Developing a logic model
A logic model is...

- A depiction of a program showing what the program will do and what it is to accomplish.
- A series of “if-then” relationships that, if implemented as intended, lead to the desired outcomes.
- The core of program planning and evaluation.
Simplest form

INPUTS → OUTPUTS → OUTCOMES
Logic models can be applied to:

- a small program
- a process (i.e. a team working together)
- a large, multi-component program
- or even to an organization or business
LOGIC

- the principles of reasoning
- reasonable
- the relationship of elements to each other and a whole

MODEL

- small object representing another, often larger object (represents reality, isn’t reality)
- preliminary pattern serving as a plan
- tentative description of a system or theory that accounts for all its known properties

The American Heritage Dictionary, 2nd Ed
“If you don’t know where you are going, how are you gonna’ know when you get there?”

Yogi Berra

Where are you going?
How will you get there?
What will show that you’ve arrived?
Many people say a logic model is a road map.
Logic model may also be called...

- Theory of change
- Program action
- Model of change
- Conceptual map
- Outcome map
- Program logic
Accountability era

- What gets measured gets done
- If you don’t measure results, you can’t tell success from failure
- If you can’t see success, you can’t reward it
- If you can’t reward success, you’re probably rewarding failure
- If you can’t see success, you can’t learn from it
- If you can’t recognize failure, you can’t correct it.
- If you can demonstrate results, you can win public support.

Reinventing Government, Osborne and Gaebler, 1992
What logic model is not…

• A theory
• Reality
• An evaluation model or method

It is a framework for describing the relationships between investments, activities, and results.

It provides a common approach for integrating planning, implementation, evaluation and reporting.
A bit of history

Dates to late 1960’s
Current accountability demands;
logic model in widespread use

Public Sector - GPRA
Non-Profit Sector
Private Sector
International Agencies
Evaluation
Why the hype?  
What’s the benefit?

• Focus on and be accountable for what matters – OUTCOMES  
• Provides common language  
• Makes assumptions EXPLICIT  
• Supports continuous improvement  
• Promotes communications
Logic modeling is a way of thinking… not just a pretty graphic

“We build the road and the road builds us.”

-Sri Lankan saying
Everyday example

- **HEADACHE**
  - Situation
  - INPUTS: Get pills
  - OUTPUTS: Take pills
  - OUTCOMES: Feel better
Everyday example

Get food → Eat food → Feel better
Every day logic model – Family Vacation

**Family Members**

**Budget**

**Car**

**Camping Equipment**

**INPUTS**

**Drive to state park**

**Set up camp**

**Cook, play, talk, laugh, hike**

**OUTPUTS**

Family members learn about each other; family bonds; family has a good time

**OUTCOMES**
Assumptions

Assumptions underlie much of what we do. It is often these underlying assumptions that hinder success or produce less-than-expected results. One benefit of logic modeling is that it helps us make our assumptions explicit.
Assumptions

The beliefs we have about the program, the participants, and how the program will work. Includes ideas about:

- the problem or existing situation
- program operations
- expected outcomes and benefits
- the participants and how they learn, behave, their motivations
- resources
- staff
- external environment: influences
- the knowledge base
- etc.
Assumptions

As you left the house today and came to this workshop, what were some of your assumptions about the day?

Why is it important that we think about assumptions?
A youth financial literacy program

- Teens establish sound financial habits
- Teens make better decisions about the use of money
- Teens gain knowledge and skills in money management

A high school financial planning program – 7 unit curriculum - is developed and delivered in high schools

Partners invest resources
Business Counseling Example

Agency invests time and resources

A variety of educational activities are provided to business owners who participate

These owners gain knowledge and change practices resulting in

Improved business performance
SITUATION: During a county needs assessment, majority of parents reported that they were having difficulty parenting and felt stressed as a result.

**INPUTS**
- Staff
- Money
- Partners
- Research

**OUTPUTS**
- Assess parent ed programs
- Design-deliver evidence-based program of 8 sessions
- Facilitate support groups

**OUTCOMES**
- Parents increase knowledge of child dev
- Parents better understanding their own parenting style
- Parents use effective parenting practices
- Parents gain confidence in their abilities
- Parents identify appropriate actions to take

**Outputs**
- Parents of 3-10 year olds attend

- Reduced stress
- Improved child-parent relations
Example: Water quality

**Inputs**
- Educational Workshops
- Set up record keeping systems to track phosphorus
- On-farm visits

**Outputs**
- Activities
- Participation

**Outcomes - Impact**
- Increased knowledge of link between cattle diet and water quality
- Increased understanding of recommended phosphorus levels
- Increased knowledge of tracking phosphorus levels

**Assumptions**
1. Reducing phosphorus saves time and money
2. Low phosphorus feed is readily available

**External Factors**
- Government programs regulate and offer incentives. Other sources reinforce use of high-phosphorus diets

**SITUATION PRIORITIES**
- Staff
- Money
- Materials
- Partners
- Research

**Short Term**
- Monitor phosphorus levels in feed, manure, soil
- Make appropriate adjustments to cattle feed

**Medium Term**
- Feed cost savings

**Long Term**
- Improved water quality
- Reductions in phosphorus use
Logic model of a training workshop

**Situation:** Funder requires grantees to include a logic model in their funding request; grantees have limited understanding of logic models and are unable to fulfill the funding requirement.

**INPUTS**
- Trainer
- Funds
- Equipment
- Research base
- Training curriculum

**OUTPUTS**
- Grantees
  - Participants will increase knowledge of logic models
  - Participants will increase ability to create a useful logic model of program
  - Participants will increase confidence in using logic models

**OUTCOMES**
- Create meaningful logic models
- Use logic models in own work
- Fulfill requirement of funder
- Improved planning
- Improved evaluation
Youth and community service

**INPUTS**
- Staff
- Grant
- Partners
- Time

**OUTPUTS**
- Youth identify project to work on
- Plan project
- Carry out the project
- Evaluate how they did

**OUTCOMES**
- Youth improve skills in planning, decision making, problem solving
- Youth learn about their community
- Youth demonstrate leadership skills
- Youth successfully complete projects
- Youth engage in additional community activities
- Youth are connected with and feel valued by their community

Youth ages 12-16

Adults
Statewide Tobacco Control: Smoke-free environments

**OUTCOMES**

- **Elected officials**
- **Mgrs of public areas/events**
- **Worksite contacts**
- **Residential owners, mgrs**
- **Tobacco users**
  - Adults
  - Youth
- **Influential others**
- **Public**
- **Changes in awareness, knowledge and attitudes about SF**
- **Increased commitment, support, demand for SF environments**
- **Demonstrations of support**
- **SF policies implemented, enforced**
- **Increased use of cessation resources**
- **Increased # of quit attempts**
- **Increased # of prevention programs, policies adopted, enforcement**
- **Change in behaviors**
- **Reduction in tobacco use and exposure**

**Coalition**
- Time
- Money
- Partners including youth
- Research and best practices

- **Organize and implement Smoke-free campaign**
- **Organize and implement strategy for treating tobacco addiction**
- **Organize and implement strategy to prevent youth tobacco use**

**Changes in attitudes and motivations**

- **Increased knowledge of availability of cessation resources**
- **Increased # of prevention programs, policies adopted, enforcement**
- **Increased commitment to eliminate access**

- **Change in knowledge, attitude, motivations**
- **Increased awareness, knowledge and attitudes about SF**
If-then relationships

Underlying a logic model is a series of ‘if-then’ relationships that express the program’s *theory of change*.

IF then IF then IF then IF then IF then IF then
Theory of change

“A theory of change is a description of how and why a set of activities – be they part of a highly focused program or a comprehensive initiative – are expected to lead to early, intermediate, and long-term outcomes over a specified period.”

(Anderson, 2000)
Logical chain of connections showing what the program is to accomplish

INPUTS
- Program investments

OUTPUTS
- Activities
- Participation

OUTCOMES
- Short
- Medium
- Long-term

What we invest
What we do
Who we reach
What results
How will activities lead to desired outcomes? 
A series of if-then relationships

**Tutoring Program Example**

- IF: We invest time and money
  - then: We can provide tutoring 3 hrs/week for 1 school year to 50 children
  - then: Students struggling academically can be tutored
  - then: They will learn and improve their skills
  - then: They will get better grades
  - then: They will move to next grade level on time
Don’t forget the arrows

- Arrows and feedback loops show the links between inputs, outputs and outcomes

- Arrows depict the underlying causal connections
A common problem is that activities and strategies often do not lead to the desired outcomes.

Check your ‘if-then’ statements and ensure that they make sense and lead to the outcomes you want to achieve.

A logic model makes the connections EXPLICIT.

“I think you should be more explicit here in Step Two.”
Simplest form of logic model
A bit more detail

**INPUTS**
- Program investments

**OUTPUTS**
- Activities
- Participation

**OUTCOMES**
- Short
- Medium
- Long-term

What we invest → What we do → Who we reach → What results

**SO WHAT??**
What is the VALUE?
Defining the Situation: Critical first step in logic model development

What **problematic** condition exists that demands a **programmatic** response?
• Why does it exist?
• For whom does it exist?
• Who has a stake in the problem?
• What can be changed?

If incorrectly understood and diagnosed, everything that flows from it will be wrong.

Factors affecting problems: protective factors; risk factors

Review research, evidence, knowledge-base

Traps:
• Assuming we know cause: symptoms vs. root causes.
• Framing a problem as a need where need is actually a program or service. “Communities need leadership training” Precludes discussion of nature of the problem: what is the problem? Whose problem? Leads one to value provision of the service as the result – is the service provided or not?
Inputs

What we invest
Staff
Volunteers
Time
Money
Research base
Materials
Equipment
Technology
Partners
### OUTPUTS

<table>
<thead>
<tr>
<th>Activities</th>
<th>Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>What we do</td>
<td>Who we reach</td>
</tr>
<tr>
<td>• Train, teach</td>
<td>• Participants</td>
</tr>
<tr>
<td>• Deliver services</td>
<td>• Clients</td>
</tr>
<tr>
<td>• Develop products and resources</td>
<td>• Customers</td>
</tr>
<tr>
<td>• Network with others</td>
<td>• Agencies</td>
</tr>
<tr>
<td>• Build partnerships</td>
<td>• Decision makers</td>
</tr>
<tr>
<td>• Assess</td>
<td>• Policy makers</td>
</tr>
<tr>
<td>• Facilitate</td>
<td>Satisfaction</td>
</tr>
<tr>
<td>• Work with the media</td>
<td></td>
</tr>
<tr>
<td>• …</td>
<td></td>
</tr>
</tbody>
</table>
# OUTCOMES

*What results for individuals, families, communities…*

<table>
<thead>
<tr>
<th><strong>SHORT</strong></th>
<th><strong>MEDIUM</strong></th>
<th><strong>LONG-TERM</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Learning</strong></td>
<td><strong>Action</strong></td>
<td><strong>Conditions</strong></td>
</tr>
<tr>
<td>Changes in</td>
<td>Changes in</td>
<td>Changes in</td>
</tr>
<tr>
<td>• Awareness</td>
<td>• Behavior</td>
<td>Conditions</td>
</tr>
<tr>
<td>• Knowledge</td>
<td>• Decision-making</td>
<td>Social (well-being)</td>
</tr>
<tr>
<td>• Attitudes</td>
<td>• Policies</td>
<td>Health</td>
</tr>
<tr>
<td>• Skills</td>
<td>• Social action</td>
<td>Economic</td>
</tr>
<tr>
<td>• Opinion</td>
<td></td>
<td>Civic</td>
</tr>
<tr>
<td>• Aspirations</td>
<td></td>
<td>Environmental</td>
</tr>
<tr>
<td>• Motivation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Behavioral intent</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**CHAIN OF OUTCOMES**
Tend not be included in a logic model graphic:

- Situational statement
  - Priorities
- List of assumptions
- List of external factors
- Evaluation methods
Hierarchy of effects

Source: Bennett and Rockwell, 1995, Targeting Outcomes of Programs

- **Participation**: Number and characteristics of people reached; frequency and intensity of contact
- **Reactions**: Degree of satisfaction with program; level of interest; feelings toward activities, educational methods
- **Learning**: Changes in knowledge, attitudes, skills, aspirations
- **Actions**: Changes in behaviors and practices
- **Social-economic-environmental improvements**:

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**University of Wisconsin - Extension, Cooperative Extension, Program Development and Evaluation**
Language: What do you mean by…

- Goal = Impact
- Impact = Long-term outcome
- Objectives (participant focused) = Outcomes
- Activities = Outputs
  - Outputs may signify “tangible” accomplishments as a result of activities; products
Goal – outcome definition

Goal represents a general, big-picture statement of desired results. “We find that it is useful to think of goals as the answer to the question ‘What are issues that you would like the program to address?’ (e.g., the goal of the program is to address existing community laws and norms about ATOD use) and outcomes as the answer to: ‘What changes do you want to occur because of your program?’ (e.g., the outcome of the program will be to increase the number of community residents who believe teenaged smoking is dangerous).”

(Western CAPT)
Outputs vs. Outcomes

Example:
Number of patients discharged from state mental hospital is an output.
Percentage of discharged who are capable of living independently is an outcome.

Not how many worms the bird feeds its young, but how well the fledgling flies
(United Way of America, 1999)
<table>
<thead>
<tr>
<th>Program</th>
<th>Outputs</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crime control</td>
<td>Hrs of patrol</td>
<td>Reduction in crimes committed</td>
</tr>
<tr>
<td></td>
<td># responses to calls</td>
<td>Reduction in deaths and injuries resulting from crime;</td>
</tr>
<tr>
<td></td>
<td># crimes investigated</td>
<td>Less property damaged or lost due to crime;</td>
</tr>
<tr>
<td></td>
<td>Arrests made</td>
<td></td>
</tr>
<tr>
<td>Highway construction</td>
<td>Project designs</td>
<td>Capacity increases</td>
</tr>
<tr>
<td></td>
<td>Highway miles constructed</td>
<td>Improved traffic flow</td>
</tr>
<tr>
<td></td>
<td>Highway miles reconstructed</td>
<td>Reduced travel times</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reduction in accidents and injuries</td>
</tr>
</tbody>
</table>

From Poister, 2003
So, why bother? What’s in this for you?

“This seems like a lot of work.”

“Where in the world would I get all the information to put in a logic model?”

“I’m a right brain type of person – this isn’t for me.”

“Even if we created one, what would we do with it?”
LM Benefits: What we are finding:

- Provides a common language
- Helps us differentiate between “what we do” and “results” --- outcomes
- Increases understanding about program
- Guides and helps focus work
- Leads to improved planning and management
- Increases intentionality and purpose
- Provides coherence across complex tasks, diverse environments
• Enhances teamwork
• Guides prioritization and allocation of resources
• Motivates staff
• Helps to identify important variables to measure; use evaluation resources wisely
• Increases resources, opportunities, recognition
• Supports replication
• Often is required!
Testimonials

“Wow – so that is what my program is all about”

“I’ve never seen our program on one page before”

“I’m now able to say no to things; if it doesn’t fit within our logic model, I can say no.”

“I can do this”

“This took time and effort but it was worth it; our team never would have gotten here otherwise.”

“It helped us to think as a team – to build a team program vs. an individual program.”
What does a logic model look like?

- Graphic display of boxes and arrows; vertical or horizontal
  - Relationships, linkages
- Any shape possible
  - Circular, dynamic
  - Cultural adaptations; storyboards
- Level of detail
  - Simple
  - Complex
- Multiple models
  - Multi-level programs
  - Multi-component programs
Common variations

UWEX logic model

Other common logic model used by United Way, Center for Disease Control and others
Feedback loops and multi-dimensions

**INPUTS**
- Program investments
- Activities
- Participation

**OUTCOMES**
- Short
- Medium
- Long-term

**What we invest**
- What we do
- Who we reach
- What results

Feedback loops and multi-dimensions
“Families” of models or “nested” models

Multiple models may be needed to describe and explain complex systems or initiatives.

Bring coherence across an organization

• **Multi-level**: a way to describe and link activities across an organization to depict varying levels such as national-state-county levels OR, institution-division-unit levels.

• **Multi-component programs**: A series of models to depict various components (goals, sites, target populations) within a comprehensive initiative.
Nested logic models
– families of logic models

• View from space
  – big picture; overall roadmap

• View from mountaintop
  – more detail: by component program, player, participant group

• View from ground level – “you are here”
Multi level - Logic models can be linked to display consistency of purpose and strategy across levels and show how parts work to achieve organizational goals.

MISSION

Macro level –
Marathon County Government

Department Level

Each logic model is built with reference to the levels above and below, and in relation to the organization’s or program’s mission.

Program level
Multi-component – a way to describe and link different activities within a comprehensive initiative.
Multi agency partnership: Abating ammonia emissions from dairy farms

**INPUTS**
- Research inputs
- Extension inputs
- Policy inputs
- Producer inputs

**OUTPUTS**
- Conduct research
- Disseminate & educate
- Develop & set standards
- Test & feedback

**OUTCOMES**
- Accurate research available and shared
- Adopt BMPs
- Policy is followed
- Reductions in ammonia emissions

Powell et al, 2005
Multi agency partnership # 2:
Research logic model within the overall initiative

- **Scientists**
  - Conduct process & operational level experiments
  - Interpret, validate results
  - Scale up/out results
  - Incorporate farmer feedback
  - Educate re. complexities, components, opportunities
  - Generate funding

- **Staff**

- **Equipment**

- **Funding**

- **Existing knowledge**

- **Researchers**

- **Partners**

  - Increased knowledge of sources, processes of ammonia emissions
  - Increased skills in non-traditional science
  - Increased ability to determine ammonia emissions at different scales
  - Increased understanding of relationship between measurement and actual emissions

- **Accurate research available**

- **Reductions in ammonia emissions**

  Powell et al, 2005
Tobacco Control: Global View

Research: evidence-base

Policy
Practitioners
Advocates
Funders
Partners

Community programs
Chronic disease programs
School programs
Enforcement
Statewide programs
Counter-marketing
Cessation programs
Evaluation and Surveillance
Administration & management

Policy makers
Current and potential users
Disparate populations
Key stakeholders
Publics

Change in knowledge, attitudes, skills, motivation
Policy change

Change in support
System change
Individual change
Change in access

Decreased smoking
Reduced exposure to ETS
Reduce mortality, morbidity

Community programs
Chronic disease programs
School programs
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Decreased smoking
Reduced exposure to ETS
Reduce mortality, morbidity
Tobacco Control: Statewide View - Community Program

Research:
- evidence-base

Policy:
- Policy makers
- Current and potential users
- Disparate populations
- Key stakeholders

Practitioner:
- Change in K,A,S,M

Advocates:
- Demonstrations of support
- Policies implemented enforced

Partners:
- Change in support

Funders:
- Change in access

Coalition development:
- Coalition members
- Key stakeholders

Coalition members:
- Key stakeholders

Individual change:
- Effective coalition functioning

Successful TC implementation:
- Reduced smoking
- Reduced exposure to ETS
- Decreased smoking
- Reduced mortality, morbidity
Tobacco Control: Local view – smoke-free environments

Coalition
- Form committee
- Develop grassroots support
- Educate community
- Organize earned media
- Identify and work with supportive policy makers

Time

Money

Partners including youth
- Elected officials
- Mgrs of public areas/events
- Worksite contacts
- Residential owners, mgrs
- Community activists
- Media

Research and best practices

OUTCOMES
- Form committee
- Develop grassroots support
- Educate community
- Organize earned media
- Identify and work with supportive policy makers

Organize and implement SF campaign

Increase awareness of importance of SF public policies

Increased knowledge of SF benefits and options

Increased commitment, support, demand for SF environments

Increased awareness of SF public policies

Increased knowledge and skills to participate in SF public policy change

Change in intent to make services/support available

Demonstrations of support

SF policies drafted, improved

SF public policies implemented

SF public policies adhered to and enforced

Increased availability of cessation support and services

Increased commitment, support, demand for SF environments

SF policies drafted, improved

Increased availability of cessation support and services

SF: Municipal buildings, grounds, & vehicles
- Public areas & events
- Worksites Residence

OUTCOMES
Programs linked as a system bringing coherence across an organization

Adapted from Chapel, 2006
Programs as “systems” within the community setting

INPUTS

Org 1

Org 2

Org 3

Org 4

OUTPUTS

SHORT-TERM OUTCOMES

MED-TERM OUTCOMES

LONG-TERM OUTCOMES

Single organization

Multi-Org partnership

Community

Adapted from Chapel, 2006
Culture is…

A set of socially transmitted and learned behavior patterns, beliefs, institutions, and all other products of human activity and thought that characterize a particular population, community, profession, or organization.
Cultural appropriateness of logic model

• Is a logic model culturally appropriate?

• What, if anything, would help make a logic model or its use suitable for the cultural context?

• What would you do?
First things first...

• Determine purpose of logic model
  - Who will use it? For what?
• Involve others
• Set boundaries for logic model
  - Level of specificity
• Understand situation
• Explore research, knowledge base, what others are doing/have done
Limitations

Logic Model...

• Represents intention, is not reality
• Focuses on expected outcomes
• Challenge of causal attribution
  ✓ Many factors influence process and outcomes
• Doesn’t address:
  Are we doing the right thing?
Cautions:

• Can become too time consuming – and just paperwork
• May become too focused on outcomes without adequate attention to inputs and outputs and the logical relationships that connect them to end results
• May end up perfecting the key to the wrong lock
  - Is the program focusing on the right thing?
• Mixing levels within one logic model
• Attending to context only at front end
• Thinking that logic model has to be “correct”
  - Map of Pyrenees vs Alps
• Becomes ‘fixed’ rather than flexible and dynamic
### Parent Education Program example

**Situation:** During a county needs assessment, a majority of parents reported they were having difficulty parenting, felt stressed and were unhappy with their parent-child relationships.

<table>
<thead>
<tr>
<th>INPUTS</th>
<th>OUTPUTS</th>
<th>OUTCOMES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Reduced stress</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Improved child-parent relations</td>
</tr>
</tbody>
</table>
A community collaborative, including the local school district, Extension, and the local UW-system campus has received a grant for a project titled "A Day at the University." The project is a post-secondary education day for Hispanic students grades 7-8 held on the local UW campus. The School District will release the students from school to attend the day long event which will include workshops, a student panel, lunch, and an "informance." Students will be given an assignment to be shared in their schools that reflects the knowledge gained during their "Day at the University."

Objectives for the day are that the students will gain an understanding that college is a possibility for them through advanced planning and wise choices, they will be able to explain basic types of financial aid and how to qualify, they will know some key resources available to help them as they move through high school, and they will meet several successful Hispanic community leaders who are college graduates.

1) Create a logic model based on this description
2) Write down questions that you’d ask the project staff to further clarify the project’s theory of change.
Check your logic model

1. Is it meaningful?
2. Does it make sense?
3. Is it doable?
4. Can it be verified?
Logic model in evaluation

Program Action

Inputs | Outputs | Outcomes - Impact

What we invest
Staff
Volunteers
Time
Money
Research base
Materials
Equipment
Technology
Partners

What we do
Conduct workshops, meetings
Deliver services
Develop products, curriculum, resources
Train
Provide counseling
Facilitate
Partner
Work with media

Who we reach
Participants
Clients
Agencies
Decision-makers
Customers

What the short term results are
Learning
Awareness
Knowledge
Attitudes
Skills
Opinions
Aspirations
Motivations

What the medium term results are
Action
Behavior
Practice
Decision-making
Policies
Social Action

What the ultimate impact(s) is-
Conditions
Social
Economic
Civic
Environmental

Evaluation

Assumptions
External Factors

What do you want to know? How will you know it?

EVALUATION: check and verify
Logic Model helps with Evaluation

Provides the program description that guides our evaluation process

- Helps us **match** evaluation to the program
- Helps us know what and when to measure
  - Are you interested in process and/or outcomes?
- Helps us focus on key, important information
  - Prioritize: where will we spend our limited evaluation resources?
  - What do we really need to know??
Logic model and common types of evaluation

Types of evaluation

**Needs/asset assessment:**
- What are the characteristics, needs, priorities of target population?
- What are potential barriers/facilitators?
- What is most appropriate to do?

**Process evaluation:**
- How is program implemented?
- Are activities delivered as intended? Fidelity of implementation?
- Are participants being reached as intended?
- What are participant reactions?

**Outcome evaluation:**
- To what extent are desired changes occurring? Goals met?
- Who is benefiting/not benefiting? How?
- What seems to work? Not work?
- What are unintended outcomes?

**Impact evaluation:**
- To what extent can changes be attributed to the program?
- What are the net effects?
- What are final consequences?
- Is program worth resources it costs?
Match evaluation questions to program

**INPUTS**
- Program investments

**OUTPUTS**
- Activities
- Participation

**OUTCOMES**
- Short
- Medium
- Long-term

**Evaluation questions:**
What questions do you want to answer?
e.g., accomplishments at each step; expected causal links; unintended consequences or chains of events set into motion

**Indicators:**
What evidence do you need to answer your questions?
What do you (and others) want to know about the program?

**INPUTS**
- Staff
- Money
- Partners
- Research

**OUTPUTS**
- Assess parent ed programs
- Design-deliver evidence-based program of 8 sessions
- Facilitate support groups
- Parents of 3-10 year olds attend

**OUTCOMES**
- Parents increase knowledge of child dev
- Parents better understanding their own parenting style
- Parents use effective parenting practices
- Parents gain confidence in their abilities
- Parents identify appropriate actions to take

- Reduced stress
- Improved child-parent relations
- Strong families
Possible evaluation questions...

- To what extent is stress reduced?
- Relations improved?
- To what extent did behaviors change? For whom? Why?
- What else happened?
- To what extent did knowledge and skills increase? For whom? Why?
- What else happened?
- Did all parents participate as intended? Who did/not not?
- Did they attend all sessions?...support groups?
- Level of satisfaction?
- What amount of $ and time were invested?
- Were all sessions delivered? How well? Do support groups meet?
- Did all parents gain skills in effective parenting practices?
- Parents identify appropriate actions to take
- Parents use effective parenting practices
- Parents of 3-10 year olds attend
- Parents increase knowledge of child dev
- Parents better understand their own parenting style
- Parents use effective parenting practices
- Reduced stress
- Improved child-parent relations
- Strong families
- Facilitate support groups
- Assess parent ed programs
- Design & deliver evidence-based program of 8 sessions
- Staff
- Money
- Partners
- Research

University of Wisconsin - Extension, Cooperative Extension, Program Development and Evaluation
What do you want to know about your program?

**Evaluation: What to measure – when?**

What amount of $ and time were invested?  
What did the program actually consist of?  
Who actually participated in what? Did this meet our target?  
To what extent did knowledge and skills increase?  
To what extent did practices change?  
To what extent did phosphorus reduce?  
Savings accrue to farmers?
Identify indicators

• How will you know it when you see it?
• What will be the evidence?
• What are the specific indicators that will be measured?

• Often expressed as #, %
• Can have qualitative indicators as well as quantitative indicators
Logic model with indicators for **Outputs** and **Outcomes**

**Outputs**
- Program implemented
- Targeted farmers
- Farmers learn

**Number of workshops held**

**Quality of workshops**

**Outcomes**
- Farmers practice new techniques
- Farm profitability increases

**Number and percent reporting increased profits; amount of increase**

**Number and percent who practice new techniques**

**Number and percent who increase knowledge**

**Number and percent of farmers attending**

**Number of workshops held**
Parent Education Example: Evaluation questions, indicators

**EVALUATION QUESTIONS**

- What amount of $ and time were invested?
- How many sessions were held? How effectively? 
  - #, quality of support groups?
- Who/how many attended/did not attend? Did they attend all sessions? Supports groups? Were they satisfied – why/why not?
- To what extent did knowledge and skills increase? For whom? Why? What else happened?
- To what extent did behaviors change? For whom? Why? What else happened?
- To what extent is stress reduced? To what extent are relations improved?

**INDICATORS**

- # Staff
- $ used
- # partners
- # Sessions held
- Quality criteria
- #,% attended per session
- Certificate of completion
- #,% demonstrating increased knowledge/skills
- Additional outcomes
- #,% demonstrating changes
- Types of changes
- #,% demonstrating improvements
- Types of improvements

**Develop parented curriculum**
- Parents increase knowledge of child dev
- Parents better understand their own parenting style
- Parents gain skills in new ways to parent
- Parents gain confidence in their abilities

**Deliver series of 8 interactive sessions**
- Parents of 3-10 year olds

**Facilitate support groups**
- Parents identify appropriate actions to take
- Parents use effective parenting practices

**Who/how many attended/did not attend? Did they attend all sessions? Supports groups? Were they satisfied – why/why not?**

**Parents of 3-10 year olds**
- Reduced stress
- Improved child-parent relations
- Strong families
Typical activity indicators to track

- Amount of products, services delivered
- #/type of customers/clients served
- Timeliness of service provision
- Accessibility and convenience of service
  - Location; hours of operation; staff availability
- Accuracy, adequacy, relevance of assistance
- Courteousness
- Customer satisfaction

For example:
  - # of clients served
  - # of consultations
  - # of workshops held
  - # of attendees
  - # of referrals
  - Quality of service
Methods of data collection

Sources of Information

• Existing data
  - Program records, attendance logs, etc
  - Pictures, charts, maps, pictorial records

• Program participants

• Others: key informants, nonparticipants, proponents, critics, staff, collaborators, funders, etc.

Data Collection Methods

• Survey
• Interview
• Test
• Observation
• Group techniques
• Case study
• Photography
• Document review
• Expert or peer review
# Data collection plan

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<tr>
<th>Questions</th>
<th>Indicators</th>
<th>Data collection</th>
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Logic model and reporting

PROGRAM DEVELOPMENT
Planning – Implementation – Evaluation

Program Action - Logic Model

SITUATION
- Needs and context
- Consider: Mission, Values, Priorities
- Stakeholder engagement

RESPONSE
- What we invest
- Staff
- Volunteers
- Time
- Money
- Research base
- Materials
- Equipment
- Technology
- Partners

RESULTS
- What we do
- Conduct workshops, meetings
- Deliver services
- Develop products, curriculum, resources
- Train
- Provide counseling
- Assess
- Facilitate
- Partner
- Work with media

Output
- Activities
- Participation

Outcomes - Impact
- Short Term
- Medium Term
- Long Term
- What we reach
- Participants
- Clients
- Agencies
- Decision-makers
- Customers
- Satisfaction

Why the short term results are
- Learning
- Awareness
- Knowledge
- Attitudes
- Skills
- Opinions
- Aspirations
- Motivations

What the medium term results are
- Action
- Behavior
- Practice
- Decision-making
- Policies
- Social Action

What the ultimate impact(s) is
- Conditions
- Social
- Economic
- Civic
- Environmental

Assumptions

Evaluation
- Focus - Collect - Interpret - Report

External Factors

Evidence