Program Development and Evaluation (PDE) Method Workshop

This Presentation based on the 2004 Youth Strategies Grant PDE Workshops funded by the Maryland Governor's Office of Crime Control & Prevention (GOCCP) and conducted by Denise Gottfredson, Ph.D.

Developer of PDE

The PDE Method was developed by Gary Gottfredson.

- Gottfredson, Gary D. (1984). A theory-ridden approach to program evaluation: A method for stimulating researcher-implementer collaboration. *American Psychologist*, Vol 39(10), 1101-1112. doi: 10.1037/0003-066X.39.10.1101
- Gottfredson, G. D., Rickert, D. E., Jr., Gottfredson, D. C. & Advani, N. (1984). Standards for program development evaluation. *Psychological Documents*, *14*, 32. (Ms. No. 2668)

PDE Workshop Goals

- Understand the Program Development and Evaluation (PDE) model, and how it is used to promote sound program planning and implementation in community-based prevention programs

- Develop a PDE plan for your program

The Basic PDE Model

- Module 1 Objectives
  - Explain PDE and its value
  - List the nine planning steps in the PDE model

What is PDE?

- PDE is a program planning, implementation, and evaluation model
- PDE is a series of steps, tools, processes and guidelines for assessing community needs, identifying and addressing its problems, and collecting data to measure implementation and impact
- PDE can be applied to any intervention
  - Does not prescribe a particular intervention or set of interventions

Why PDE?

- Provides Planning structure that will help:
  - Plan actions that make sense for each community's situation and that have a reasonable chance of succeeding
  - Develop programs that strongly implement the planned interventions
  - Provide data for program evaluation and continuous improvement
  - Demonstrate the utility of researcher-practitioner collaboration

The 9 Steps of a PDE Plan

1. Define the problems

   What problems should your program address? What evidence implies that these are real problems?

2. Specify goals

   What are the goals your program is intended to reach? How can you *measure* each goal? How will you know if you have reached your goal? *When* do you expect to have made a substantial difference? How will you know *your program* made the difference?

The 9 Steps of a PDE Plan (Cont)

3. Elaborate as theory of Action

   Why do the problems occur?

4. Define Objectives

   What measurable changes in behavior, attitude, or social organization must be brought about? How can you measure each objective? When do you expect to have made a substantial difference? How will you know your program made the difference?

The 9 Steps of a PDE Plan (Cont)

5. Make program design choices

   What major interventions will achieve your objectives? Are there developed interventions which have been known to achieve your objectives?

6. Assess feasibility and develop strategies

   What resources do you have to move forward? What obstacles do you anticipate? What *strategy* or plan can move your program forward?

The 9 Steps of a PDE Plan (Cont)

7. Set critical benchmarks

   What specific major changes must occur to implement your interventions and when must they occur?

8. Spell out Implementation Standards

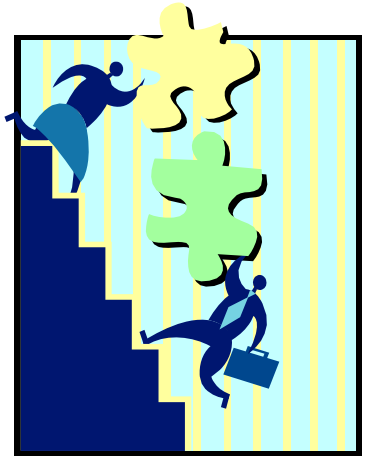
   What are the specifications for your interventions? How can you know that the components of your program are being put in place as planned? How will implementation be monitored?

9. Set tasks

   Who must do what by when?

The PDE Steps

- **Define the problem**
- **Specify goals**
- **Develop a theory of action**
- **Specify objectives**
- **Design the interventions**
- **Establish implementation standards**



- Force-field analysis and strategy development
- Identify critical benchmarks
- Write an action plan
- **Evaluate implementation**
- **Evaluate outcomes**
- **Strengthen and improve**

Formulating Problem Statements And Goal Statements

- Module 2 Objectives
  - Identify the fundamental problem(s) the program is designed to address
  - Establish the overall program goals, based on the identified problems

Step 1: Define The Problem

- What problem or problems is this program intended to address?
- Guidelines for problem statements
  - Stated in quantified terms
  - Reference target population
  - States a problem, not a potential explanation
  - States a concrete problem that is, in principle, solvable by the agency or group
  - Based on needs assessment, not personal opinion

Step 2: Set Goals

- What goals--overall desired outcomes--is the program designed to address?
- Guidelines for goals
  - Realistic and feasible
  - Measurable and measured
  - Magnitude of expected effect is specified
  - Data available or could be developed
  - Complete
  - Program people will accept and be willing to work for it
  - Difficult (but not impossible); worth pursuing

Developing An Action Theory And Specifying Objectives

- Module 3 objectives
  - Diagram your program's theory of action
  - Based on your theory of action, establish program objectives

Step 3: Develop An Action Theory

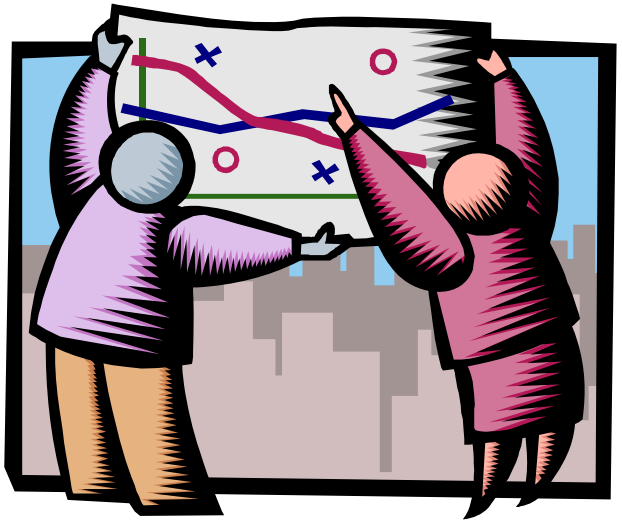
- What causes the problems that the program is designed to address?
  - What will solve the problem or reach goals?
  - Action theory forms a realistic base for activities

Develop Action Theory (Cont)

- Theory of action consists of action statements
  - As much as possible, correspond with evidence from tested or at least plausible theories
  - Are actionable by this organization or group
  - A good theory implies some intervention(s)
  - Are complete, congruent and consistent

What Is The Theory?

- What is causing the identified problem(s)?
- Theory statements should be in “If X then Y” format
- Diagram the chain of events that results in the identified problem(s)

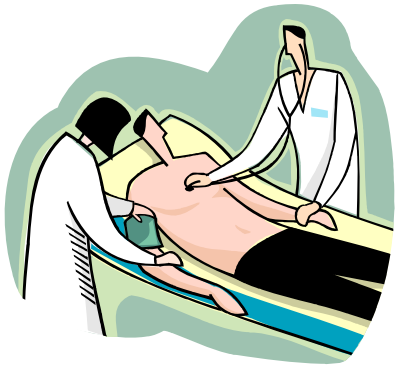


Step 4: Specify Objectives

- What measurable changes in behaviors, attitudes, climate, structure, and/or policy does your theory imply that you must bring about?
- What risk/protective factors will the program address?

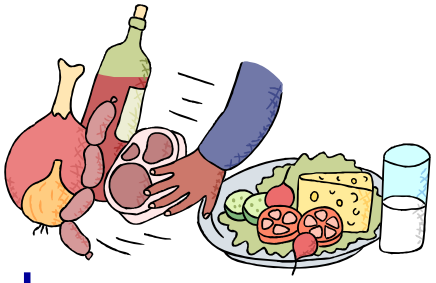
- Objectives should
  - Be realistic
  - Be measurable and measured
  - Specify the data source or establish a data system
  - Be complete

Difference Between Goal & Objective



George has a heart attack

- George's GOAL is to avoid another heart attack



- The OBJECTIVE would be an intermediate outcome that would reduce his chances of having another heart attack by losing weight, reducing his cholesterol to a healthy level, stopping smoking, and exercising.

Selecting The Intervention And Establishing Implementation Standards

- Module 4 objective
  - Select and design a comprehensive, feasible intervention or set of interventions
  - Establish a set of implementation standards to monitor, control, and assess implementation strength

Step 5: Design The Intervention

- What are the major program components that are designed to achieve your objectives?
- Intervention criteria
  - Focused on identified target population
  - Address identified program objectives
  - Comprehensive
  - Specific
  - Realistic, feasible and acceptable
  - Powerful enough to make a big difference
  - Evidence-based to the extent possible

Step 6: Establish Implementation Standards

- Expectations for quality, quantity and timing
- Help with interpreting negative outcomes and in replicating the program
- For each intervention, define
  - When delivered
  - How long/how frequently delivered
  - To whom it will be delivered
  - Who will deliver it
  - How it will be delivered

Guidelines for Writing Implementation Standards

- Based on evidence to the extent possible
- Observable
- Measured
  - Frequency
  - Intensity
  - Duration
- Challenging
- Accepted
- Part of overall data collection system

Force-Field Analysis and Strategy, Setting Critical Benchmarks, Establishing Tasks, Improving the Program

- Module 6 objectives
  - List potential obstacles to your program's success
  - Design a strategy to change the status quo
  - Identify critical benchmarks
  - Assign tasks for implementing your program
  - Use data to improve the program over time

Step 7: Force-field Analysis and Strategy Development

- What obstacles to implementing the program can be anticipated and what resources can be used to overcome these obstacles?
  - Should be assessed for each intervention
- What strategy would change the status quo?
- Guidelines to force-field analysis include:
  - Feasibility
  - Completeness and honesty
  - Results in strategy to neutralize obstacles

Conducting a Force-Field Analysis

1. Identify obstacles—the restraining forces
2. Determine which obstacles are important
3. Identify resources
4. Develop a general strategy
5. Specify critical benchmarks

Step 8: Identify Critical Benchmarks

- What key changes in the force field must occur for the program to be
  - Adopted or,
  - Strongly implemented?
- What key obstacles must be overcome to move forward?
  - Stakeholders
  - Physical and financial resources
  - Human resources
  - Information resources

Step 8 (Cont)

- Guidelines for identifying and establishing critical benchmarks include
  - Traceable to force-field analysis and complete
  - Specify observable changes
  - Scheduled in the management plan

Step 9: Write an Action Plan

- Part 1: Action plan for the intervention
- ***Who*** must do ***what*** by ***when***?
- Key tasks
  - Establishing and implementing the intervention
  - Meeting critical benchmarks
  - Collecting and monitoring implementation and outcome data

Action Plan (Part 1 Cont)

- Plans must include some monitoring plan:
  - Who will monitor plan implementation?
  - Who is the overall program manager?
  - Include a clear organization chart
- Guidelines for assigning tasks include:
  - Complete and detailed
  - Specificity
  - Communication and agreement

Step 9: Part 2

- Part 2: Action plan for measurement and evaluation
- Common failure point for PDE implementation
- Need to plan for the who, what, how, and when for data collection, including:
  - Implementation standards
  - Outcome evaluation

Planning a Measurement System

- A Key to PDE success: designing and implementing a data system to support:
  - Program development and management
  - Outcome evaluation
- Action plan must include
  - What is to be measured, and how
  - Who is to collect the data locally
  - How the data is going to be stored and manipulated electronically

Measurement System (Cont)

- *Note: The Data Action Plan Must* be placed as an integral part of the program
- Important caution: Researchers and implementers must *mutually* determine data and feedback needs