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Partnerships for Environmental Public Health Evaluation Metrics Manual Workshop

Instructor Guidance

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This Instructor Guidance is intended to serve as a companion to the Partnerships for Environmental Public Health Evaluation Metrics Manual training materials developed by NIEHS, available at: http://www.niehs.nih.gov/pephmetrics.

PEPH Evaluation Metrics Manual Workshop
Instructor Guidance

Introduction

The National Institute of Environmental Health Sciences (NIEHS) has developed online workshop materials to help grantees and others learn about developing logic models and evaluation metrics for activities conducted in the Partnerships for Environmental Public Health (PEPH) program (http://www.niehs.nih.gov/pephmetrics). These materials are available to all who wish to download them. This Instructor Guidance provides a "lesson plan" for the workshop. It walks the instructor through the workshop presentation, handouts, and evaluation forms, providing suggestions for key messages and discussion questions.

PEPH Background and Workshop Scope

In July 2008, the NIEHS met with grantees so they could provide input on the development of the PEPH program. During this workshop, grantees reported challenges in evaluating and documenting achievements related to building community partnerships and to other translation and outreach components of their programs. Because researchers do not usually report on these types of projects in journal articles, the Partnerships for Environmental Public Health (PEPH) Evaluation Metrics Manual (Manual) was created to provide ideas about how grantees can measure their success, other than through analysis of peer-reviewed literature.

The Manual provides examples of tangible metrics that PEPH grantees and program staff can use for program planning, implementation, and evaluation. The Manual is designed to show grantees how to use a systematic, strategic analysis of program activities, outputs, and impacts to identify meaningful metrics that can be used to document program achievements. The Manual also serves to establish a common language around evaluation activities. In creating the Manual, NIEHS hopes to make evaluation more accessible to its grantees and others working to address environmental public health issues.

The strategies and metrics described in the Manual are ***examples*** that grantees might use to evaluate their programs; they should not be considered a prescriptive set of actions, rules, or measures that must be followed. The Manual is intended to generate discussion and build capacity among grantees to document and demonstrate their achievements in environmental public health.

In this workshop, you will introduce participants to the Manual, provide them with practice developing logic models, and have them work in groups to use logic models to create metrics

for project evaluation. As the instructor for the workshop, you can choose from three case studies created from real-world PEPH projects to develop logic models and evaluation metrics.

Workshop Objectives

To familiarize participants with the major concepts in the PEPH Evaluation Metrics Manual, this workshop has the following objectives:

Using the Manual:

- To understand the organization of and resources in the Manual
- To provide real-world based models of themes discussed in the Manual

Evaluation:

- To provide participants with new project evaluation tools and skills

Logic Models:

- To see how project goals relate to logic model development
- To understand logic models and how they can be used for developing metrics
- To be able to identify the components of a logic model
- To be able to create the components of a logic model using the case studies

Metrics:

- To be able to identify evaluation metrics based on logic models
- To think about metrics early and often
- To realize that every aspect of a logic model is measurable, either qualitatively and quantitatively

Real-World Application:

- To see real-world examples of logic models and metrics
- To be able to create a logic model for his/her own program
- To practice evaluating real-world projects

Target Audiences

The primary intended audiences for this Workshop are PEPH grantees, program staff and community partners. However, we hope that other groups and organizations will also find it useful, particularly those interested in measuring environmental public health activities. Some grantees have found it useful to use the Evaluation Metrics Manual framework with all project partners to map out a project and develop evaluation plans.

Instructor Preparation

The PEPH Evaluation Metrics Manual is organized into an introduction that covers logic models and evaluation metrics, a chapter each about five cross-cutting program areas (Partnerships, Leveraging, Products and Dissemination, Education and Training, and Capacity Building), a more in-depth chapter on evaluation, and appendices that contain methodology, bibliography, resources, and more.

To prepare, you may choose to read the complete PEPH Evaluation Metrics Manual, or concentrate on specific chapters. The case studies developed for this workshop are most related to Chapter 2: Partnerships, Chapter 3: Leveraging, and Chapter 4: Products and Dissemination. You will also want to be prepared to provide an explanation of logic models and evaluation metrics and how these can be used to evaluate projects, which is covered in Chapter 1: Introduction. Additionally, you will need to have a thorough understanding of the handouts outlining the cases (http://go.usa.gov/YckW) and the PowerPoint presentation (http://go.usa.gov/YcKz) that will be used for this workshop.

This Workshop contains materials for three case studies - California Goods Movement**,** Encuentros Network**,** and Cincinnati Anti-Idling Campaign. Before the workshop, you should pick which case study best fits the needs or interests of your audience and print the corresponding materials. Each handout should be printed double-sided and stapled separately, as each is distributed at different points during the workshop.

Materials/Setup

Materials

1. On a front table: have enough copies of Handout A and the Feedback Form for each participant. You may also want to bring name tags or table tents to help identify participants.
2. At each table, have:
    - 10 sheets each of the following lightly colored paper: green, yellow, and purple.
    - Tape that will work to hold the paper to the wall (Scotch tape works best).
    - 5 dark colored markers per table.
    - A few sheets of scrap white paper and pens and pencils.
    - The handout with Key Points for Logic Modeling and Metrics.
3. At your podium or table, have:
    - Enough copies of Handout B and Handout C for each participant and yourself, as well as a copy of Handout A for yourself.

4. On a piece of green paper, write the word “Activities,” on yellow paper write “Outputs,” and on purple paper write “Impacts.” These will be used as headers for the logic model that is constructed on the wall, white board, or flip chart. (These colors are coordinated with the colors of the logic model components in the Manual and on the handouts.)

Room Setup

- Ideally the room should be set up “in rounds” with 4-5 participants seated around small round or rectangular tables. This arrangement facilitates group interaction, discussion, and note taking. If the room does not have enough space for tables, the room can be set up classroom or theater style and participants can move their chairs into clusters for the small group work.
- The room will need a screen or monitor on which to display the PowerPoint presentation. The screen should be positioned so that it is easily viewable by all participants.
- Walls or whiteboards can be used to display the results of the small group work. If wall or whiteboard space is not available, flip charts can be used.
- On the wall, whiteboard, or flip chart, tape the logic model component headings (#4 under Materials above) high up on the wall, in a horizontal line. Leave room between each heading to allow for the posting of the activities, outputs, and impacts that the class comes up with during their small group activity.

Classroom Direction/Material Distribution

- The handouts that are used in this workshop contain the information needed for each group exercise.
- Handout A and the Feedback Form should be given to participants when they arrive. If you want to measure pre/post knowledge, ask participants to fill out the first part of the evaluation before the workshop begins.
- The PowerPoint presentation will indicate when each handout should be distributed.
- The PowerPoint presentation details the pages in the handout that pertain to each exercise.

Notes and Schedule

The pilot tests of these workshop materials were conducted with attendance ranging between 12 and 50 participants. When working with large numbers of participants, it has proven advantageous to have a number of helpers who can walk around and assist participants during small group work. For the small group work with Logic Models and Metrics, 4-5 people per group has proven to be optimal. During our workshops, we did not schedule a break; instead we encouraged participants to take “biology breaks” as needed.

Time	Activity
15 min	Introduction and Overview of Logic Model and Metrics
10 min	Introduction to Case Study
20 min	Developing Logic Models/small groups
25 min	Developing Metrics/work with a partner
10 min	Discussion – Metrics and Data
10 min	Wrap Up and Questions

Workshop Structure

The workshop is structured into two modules: one covering logic models and one covering evaluation metrics derived from logic models.

Each module is 45 minutes in duration beginning with a background and explanation of the topic. This is followed by a "hands-on" small group exercise. The PowerPoint slides use minimal text to convey important concepts that are reinforced with graphics when applicable.

To increase participant interaction, the discussions should be informal and participants should be encouraged to ask questions and share stories. The incorporation of group work should also serve to increase audience participation.

Prior to and following the workshop, a pre-workshop and post-workshop feedback form (http://go.usa.gov/YckW) is administered, respectively. The intent of the pre-workshop feedback form is to gauge the knowledge and familiarity of participants on logic models and metrics. The post-workshop feedback form is designed to measure how effective the workshop is in educating participants about developing logic models and metrics, and to identify any suggestions for improvement.

NIEHS is interested in cataloging the feedback you receive. This will help us evaluate the extent of our training "reach" and make improvements in the future. If you are willing to share, please contact Kristi Pettibone (kristi.pettibone@nih.gov) or Christie Drew (drewc@niehs.nih.gov) to get a copy of our feedback spreadsheet template.

Workshop Sections

In this section of the Instructor Guidance, we provide key messages for each section of the slides.

I: Introduction

1. **Introduction of the workshop**:
    - Key messages:
        - **Purpose of the workshop** is to provide hands-on experience developing logic models and identifying metrics and to show how the tools in the Metrics Manual can help participants evaluate their programs.
        - **Purpose of the Manual** is to: 1) show grantees how to use a systematic, strategic analysis of their program activities, outputs, and impacts to identify meaningful metrics that can be used to document their program achievements and 2) establish a common language around evaluation activities and to make evaluation more accessible to grantees and others working to address environmental public health issues.
        - **Purpose of Evaluation** is to see if you are meeting your project goals and, if not, how the project can be modified to help meet those goals. Stating an evaluation purpose up front can help guide the selection of evaluation questions. We often ask people "why evaluate" before showing them the slide to get them thinking about why they are in the workshop, and active in the discussions.
        - **Evaluation is goal-oriented:** If you know where you are starting from and where you want to end up, it is easier to map the most direct route!
    - Discussion Questions
        - What are your project evaluation challenges?
        - How have you approached evaluation in the past?
        - Have you had training in evaluation?
    - Resources
        - PEPH Evaluation Metrics Manual Chapter 1 provides a basic introduction to the manual.
        - PEPH Evaluation Metrics Manual Chapter 7 provides some basic evaluation advice.
        - The PEPH Evaluation Metrics Manual Appendices contain a full bibliography (Appendix 5) and additional resources listed by topic (Appendix 4).

2. **Introduction of the Logic Model**:

   In order to evaluate a program, it is helpful to understand the expected goals and the activities that will help achieve those goals. Developing program logic models is one way to illustrate systematically how the parts of a program interact to achieve program goals or impacts.

   - Important Definitions:
     - **Logic Model** – provides project-specific frameworks in an organized approach that can be used to develop informative metrics for evaluation.
     - **Inputs** – are the various resources available to a program (not shown on Manual logic models).
     - **Activities** – are actions that use available resources to generate outputs.
     - **Outputs** – are the direct products of activities.
     - **Impacts** - are benefits or changes resulting from the activities and outputs.
   - Key Messages:
     - One, single logic model cannot be used for all projects!
     - There is no one "correct" logic model. There are many different ways to reach your goal.
     - The "process" of writing a logic model with a group of stakeholders helps to identify how different people approach the problem(s) you are trying to address. It is not always simple or easy, but it is usually time very well spent.
     - Logic models help you get to your goals efficiently and effectively with MEASURABLE results!
     - A logic model is a living thing, so it's good to revisit it occasionally. Effective logic models are dynamic.
   - Discussion Questions
     - Have you used logic models previously?
     - How do you connect your logic model to your goals?
     - In the past, how often have you revisited your project goals during your project? What did you find?
     - Who has been/should be a part of your logic model discussions?

II. Case Study Background

1. Goods Movement Case Study

This case is based on a project from the Environmental Health Services Core Center at University of Southern California where community groups and university partners formed partnerships to fight against port and goods movement expansion.

The concern was that movement of goods through the Ports of Los Angeles and Long Beach, California was negatively affecting the community (air, light, and noise pollution). Partners worked to shift the focus of the goods movement discussions to issues of environmental public health.

- Key Messages:
  - The six groups that formed THE Impact Project worked well together to gather and use scientific information to inform public policy.
  - Through leveraging their work, the partners were able to obtain additional grants to fund their efforts.
  - The hard work of these partners has started a national movement to stop or mitigate goods movement expansion across the United States.

- Recommended Reading
  - PEPH Evaluation Metrics Manual Chapter 2: Partnerships
  - PEPH Evaluation Metrics Manual Chapter 3: Leveraging

2. Encuentros Network Case Study

This case study is based on a project from the University of Texas, Medical Branch and community partners working together to build capacity of the gulf coast area populations to understand and address environmental health concerns.

The concern was the multiple exposures that fence line neighborhoods and communities in Texas and Louisiana face. The partners worked with the community members to facilitate community ownership in identifying solutions to environmental health concerns.

- Key Messages:
    - The Encuentros meetings were an effective method of establishing strong relationships with the communities.
    - Over time, the community partners developed a Community Science Workshop that partners communities with scientists who have the expertise to help them address the concerns identified during the Encuentro process.
    - The Encuentros Network developed Teatro – the Theatre of the Oppressed – to engage community members in the process of collaboration and inform researchers about the community's view of the issues.

- Recommended Reading
    - PEPH Evaluation Metrics Manual Chapter 2: Partnerships
    - PEPH Evaluation Metrics Manual Chapter 4: Products and Dissemination

3. Cincinnati Anti-Idling Campaign Case Study

This case study is based on a project from the University of Cincinnati and community partners addressing the health effects of traffic-related air pollution in the public school environment.

The concern was that students were exposed to traffic-related air pollution from idling busses and vehicles in the school environment. The partners created and implemented an anti-idling campaign to reduce the school-based exposures.

- Key Messages:
    - The partners collaborated well, bringing their expertise to bear on creating high quality products to serve the project's needs.
    - After their campaign, the partners documented a reduction in the idle time of both busses and vehicles at the project schools.
    - As a result of their campaign, the Cincinnati Public School system revised its anti-idling bus policy to contain stricter language and required that all school bus drivers attend partner-developed training about idling.

- Recommended Reading
    - PEPH Evaluation Metrics Manual Chapter 2: Partnerships
    - PEPH Evaluation Metrics Manual Chapter 4: Products and Dissemination

III. Activity: Developing a Logic Model

- The purpose of this activity is to:
  - Give participants a chance to develop a logic model with guidance, if needed.
  - Give participants a chance to see logic model components developed by different groups. This will illustrate the point that there is no one right way to develop a logic model.
- Instructions for the activity
  - The PowerPoint slides walk the group through Logic Model development as a whole before the small groups start.
  - Form groups of 3-5 people or have each table work as a group.
  - Using the Case Study you have selected as the project, each group should select ONE of the project goals on Handout A from which to create logic model components. You can have everyone work on the same goal, but it is interesting to have different goals to talk about. Groups can also work on more than one goal, but that takes longer.
  - In the small groups, spend 10 minutes to develop at least one activity, outcome, and impact for the selected goal. Direct the groups to the Key Points for Logic Modeling document in the center of their tables to help them create their logic model components. Walk around and answer questions. For groups of 20 or more, it is helpful to have more than one person to assist. If the groups really struggle, you can always call them back together and walk them through it as a group – then let them try it again.
  - Write the activity on green paper, the outcome on yellow paper, and the impact on purple paper. (Note: these colors correspond to the color codes in the Manual and on the handouts)
  - Circulate among the groups to answer any questions and make sure that each group is on the right track.
  - Have everyone stand up and form a group around the logic model headings on the wall, whiteboard, or flip chart.
  - After 10 minutes, ask each group to elect a "spokesperson." The spokesperson will present their group's logic model components to the other groups. (During the presentations, it helps to give the spokesperson a 3 minute warning… it is easy to run over time here.)
  - Have one group at a time put their activity, outcome, and impact under the appropriate headings. As each one is posted, have the spokesperson explain why she/he selected the specific activity, outcome, and impact.

You can choose to have groups start posting on the wall as they finish (good for large groups), or as they present their discussions.

- Have the spokesperson (or someone else from the group) explain his/her group's method for coming up with their Logic Model components. Did they start with an activity, then develop an outcome, and finally an impact or did they go the other way, starting with an impact, then outcome and finally with the activity to produce the outcome? If something is misidentified (e.g., an impact that should be an outcome, etc.), explain why you are moving it to a different heading to reinforce what is an activity, outcome, and impact.
- Distribute Handout B. Allow participants to look at the logic model from the case study in the Handout and compare it to what the different groups came up with.

- Key Messages:
  - There is no right or wrong way to create a logic model!
  - A logic model should be revisited and possibly modified during a project to make sure you are still on the right track and to see if you need to change anything.
  - It is important to involve everyone in the project in the development of the logic model, because everyone brings different ideas and experiences.
  - Writing the logic model can help build consensus around what is most important.
  - The logic models in the Manual are not prescriptive. Their purpose is to provide examples to assist users in developing their own logic models.
- Discussion Questions:
  - What did you find most challenging?
  - Did thinking about the project within the logic model framework give you any insight about this project or about one of your own?

IV. Introduction to Evaluation Metrics

- Key Messages:
  - Metrics are the measures (such as size, capacity, quantity, duration or frequency) of a characteristic or aspect of the program.
  - Metrics can be built from the logic model.
  - Metrics can be qualitative or quantitative!

    - Look at your logic model and decide what is important to you. Those are your metrics!
    - Example metrics for a partnerships logic model:
        - Number of contacts made with potential partners (quantitative).
        - Descriptions of project goals as related to partnerships (qualitative).
- Discussion Questions:
    - Do you plan for your metrics? How? When?

V. Activity: Developing Metrics

- The purpose of this activity is to:
    - Give participants a chance to develop metrics from a logic model with guidance, if needed.
    - Give participants a chance to see metrics developed by different groups. This will illustrate the point that there are many different forms metrics can take.
- Instructions for the activity
    - Have the original small groups split up into groups of 2 or 3. If the number of workshop participants is very large, keep the original work groups of 3-5 people. Have each group create one or more metrics for one of the logic model components (activity, outcome, impact) they developed earlier.
    - Write the metrics on the scrap paper provided at each table.
    - Allow 5 minutes for the group to come up with the metrics. Direct the groups to the Key Points for Metrics document in the center of their tables as well as to the list of questions at the end of Handout B to help them create their metrics.
    - Circulate among the groups to answer any questions and make sure that each group is on the right track.
    - After 5 minutes, have each group elect a "spokesperson." The spokesperson will present their metric(s) to the other groups.
    - Write the metrics on a flip chart or white board and discuss. (You might not get through all the metrics for all the groups, especially with large groups.)
    - Distribute Handout C. Allow participants to look at the "actual" metrics from the case study in the Handout and compare it to what the different groups came up with.

- Key Messages
    - Metrics come from the verbs, nouns, and adjectives/adverbs in your logic models. Ask yourself: What do I care about?
    - Metrics measure what is important to you in your project.
    - Every aspect of a logic model is measureable. If something isn't measurable, you might need to redesign that aspect of your project.
- Discussion Questions:
    - What did you find most challenging about developing metrics?
    - What did you find most helpful when identifying metrics?

VI. Data Collection

- Key Messages
    - Think about data collection early in the planning phases of a project: what data will be needed, how it will be collected, who will collect it, how often, where it is stored, etc.
    - Data collected for program evaluation can be both quantitative and qualitative.
    - The logic model framework can help with data organization and analysis.
- Discussion Questions
    - How do you decide who owns the data in collaborative projects?
    - What have been your challenges with data in past projects?

VII. SMART Metrics

- SMART metrics are a tool to use when developing metrics for your program. SMART metrics meet the following five criteria: specific, measurable, attainable, relevant, and timely. Use the SMART technique for evaluating each metric. If it does not meet all five criteria, revise it.
- Key Messages:
    - Think critically about your evaluation metrics.
    - SMART metrics are the key to a successful project.
- Discussion Questions:
    - Is the metric something you can achieve?
    - Is the metric related to your goal?
    - Is the metric important to you?

VIII. Discussion and Wrap-Up

- Ask participants to complete the bottom part of the feedback form.
- Key Messages:
    - Evaluation done in the planning stages leads to more effective projects.
    - Revisiting your plan during the project can help you achieve your goals.
    - Early consideration of metrics ensures your project is measurable, which can lead to better outcomes.
- If there is time and interest, work with the participants on developing logic models/metrics for current or upcoming projects.

Additional Resources and Materials

- See the Appendices of the PEPH Evaluation Metrics Manual for a list of resources and references
- Chapter 7 of the PEPH Evaluation Metrics Manual has a more in-depth discussion of evaluation for those interested
- Goods Movement Case Study
  http://hydra.usc.edu/scehsc/web/index.html
- Encuentros Network Case Study
  http://www.utmb.edu/cehd/projects/encuentro.html
- Cincinnati Anti-Idling Campaign Case Study
  http://www.cps-k12.org/general/antiidle/antiidle.htm