions with you by asking questions, rather than offering solutions;
- Researchers recognize the gap between *measuring* differences and *making* differences;

# CBPR - Partnering with Academic Researchers: What to Look For<sup>11</sup>

- Researchers demonstrate a willingness to help you measure the differences you make;
- Researchers share control over financial resources and decisions with community representatives; and
- Researchers express commitment to a working relationship built on trust and equity.



# Food for Thought

- “Here, then, is our shared dilemma – and our shared challenge. Community leaders may be able to make differences they don’t know how to measure. And academic researchers may know how to measure differences they don’t know how to make! Each of us without the other is like the proverbial sound of one hand clapping.”<sup>11</sup>
- David L. Katz, MD, MPH, FACPM, FACP