

Building Equitable Partnerships for Environmental Justice

Curriculum



University of California, Davis
University of Michigan, Ann Arbor

UCDAVIS
ENVIRONMENTAL HEALTH SCIENCES CENTER

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SCHOOL OF PUBLIC HEALTH
LIFESTAGE ENVIRONMENTAL EXPOSURES
AND DISEASE CENTER
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We thank the members of the Community of Practice who contributed to the work presented here: California Asthma Coalition, Central California Environmental Justice Network, Detroit Health Department, Detroit Hispanic Development Corporation, Detroiters Working for Environmental Justice, Environmental Coalition for Water Justice, Health Education Council, Leadership Counsel for Justice and Accountability, and the University of California, Davis and University of Michigan Community Engagement Cores.

Introduction

Community engagement has been shown to play a central role in developing and implementing innovative approaches to environmental health science research. Balazs and Morello-Frosch (2013) argue that community engaged research models result in better science with increased rigor, relevance, and reach. Ensuring that community voices are heard in the research process means that the research topic and question reflect local concerns and that the findings can be used to inform effective strategies to address these concerns (Gaventa, 2006; Minkler, 2005; Israel et al., 2013; Senge and Scharmer, 2006). Linking community and academic knowledge can help strengthen democracy, create more legitimate public policy, and build more productive relationships between academic and social institutions (London et al., 2011; London et al., 2016).

Building effective, equitable, and sustainable university-community partnerships is essential to the success of environmental health science research. However, researcher and community partners do not always have the capacity to build and maintain these partnerships. Without effective training for both academic and community stakeholders they may, at best, miss important opportunities for bi-directional learning, and, at worst, reproduce disparities between universities and communities and devolve into mutual distrust and conflict. This is particularly problematic in partnerships with historically under-served communities of low-income people and people of color. While each community-university partnership is unique in terms of its participants and topical focus, a rich body of experience in the field exists that can be used to guide and support the effective growth and development of these partnerships.

The goal of this curriculum is to strengthen capacity among community leaders in environmental justice movements and academic researchers to develop collaborative, equitable, and effective partnerships to promote mutual learning and address environmental issues in disadvantaged communities. Our hope is that this will foment innovative and impactful environmental health research that informs environmental justice strategies.

THE CURRICULUM

This curriculum provides training on a variety of topics that provide the background and fundamentals necessary to have meaningful mutual-learning collaboration between researchers and community residents and organizations. Its intended audiences are academic and community leaders interested in entering a community-university research partnership, with a focus on environmental health science. Ultimately, this is intended to strengthen the integration of environmental health science into policy and practice to promote environmental justice and health equity.

The curriculum is grounded in the values and methodologies of community-based participatory research (CBPR). CBPR is an iterative process through which academic researchers and community members collaborate as partners in the design, implementation, and application of research, contributing their expertise and shared ownership, to address community needs and interests through interventions, policy change, and social action (Israel et al., 2001; Israel et al., 2013; Minkler, 2005).

The curriculum consists of a three-part workshop that takes approximately 6-8 hours to complete. It can be completed in a single session or can be stretched across a number of sessions in order to dive more deeply into the topics. The curriculum is designed to be a collaboration between researchers and community organizations, with opportunities for both groups to share their expertise and learn from each other. This curriculum is composed of four modules that cover the following topics:

Module 1: An Introduction to Community-Based Participatory Research (CBPR)

Module 2: Ready for Collaborative Research: Establishing Equitable Research Relationships

Module 3: Introduction to Power Maps and Their Use to Advance Environmental Justice through CBPR

Module 4: How to Identify Levers to Promote Change: How to Include Research in Strategy Charts

THE AUTHORS

This curriculum was the result of a partnership between the Environmental Health Sciences Core Center (EHSCC), based at the University of California, Davis and the Michigan Lifestage Environmental Exposure and Disease (M-LEEaD) Core Center, based at the University of Michigan, Ann Arbor. These Centers are part of a national network of Environmental Health Sciences Core Centers funded by the National Institute of Environmental Health Sciences under the P30 Core Center program¹.

The partnership between UC Davis and University of Michigan Centers was funded through an Administrative Supplement grant (PA-16-327) that was designed to facilitate cross-center collaboration. The Centers' Community Engagement Cores applied for funding, with collective authorship with members of the Community of Engaged Practice, described below.



Members of the Community of Engaged Practice at NIEHS Fest

UNIVERSITY PARTNERS

UC Davis :

Jonathan London, PhD, EHSCC CEC Co-Director
Karen Andrade, PhD, EHSCC Postdoctoral Scholar; Project Manager
Krista Haapanen, EHSCC Graduate Student Associate

University of Michigan:

Amy J. Schulz, PhD, & Barbara A. Israel, DrPH, M-LEEd COEC Co-Leads
Carol Gray, MPH & Sharon Sand, MPP, M-LEEd COEC Project Coordinators

COMMUNITY PARTNERS

California:

California Asthma Coalition: Sarah Sharpe
Central California Environmental Justice Network: Nayamin Martinez
Environmental Coalition for Water Justice: Colin Bailey
Health Education Council: Debra Oto-Kent
Leadership Counsel for Justice & Accountability: Phoebe Seaton

Michigan:

Detroit Health Department: Yolanda Hill Ashford
Detroit Hispanic Development Corporation: Erick Varga, Sherita Smith, Angela Reyes
Detroiters Working for Environmental Justice: Guy Williams, Wibke Heimach

THE COLLABORATIVE PROCESS AND CURRICULUM TOPIC SELECTION

The curriculum topics were identified by a Community of Engaged Practice (COEP) that was intentionally composed of both academic and community partners. A COEP is characterized by a social learning process that brings together diverse practitioners in a given field (in this case, CBPR) to critically reflect on experience and build new knowledge based on this reflection (Wenger, 2002). The COEP approach highly values diverse experiential knowledge and is therefore a useful framework for linking academic and community partners.

The COEP for this project was assembled as soon as the project was funded. The community members of the COEP were recruited from the community stakeholder advisory committees working with UCD and UM, respectively. The community COEP members were representatives from organizations listed above in the authors section.

The COEP engaged in a three-month process to design the curriculum. This involved several key steps. We first worked to identify core topics that would be important in a curriculum focused on capacity building for equitable community-university partnerships. To facilitate collaboration between the centers in different states, the full group met virtually three times and then a subset met in person a fourth time at the NIEHS Fest in North Carolina in December 2016. In addition to the full COEP meetings, the UCD and UM academic teams met numerous times in conference calls throughout the three-month process to design and modify the process as needed.

To mirror the content of the curriculum based on collaborative partnerships, we developed a collaborative process for decision-making based on a 70% consensus standard (Becker et al., 2013: 89). Our intent was to model principles of equitable and respectful partnership – including respectful dialogue and consensus decision-making – in the creation of curriculum.

The first two meetings of the COEP were devoted to brainstorming which topics should be included in a comprehensive curriculum on this topic. The intent of the first of these meetings was to think broadly and creatively. The overall list of topics developed is included in Appendix A. After all the topics were categorized and summarized, several larger topics and subtopics emerged. The UM academic team then conducted a detailed survey of existing curricula associated with the topics identified by the group to highlight areas in which the current project could add unique value to the field. Their analysis can be seen in Appendix B.

The COEP used the process described above to identify four detailed modules to be developed for this curriculum. Topics were selected because they would provide both a common ground and add important skills and tools to both the academic and community training participants. To enhance the curriculum's broad usability, participant materials and PowerPoint presentations are provided in appendices C and D.

The modules in this curriculum were piloted in March 2017 in Fresno, California with approximately 30 participants comprised of both local non-profit employees and academics from UCD and UM. The UCD and UM conducted a detailed evaluation of all elements of the curriculum as part of the COEP process. The evaluation tools can be found in Appendix E.



The university and community partners carefully reflected on this evaluation data through several meetings and considered ways that the activities could be improved to better meet the goals identified by the COEP partners. The COEP teams then incorporated the results of this reflection to form the final curriculum.

Pending funding, future steps under consideration for work include expanding the curriculum to cover other high priority topics from the COEP workshops, applying the curriculum in environmental justice campaigns, hosting additional workshops for academic and community partners associated with the EHSCCs, and writing peer-reviewed articles based on the experiences of implementing the curriculum.

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Module 1: Introduction to Community-Based Participatory Research: Definitions, Principles, Structure, and Effective Group Process²

This module and supporting materials were adapted from the Detroit Community-Academic Urban Research Center (Israel, B.A., Schulz, A.J., Parker E.A., Becker, A.B., 1998; and Israel, B.A., Eng, E., Schulz, A.J., Parker, E.A., 2013).

Session Objective

To introduce participants to community-based participatory research (CBPR) as one approach to equitable engagement of community, academic, and health practice partners in research, including definition of CBPR, principles, phases of group development, and organizational structure.

Materials:

Projector/Monitor
Computer
Newsprint
Markers
Tape (if newsprint is not self-stick)

SESSION AGENDA

Time:	130 minutes
I. Introduction To Cbpr, Definitions, Principles, Phases, And Organizational Structure	35 minutes
II. Activity: Developing operating norms	20 minutes
Break	10 minutes
III. Partnership Development: Group Process	15 minutes
IV. Example of CBPR Success	30 minutes
V. Activity: Identifying and selecting partners	20 minutes

I. INTRODUCTION TO CBPR, DEFINITIONS, PRINCIPLES, PHASES, AND ORGANIZATIONAL STRUCTURE

(35 out of 130 Minutes)

Introduce the following ideas:

- Definition of Community-Based Participatory Research (CBPR)
- Key principles of CBPR
- Community Involvement in Research Continuum

Definition of Community-Based Participatory Research (CBPR)

CBPR is a partnership approach to research that equitably involves community members, organizational representatives, and academic researchers in all aspects of the research process. It enables all partners to contribute their expertise with shared responsibility and ownership, enhances the understanding of a given phenomenon, and integrates the knowledge gained with action to improve the health and well-being of community members, such as through interventions and policy change (Israel et al., 2001).

Key Principles of CBPR

There are a number of key principles or characteristics of CBPR that can be used to guide the development and maintenance of a research intervention partnership. While no one set of principles is applicable to all contexts and participants involved, there are core underlying perspectives that need to be considered in adopting principles for any given CBPR effort. The principles presented here are based on a synthesis of the present knowledge in the field, and although presented as distinct items, it is recognized that CBPR is an integration of these characteristics. (Israel et al., 2013; and Israel et al., 1998)

- 1. CBPR recognizes community as a unit of identity.**
 - a. Sense of emotional connection and identification with others
 - b. Shared norms and values
 - c. Common language and customs
 - d. Similar goals and interests
 - e. Desire to meet shared needs
- 2. CBPR builds on strengths and resources within the community.**
 - a. Skills and assets of individuals
 - b. Social networks
 - c. Faith-based organizations and community-based organizations
- 3. CBPR promotes collaborative and equitable partnerships.**
 - a. Identification of issues and concerns to be addressed by community members
 - b. Pay attention to the expertise of community members, and the need to create an empowering process through sharing information, decision-making power, and resources among members of the partnership
- 4. CBPR facilitates co-learning and capacity building.**
 - a. Researchers learn from the local knowledge that community members have about their community's history, culture and broader social context
 - b. Community members learn further skills in areas such as conducting research

II. ACTIVITY: DEVELOPING OPERATING NORMS

(20 out of 130 Minutes)

This activity was developed by the Detroit Community-Academic Urban Research Center (*Israel et al., 2001*)

Objective: To illustrate a method that community groups can use to identify and discuss potential group norms, beginning by identifying group characteristics that are important to them.

Step 1:

5 Minutes

Ask participants to think alone and jot down on a piece of paper their response to the following:

Think about groups in which you have been a member that have been positive experiences - groups in which you enjoyed participating, groups that have accomplished their tasks, whose meetings you liked. Considering these groups, write down three to five factors that contributed to this being a positive experience.

- That is, what was it about the group that made it successful?
- If you have not had any such experiences working with groups, then think about groups in which you were a member that you did not think were effective. What are three to five factors that would have needed to change in order to have made it a more effective group?

Step 2

15 min

Invite them to share responses and write their comments on newsprint, sharing one at a time to allow all participants to contribute. Clarify any points necessary.

Once everyone is clear on the meanings of each element on the newsprint, explain that, for the most part, these are the very principles that have been identified in the group process literature that define the characteristics of effective groups.

At this point you can ask participants if they are willing to adopt this set of characteristics as the operating norms that will guide the group process of their partnership. The norms are then typed and distributed at a subsequent meeting, and the partnership is encouraged to periodically revisit these. The group is also encouraged to use these characteristics to help evaluate their partnership process; that is, they could assess the extent to which their partnership is following the characteristics they adopted.

III. PARTNERSHIP DEVELOPMENT: GROUP PROCESS

(20 out of 130 Minutes)

This activity was developed by the Detroit Community-Academic Urban Research Center (Israel et al., 2018).

Objective

To introduce participants to the development and maintenance phases of CBPR partnerships. There are seven broad core components in conducting CBPR.

Notes to Facilitator

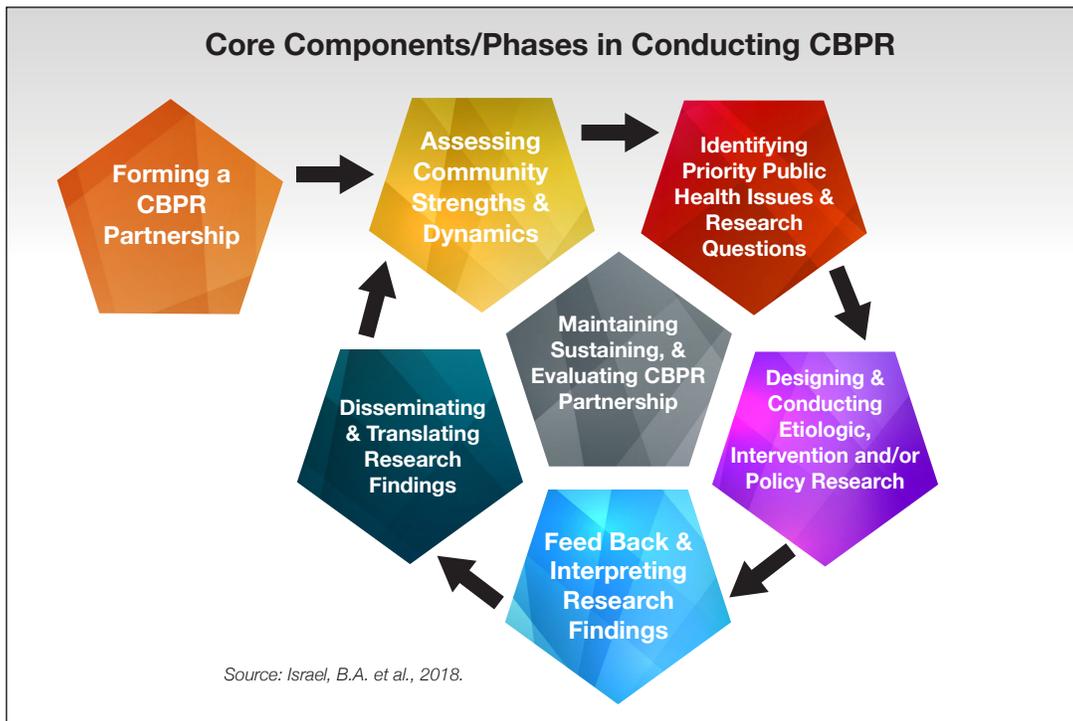
The following content can be used as the basis for a discussion with participants about the development and maintenance phases of CBPR. It can also be used as a basis for a formal presentation to the group.

Sometimes we think there might be sequential phases or stages to conducting CBPR. However, the process is more circular than linear, and some elements may continue throughout the entire CBPR study. For example, maintaining and sustaining a partnership occurs throughout different phases of the process. It occurs:

- as partners work on an ongoing basis to strengthen trust,
- while resolving conflicts,
- while developing and sharing knowledge and skills, and/or
- as partnerships work together to carry out tasks involved in conducting research.

Similarly, evaluation of the partnership's effectiveness needs to start at the beginning and continue throughout a CBPR project. These different phases include:

- Forming a CBPR Partnership
- Assessing Community Strengths and Dynamics
- Identifying Priority Concerns and Research Questions
- Designing and Conducting CBPR
- Feeding Back and Interpreting the Research Findings within the Partnership
- Dissemination and Translation of the Research Findings
- Maintaining, Sustaining and Evaluating CBPR Partnerships



1. Forming a CBPR partnership involves:
 - Identifying potential partners and communities to be involved
 - Building trust and relationships
 - Establishing operating norms and CBPR principles
 - Creating an infrastructure for carrying out the research process
2. Assessing community strengths and dynamics. This involves asking questions, such as:
 - What are the strengths and resources in the community?
 - Which are the influential organizations?
 - Where's the power in the community?
 - Who needs to be involved to ensure community buy in?
3. Identifying priority local health concerns and research questions.
 - Key question: how do you figure out what are the major health problems that impact the community that a partnership might address?
4. Designing and conducting etiologic, intervention and/or policy research. This involves, for example:
 - Deciding which research design and data collection methods to use
 - Deciding the most appropriate intervention strategy
5. Feeding back and interpreting the findings within the partnership involves:
 - Sharing research findings (e.g., analysis of survey data)
 - Engaging all partners in making sense of what was found
6. Disseminating and translating research findings. Critical questions here include:
 - What is most important from the findings to share with the community?
 - How are results disseminated to the community?
 - What is the role of community partners in publishing the results?
7. Maintaining, sustaining, and evaluating the partnership
 - Ongoing process which is at the center of and occurs throughout all of these phases
 - Relevant questions to address, include: How well is the partnership working? How can the partnership process be improved?

Detroit Urban Research Center CBPR Partnership Development Worksheet could be a tool for setting and tracking progress of partnership goals. The worksheet is organized by the seven core components or phases of CBPR partnership development as shown in the image above. Partnerships are encouraged to review the worksheet and fill out relevant sections periodically to assist in planning strategies/activities as well as documenting partnership progress. See “CBPR Partnership Development Worksheet” in Appendix C for more information (Israel et al., 2018; and Israel et al., 2013).

IV. EXAMPLE OF CBPR SUCCESS

(30 out of 130 Minutes)

Notes to Facilitator

Participants should be given a few examples of successful CBPR partnerships. Trainers should identify successful CBPR partnerships that are relevant to research interests and/or experience. For examples please visit www.DetroitURC.org; www.hepdetroit.org.

In selecting a case study, think about:

- What constitutes “success”? (e.g., longstanding partnership, relationships among partners, successful in obtaining funding, ability to successfully handle conflicts that arise)
- Your comfort/depth of knowledge in sharing the example (that is, is it a partnership in which the presenter has been involved and can speak to with some depth of knowledge?)
- How will you handle decisions about what information to share within the partnership being featured?

V. ACTIVITY: IDENTIFYING AND SELECTING PARTNERS

(20 out of 130 Minutes)

This exercise was developed by the Detroit Community-Academic Urban Research Center for use in the University of Michigan Summer Session in Epidemiology, “Methods in Community-Based Participatory Research for Health”.

Objective

To introduce participants to principles and strategies for developing effective partnerships, and to develop tools that partners can apply to increase the effectiveness of their partnership in conducting community-based participatory research on environmental justice issues.

Notes to Facilitator

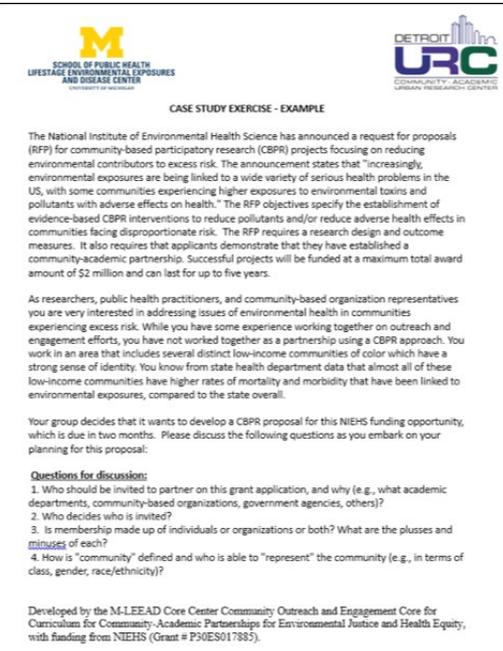
The group is given a handout that describes a hypothetical opportunity to apply for CDC funding to do a CBPR research project (see Case Study Exercise Handout in Appendix C: Participant Materials)

Step 1:

5 mins

The group is instructed to spend 5 minutes individually reviewing the case and responding to the following questions:

1. Who should be invited to partner on this grant application, and why (e.g., what academic departments, community-based organizations, government agencies, others)?
2. Who decides who is invited?
3. Is membership comprised of individuals or organizations or both? What are the advantages and disadvantages of each?
4. How is “community” defined and who is able to “represent” the community (e.g., in terms of class, gender, race/ethnicity)?



The handout is titled "CASE STUDY EXERCISE - EXAMPLE" and features logos for the School of Public Health (M) and the Detroit Community-Academic Urban Research Center (URC). The text describes a request for proposals (RFP) from the National Institute of Environmental Health Science (NIEHS) for community-based participatory research (CBPR) projects. It details the RFP's focus on reducing environmental contributors to excess risk and lists specific objectives and requirements for applicants, including the need for a community-academic partnership and a maximum award of \$2 million. The handout also includes a scenario where a group decides to develop a CBPR proposal and a list of four discussion questions for the group to address.

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CASE STUDY EXERCISE - EXAMPLE

The National Institute of Environmental Health Science has announced a request for proposals (RFP) for community-based participatory research (CBPR) projects focusing on reducing environmental contributors to excess risk. The announcement states that “increasingly, environmental exposures are being linked to a wide variety of serious health problems in the US, with some communities experiencing higher exposures to environmental toxins and pollutants with adverse effects on health.” The RFP objectives specify the establishment of evidence-based CBPR interventions to reduce pollutants and/or reduce adverse health effects in communities facing disproportionate risk. The RFP requires a research design and outcome measures. It also requires that applicants demonstrate that they have established a community-academic partnership. Successful projects will be funded at a maximum total award amount of \$2 million and can last for up to five years.

As researchers, public health practitioners, and community-based organization representatives you are very interested in addressing issues of environmental health in communities experiencing excess risk. While you have some experience working together on outreach and engagement efforts, you have not worked together as a partnership using a CBPR approach. You work in an area that includes several distinct low-income communities of color which have a strong sense of identity. You know from state health department data that almost all of these low-income communities have higher rates of mortality and morbidity that have been linked to environmental exposures, compared to the state overall.

Your group decides that it wants to develop a CBPR proposal for this NIEHS funding opportunity, which is due in two months. Please discuss the following questions as you embark on your planning for this proposal:

Questions for discussion:

1. Who should be invited to partner on this grant application, and why (e.g., what academic departments, community-based organizations, government agencies, others)?
2. Who decides who is invited?
3. Is membership made up of individuals or organizations or both? What are the pluses and minuses of each?
4. How is “community” defined and who is able to “represent” the community (e.g., in terms of class, gender, race/ethnicity)?

Developed by the M-LEAD Core Center Community Outreach and Engagement Core for Curriculum for Community-Academic Partnerships for Environmental Justice and Health Equity, with funding from NIEHS (Grant # P30ES017885).

Step 2:

5 mins

Allow 10-15 minutes in large group to share and discuss their responses.

Module 2: Ready For Collaborative Research: Establishing Equitable Research Relationships

This module and supporting materials were developed by the Detroit Community-Academic Urban Research Center.

Session Objective

By the end of this session, participants will have an understanding of questions they may want to ask before deciding to get involved in a community-academic partnership, and will have tools to use in developing collaborative research relationships.

Materials:

Projector/Monitor

Computer

Newsprint

Markers

Tape (if newsprint is not self-stick)

Session Agenda

Time:	60 minutes
I. Activity: Red Light/Green Light Exercise and Discussion	30 minutes
II. Questions to Ask Before Getting Involved	10 minutes
III. Assuring Equity: Tips and Tools for Negotiating Equitable Partnerships	20 minutes

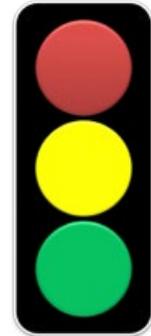
I. ACTIVITY: RED LIGHT/GREEN LIGHT EXERCISE AND DISCUSSION

(30 out of 60 Minutes)

This activity was developed by Chris Coombe in collaboration with the Detroit Community-Academic Urban Research Center Infrastructure Committee with funding from National Institute on Minority Health and Health Disparities, Award #1RC4MD005694-01.

Materials:

Red circle on newsprint
Yellow circle on newsprint
Green circle on newsprint
Tape
Questions for discussion



Objective:

In this activity, community-based participants will think about what to do if approached by an outside researcher or institution, how to read the signs to help decide if and how to proceed with getting involved in research. Researchers will reflect on how this communication and collaboration process can be best managed.

Notes to Facilitator

Affix the three pieces of newsprint with the large red, yellow and green circles on the walls so they are set apart throughout the room.

Step 1:

In large group with participants standing in the middle of the room, the trainer reads a brief scenario (listed below) one at a time, followed by the question, *“Would you get involved with this research project?”*

After each statement is read, participants respond to the question by moving to one of the three signals—Green, Yellow, Red. Green means go/yes; Yellow means caution/maybe; Red means stop/no. Each group then briefly discusses why they selected that answer. The trainer then calls for attention and asks for reasons from the groups. After brief large group discussion, the trainer reads off another statement—continuing until all five issues are covered. Activity is summarized in the large group.

Questions to debrief on include:

- What were some clues or red flags?
- If some people always answered Yellow/Maybe, ask what it would take to move them to Green or Red.
- If someone always answered Red/No, ask what it would take to move you to Yellow/Maybe or Green/Yes.

Scenarios:

You have been approached by a university researcher about potential involvement in a research project:

1. The proposal has already been written and is due in a few days. The university researcher would like to list your group as a member of an advisory committee, which would be formed if the proposal is funded.
2. You've identified this very issue as a priority concern and need the research on this topic, but the lead researcher has a bad reputation in your community.
3. The research group would like to meet with you to explore being co-investigator on a project. You don't know them, but you know another CBO that has been involved with them for several years.
4. Your executive director received a mass email from a university researcher with a one sentence description of a community research project aimed at parents of young children, and asking your organization to forward the attached survey to all your parent members so they can gather data for their project.
5. The researchers are interested in studying the effectiveness of community health advisors (CHAs), and would like to include your existing CHA program in the study.

II. QUESTIONS TO ASK BEFORE GETTING INVOLVED

(10 out of 60 Minutes)

Objective

To identify questions that community partners may want to ask before deciding to get involved in a community-academic research partnership.

The group should review the Detroit Urban Research Center's *"Is this Community-Based Participatory Research?"* handout. Participants should reflect upon and ask themselves some of the listed questions to determine if they are ready for this particular research project or for any research. Being "ready" to engage in research includes thinking about the organization's familiarity with research, needs, priorities and interests in advance:



- What are the potential benefits as well as costs of being involved in this research partnership, both to the organization and to the community?
- Do we have the time and resources to participate?
- What expectations do we have of each other as partners?
- Do we have common goals and objectives for this partnership?
- Is there enough initial mutual trust and respect to move forward together?

Depending on the group, these questions may be discussed first in small groups and then shared with the larger group, or may be discussed in the large group.

III. ASSURING EQUITY: TIPS AND TOOLS FOR NEGOTIATING EQUITABLE PARTNERSHIPS

(20 out of 60 Minutes)

Notes to Facilitator

The following is a framework for interactive discussion with participants:

Here are some tips and tools for negotiating with potential research partners. There are samples of these in your workshop packet and others area accessible online.

- Decide what's most important, what's negotiable, what's your bottom line
- Review "Questions to Ask" (See handout in Appendix C: Participant Materials)
- Discuss how to check "references" (i.e., reputation)
- Discuss Memorandums of Understanding (MOUs)
 - You may not want to develop an MOU until trust is established, as it can get in the way of the larger process of establishing the relationship. Then you may want to put it in writing as you move forward (Becker, A.B. et al., 2013; and Yonas, M. et al., 2013).

Online Tools

- [Asian Health Services Research Collaboration Questionnaire](#)
- [Negotiating Research Relationships: A Guide for Communities](#)
- Collaborative Research Guiding Principles– (see www.detroitURC.org for principles)
- Dissemination Guidelines (see www.hepdetroit.org for guidelines)

References

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Module 3: Introduction To Power Maps and Their Use to Advance Environmental Justice Through Research

Session Objectives

- To introduce participants to Power Maps and how they are used as a community organizing tool
- To highlight the role research can play in changing the distribution of power across different stakeholders in a Power Network Analysis
- To use CBPR Strategy Maps to help participants map the research institutions and researchers that they collaborate with on their campaigns
- To make clear how collaborative action research can further EJ campaigns

Materials:

Flipcharts

Markers

PowerPoint presentation describing power maps

Rectangular Post-its

Square Post-its (could also use two different colors of Post-its)

Session Agenda:

Time:

100 minutes total

I.	Introduction To Power Mapping And Development Of An Environmental Justice-Related Campaign Power Map	55 minutes
II.	Mapping Out Research Networks In Relation To An Environmental Justice Issue	40 minutes
III.	Activity Summary	5 minutes

I. INTRODUCTION TO POWER MAPPING (SEE POWERPOINT IN PARTICIPANT MATERIALS)

(35 out of 80 minutes)

Prep Time (developing activity materials): 45 min

Step 1:

Engage participants in a discussion about the strategies they use to identify environmental justice and health equity campaigns/policy advocacy priorities and introduce power mapping in this context. This is an opportunity for community organizations to reflect on and share their process in determining their work priorities with researchers as a crucial step in building research partnerships that can inform policy and organizing.

Use some of the following guiding questions:

- For community partners:
 - How does your group or organization decide what will be your campaign/ advocacy priorities?
 - How many of you have a policy focus for coming years? If so, what is it?
 - How might research help inform this work?
- For researchers:
 - What is your research plan over the coming years?
 - What policy issues are (or could be) informed by your research?
- Who knows what Power Mapping is and how would you explain it?
- Have you used Power Mapping and if so, how?

Step 2:

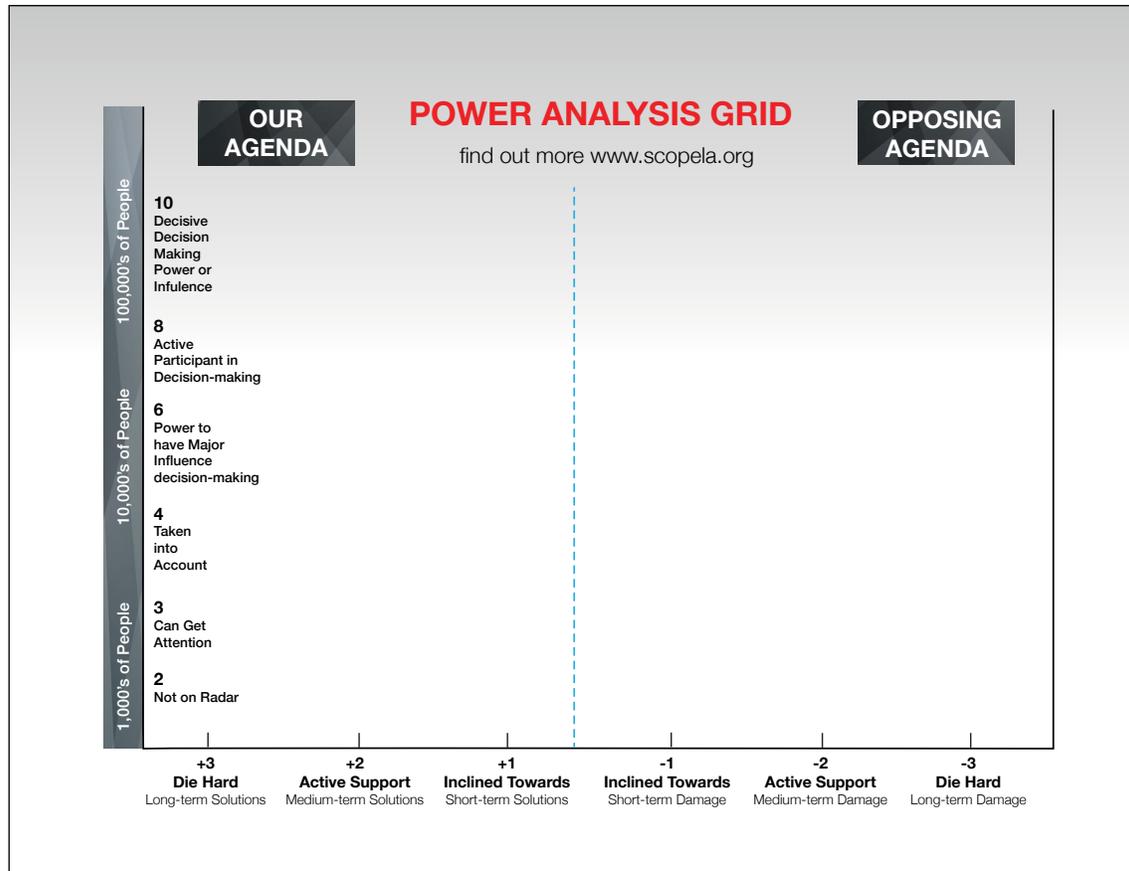
Introduce the following ideas. Also include images of example power maps (see SCOPE's template on the following page.):

- Power Mapping is one of many tools in the community organizing toolkit
- Power Maps are a framework for understand the landscape of actors that have power or influence on the issue we are seeking to change
- This framework assumes that networks of relationships are critical resources and that stronger networks yield stronger solutions
- How can it be used it for your own EJ work?

In the next steps, you will use a PowerPoint to walk people through how to fill out a Power Map to build a campaign on their assigned issue and vision for change.

Step 3:

- Explain that we will first look at an example of what a Power Map is and how it is used in a campaign, then do an exercise of filling out an abbreviated power map.
- On the PowerPoint, use SCOPE's example to start explaining the matrix. The vertical axis represents the level of influence held by a given stakeholder. The horizontal axis represents the degree of alignment of a given stakeholder with the campaign ("Our Agenda").



- Place the elements of "Our Agenda" and "Their Agenda" on the Map.
- Walk through steps 1,2,3:
 1. ID the Problems and Conditions
 2. ID competing agendas
 3. ID the major issues/policy battles.

Problems and conditions describe the situation facing communities that they seek to change. *Competing agendas* are the positions taken by different stakeholders who seek to change (or protect) the status quo. The *major issues/ policy battles* are the processes through which stakeholders mobilize support for their agenda.

- Lead group through steps 4, 5, 6, 7, 8:
 4. ID major centers of decision-making
 5. ID major opposition
 6. ID allies
 7. ID unorganized actors
 8. Analysis of the map

Guiding questions can include:

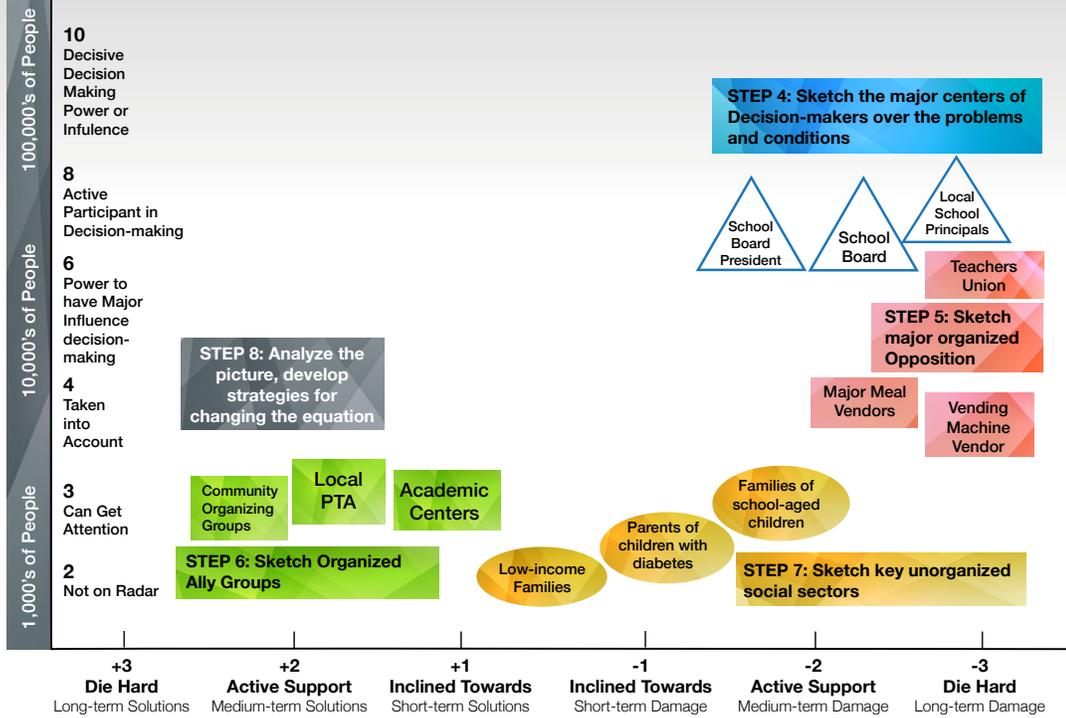
1. Who are the stakeholders who can influence changes to the status quo? Are these elected officials, government agencies, businesses, civic organizations, labor unions?
2. Out of these stakeholders, which ones are organized against the policy or change strategy you seek to support? What are their positions and interests? What are the bases of their power?
3. Out of these stakeholders, which ones are organized for the policy or change strategy you seek to support? What are their positions and interests? What are the bases of their power?
4. Out of these stakeholders, which ones are not engaged (but who could be)? What are their positions and interests? What are the bases of their power?
5. What does this map of stakeholders tell you about how you should organize and prioritize your actions? How can you mobilize your allies and potential allies to change or challenge the positions of those opposed to you change agenda? How can you help build the power of your allies and potential allies to shift the position of your current opponents or to overcome their opposition if needed? What are strengths in your coalition and weaknesses in the opponents that might have been overlooked? What are areas of agreement that could have been missed?

Step 4:

- Show an example of a Power Map completely filled out and ground the conversation on how it shows a landscape of power/influence and opportunity to move forward a particular campaign.
- The PowerPoint stops here. Tell the participants the following: *now we will be explaining how to develop your own Power Map and use it to identify the types of research that may be needed to move your issue forward. This will be a hands-on activity.*

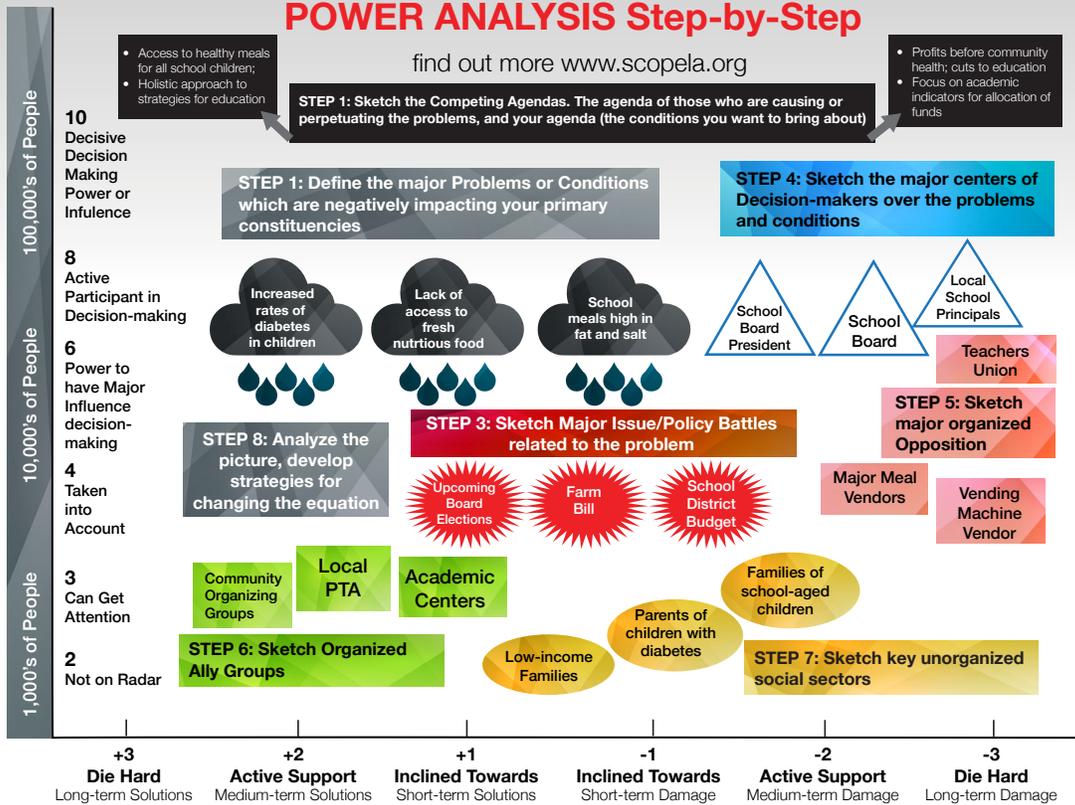
POWER ANALYSIS Step-by-Step

find out more www.scopela.org



POWER ANALYSIS Step-by-Step

find out more www.scopela.org



II. ABBREVIATED EXAMPLE OF CAMPAIGN POWER MAP

Step 1: Develop the Power Mapping Teams

25 mins

Break participants into groups of 5-6 people. One option if participants do not have an existing campaign issue is to create groups by issue interest area, region, or other similar characteristic. Also make sure there is a good distribution of scientists and activists in each group.

If a small group is already working on an existing campaign or can potentially collaborate on a real campaign, allow the group 20 minutes to define their campaign issue and define a vision for change. The vision for change should describe the outcome of a specific campaign or policy focus. Below are sample issues and visions for change that can help groups come up with their own. Alternatively, groups can simply use the samples below for the purposes of this exercise.

Sample Issues:

The use of agricultural pesticides is leading to increased health concerns and complaints in farm working communities in the San Joaquin Valley.

- Vision for change: Reduce the use of the most dangerous pesticides in California agriculture

A biomass facility, which emits high levels of air pollutants such as particulate matter (PM) 2.5 (fine inhalable particles), is expanding. It is located near a neighborhood where the majority of residents are low-income people of color.

- Vision for change: Approve policies that increase the regulations of existing biomass facilities, including stopping their expansion and prevent new facilities to be located near residential neighborhoods

The proposal to build a new freeway to support the development of a high-income suburban community.

- Vision for change: Decision makers refuse to approve the new freeway despite the pressure of developers

Contaminated drinking water is making residents of small rural communities sick.

- Vision for change: Federal and state funds are invested to ensure that small communities have the infrastructure needed to access clean, safe drinking water

Notes to Facilitator

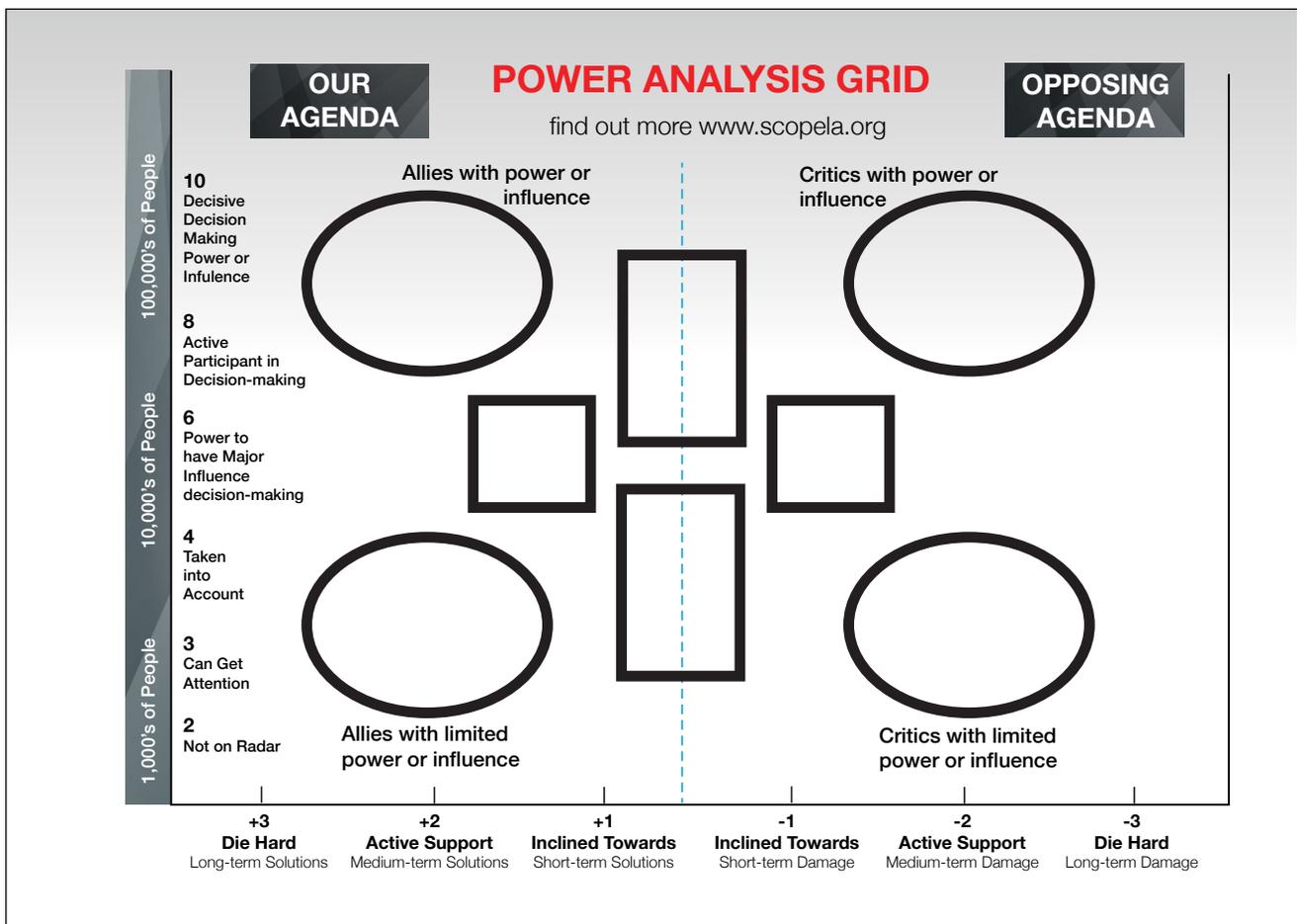
Participants should remain in the groups established in Step 1. Distribute handout (below). Handouts are blank versions of the diagram with circles, squares and rectangles (described below). They will write their own issue area on their handout and use their vision for change as their driving goal.

Instructions: As a group, fill out boxes and circles in Power Map to your best ability.

- Circles: Allies or critics
- Rectangles: Those who are on the fence and could be moved
- Squares: On one side of agenda and could be moved one way or another

Instruct participants to jot down notes on the campaign landscape for each issue group. Participants may also add other rectangles or squares as they see fit.

HANDOUT (A full page handout is located in Appendix C: Participant Materials).



Notes to Facilitator

- Ask participants to add arrows and think through how research could move any of these actors in an organization's campaign.
- As a group: have participants discuss and write how research can move any of these actors towards our siding with our campaign or issue change.

Some guiding questions for this reflection can include the following:

- What are the gaps in information that impede you, your allies, and potential allies from making a convincing case for community action?
- What kind of information is your opponent using to delay or disregard your positions that could be countered?
- Are there symptoms or experiences community members have had that may be related to your issue but are unexplained?

Instruct participants to identify research questions that can influence a particular actor associated with the campaign. Write these questions on Post-its and place them next to the relevant actor.

III. MAPPING RESEARCH NETWORKS THAT RELATE TO A CAMPAIGN ISSUE

(40 out of 80 minutes)

Prep Time (developing activist materials): 60 min

Materials

Post-it Sticky Butcher paper

Rectangular Post-its

Square post-its (two colors of Post-Its may be substituted for different shapes)

Markers

Notes to Facilitator

Use PowerPoint slides to walk participants through an example of this power network analysis. Distribute participant instructions (Appendix C) and read the instructions to participants provided for each step.

Step 1: Transfer Results from Power Map

5 mins

Instructions to Participants

We have seen how a Power Map can help us represent the landscape of the issue or campaign that you are working and inform strategies on how to move people to support your vision for changes.

Now we will show you how to use another version of a Power Map known as a “Power Network Analysis” to help think through the relationships that you have or ones that we want to develop with researchers. This will help identify what research we are currently using and what research gaps we need filled to move our issue forward.

- In the center of the butcher paper draw a circle and write on the center of that circle the issue you are working on (as identified in the Power Map activity).
- Identify what is your vision for change in this issue and write it down underneath the issue.

Step 2: Map major research institutions and/or individual researchers who work in areas relevant to the issue we are addressing

10 mins

Instructions to Participants

In this step, we will be brainstorming and mapping the major institutions and researchers that you know are involved in this issue and/or are associated with the institutions we have listed. Place particular focus on individuals or institutions that could perform research that could further your issue. If you know it, include their expertise and/or type of research that they conduct and could advance your cause.

- Researchers answer the following questions on a Large Post-it Note and place it on the butcher paper:
 - o What is your research area(s)?
 - o How does it impact this issue?
 - o How do you envision your research being used?
 - o If your research does not fall in this area, what general type of research approach can you imagine applying?
 - o What colleagues or research organizations do you think could conduct research on this topic?Draw circle at the edge of the issue circle with the name of the institution in the center.

Notes to Facilitator

On the PowerPoint, show the slide that highlights institutions that conduct community focused research and could be added to their Power Network Analysis Diagram.

*Note that these are often not easy to quickly identify within a university structure.

- o Entities to map can include:
 - Organizations
 - Agencies
 - Regulatory agencies and commissions
 - Universities and other research entities
 - Tips on how to find these researchers: 1) networking 2) the heads of the centers we identified above 3) searching “community engagement research” and then send them cold email. Also show the following:
 - Examples:
- o UC Davis (institution)
 - a. Professor “X”
 - Uses mapping tools to highlight places and communities that are in greatest need based on their proximity to pollution sites and social vulnerability
- o (Community Based Organization)
 - a. Director or Lead Organizer
 - Uses Community-Based Participatory Research (CBPR) report detailing survey of water in our area

This step helps to identify people participants already know but may not have been mobilized in the campaigns as well as to identify people and their research that they don’t know well but will be beneficial to learn more about.

Step 3: Research and Research Needs

10 mins

Notes to Facilitator

Show the PowerPoint slide that challenges the idea that research only happens in a lab or campus office (slide 17). Clarify that a CBPR approach could be applied to any of these research types and examples of how community organizations could use/have used them.

- o Laboratory research
- o Economic analyses
- o Surveys
- o Water/air/soil testing

Community Based Organizations and agency participants answer the following questions on a large Post-It Note and place it on diagram:

- o What research are you using or conducting (if any)?
- o How does or could it impact the campaign?
- o What additional types of research do you need to move your issue area?
- o If you have not conducted research what type of research approach would be useful?

Step 4: What relationships do we have and want to develop?

10 mins

Based on the map, what relationships are already in place? Which did we identify as essential to make change in the identified issue area or campaign?

Instructions to Participants

- Draw a line connecting the relationships between the different actors that can support each other to achieve the identified policy goal
- Place a labeled post-it note on that line to describe the relationship (e.g., strongly supportive, somewhat supportive, possibly supportive)
- Place a Post-it note next to an institution, community-based organization researcher or body of research that you don't already have a relationship with but want to.

Step 5: Groups fill out the rest of their Power Network Analysis Diagram

10 mins

Materials

Butcher paper
Markers
Post-it Notes

Instructions to Participants

- Review the results from Steps 1-4.
- Consider: what else is needed to complete the map?
 - Other actors
 - Other relationships
 - Other ways to apply research to campaigns
- Add additional details based on these reflection questions to the map.

IV. ACTIVITY SUMMARY AND BRIEF GROUP CHECK-IN

(5 out of 80 mins)

Notes to Facilitator

- Review the main goals of activity with the group and reflect on how well they have been met
- Ask how participants feel about their Power Maps
- Solicit feedback and insights from two or so participants
 - What were highlights (most useful elements) of the Power Map and Power Network Analysis?

Module 4: How To Identify Levers To Promote Change: How To Include Research In Strategy Charts

Session Objectives

- To introduce participants to a CBPR Strategy Chart and how to use it for Environmental Justice campaigns
- To strengthen the capacity of both academics and staff of community organizations to promote environmental justice through research
- Provide actionable steps around finding the levers to make change with research

Materials

- PowerPoint
- Butcher Paper
- Markers
- Tape
- Post-it Notes
- Printed CBPR Strategy Chart Guide

Session Agenda

TIME:

75 MINUTES TOTAL

I.	Introduction To Strategy Charts	10 Minutes
II.	Components Of Strategy Charts	20 Minutes
III.	Integrating CBPR In Strategy Charts Simulation	40 Minutes
IV.	Activity Summary/Reflection	5 minutes

I. INTRODUCTION TO A STRATEGY CHART

(10 out of 75 minutes)

Notes to Facilitator

The CBPR Strategy Chart is a roadmap for your group to use research to win the issue it has selected for action. The Strategy Chart and its terms were developed by the Midwest Academy, a training organization in Chicago that has worked with hundreds of groups around the country to map out successful campaigns. In this adaptation (CBPR Strategy Chart), we will be working to create this roadmap and identify strategies to utilize existing research and plans to co-create research as identified in the power mapping activity.

Instructions to Participants

We are going to show how a CBPR Strategy Chart works in order to help guide next steps of a campaign, and highlight how research can further specific parts of your campaign. To this end we have included short, medium, and long-term research goals as part of the strategy chart, as well as guiding questions to think through research needs.

Ask participants:

- Who knows what a CBPR Strategy Chart is?
- Who currently utilizes a Strategy Chart?
- How do you use it?
- What are some pros and cons to using a Strategy Chart?

II. COMPONENTS OF A STRATEGY CHART

(20 out of 75 minutes)

- Hand out the CBPR Strategy Chart Guide and Template (Appendix C: Participant Materials)
- Use the PowerPoint to walk through the components of the strategy chart

Participant Handout: CBPR Strategy Chart Guide

Long-Term Action Goals: (1 year+)

- Campaign Goals: Long-term goal of your efforts. What changes in environmental and/or social conditions are you trying to achieve? (Note: refer back to the vision statement developed in the Power Map activity)

Mid-Term Action Goals: 6-12 months

- Campaign Goals: This is the specific action goal of your campaign. You should choose something that can be done within a year and move you towards your long-term goal.

Short-Term Action Goals: 0-3 months

- Campaign Goals: First steps that your group can take to get to your mid-term goal(s). This should be quick victory to gain momentum and inspire your members and the broader public around your campaign goals.

Use the results of your power map to identify the following:

Targets	Constituents	Allies	Opponents	Tactics	Resources
<p>People and/or person who has the power to give us what we want.</p> <p>What is the relationship we have with them?</p> <p>What power do we have over them?</p>	<p>Who are the people, organizations, institutions, and communities that are on our side of the issue?</p>	<p>Who are the people, organizations, institutions that can align with our issue for reasons that may be different than ours?</p>	<p>Who are the people, organizations, or institutions that oppose us?</p> <p>What do they stand to lose?</p> <p>What are they capable of doing to oppose your work?</p> <p>How much influence or power do they have over our targets?</p>	<p>What steps can we take to influence our targets?</p> <p>List out potential Tactics</p>	<p>What information, funding, information or other assets do we have to help us succeed in our tactics?</p>
Research:	Research:	Research:	Research:	Research:	Research:
<p>What types of research can help us move our targets closer to side?</p>	<p>What research are we already using (from outside researchers or our own) organizations' research)</p> <p>What Research needs do we have?</p>	<p>What can our current or potential partner researchers bring to the campaign?</p> <p>What research needs do we have in common with our allies?</p>	<p>What research are our opponents using?</p> <p>Can we utilize their research to make a case for what we want?</p> <p>What research will help us move them closer to what we want?</p>	<p>How will we utilize research in our strategy?</p> <p>What other research needs do we have to help us with our tactics</p> <p>Whose research can we utilize for our tactics?</p>	<p>What relationships do we have to additional researchers?</p> <p>How can we get access to them?</p>
<p>Short-Term Research Goals:</p> <ul style="list-style-type: none"> o Use existing research to inform “quick win” 					
<p>Mid-Term Research Goals:</p> <ul style="list-style-type: none"> o Conduct our own research o Build relationships with researchers and/or research institutions for additional support to help meet our goals o Work on collaborative research design process and conducting of research with identified research partners. 					
<p>Long-Term Research Goals:</p> <ul style="list-style-type: none"> o Complete collaborative action research projects with research partners o Utilize research to inform longer terms strategies o Scale up existing research for broader impacts 					

CBPR Strategy Chart Component Definitions

Issue: Problem facing your community or constituents

Target: The person/ institution with the power to address your issue

Constituents: People and/or organizations that agree with your issue and want to win the issue for the very same reasons you do. Their self-interest is the same as yours. Often, they represent the same group of people you are working with.

Allies: People and/or organizations that agree with your issue but for reasons that are different. Their self-interest is different from yours, but they want the same thing as you.

Opponents: People and/or organizations that are not on your side of an issue and who stand to lose something if you win your issue.

Tactic: The actions you will take to pressure the targets into making decisions you want them to make in order to win your issue.

- Tactics should be aligned with the experience and comfort level of your group and out of the experience of the target.
- Tactics should also include partnering with people outside of your organization that have tools or capacities that are outside of the experience of your work.

Short term Goal: First steps that your group can take to get to your intermediate goal

- A quick victory, or something that your group should do before working on the intermediate goal

Intermediate Goal: This is the goal of your campaign.

- You should choose something that can be done within a year and move you towards your long-term goal.

Long-Term Goals: Long term goal of your efforts

- Usually something you can accomplish over a year or more time.

List of Appendices

Appendix A: Community of Engaged Practice Process

Appendix B: Review of Existing Environmental Justice and Health Equity Curricula

Appendix C: Participant Materials

Module 1 Handout: Case Study of CBPR

Module 1 Handout: CBPR Partnership Development Worksheet

Module 2 Handout: Questions To Ask Before Getting Involved

Module 3 Handout: Completed Power Map Example

Module 3 Handout: Networking Power Map Handout

Module 3 Handout: Power Map Scenarios

Module 3 Participant Instructions: Mapping Out Research Networks In Relation To An Environmental Justice Issue (Power Network Analysis)

Module 4 Participant Handout: CBPR Strategy Chart Template

Module 4 Participant Handout: CBPR Strategy Chart Guide

Appendix D: PowerPoint Presentations To Accompany The Curriculum

Appendix E: Sample Evaluation Forms

All Appendices are available online at

<https://environmentalhealth.ucdavis.edu/how-to-do-community-engaged-research>



Building Equitable Partnerships for Environmental Justice



environmentalhealth.ucdavis.edu



mlead.umich.edu