In one guide, find recommendations about resources providing overviews of evaluation, methodologies, conducting a literature search, locating datasets pertinent to many topics, and toolkits available on the web to help you conceive a well thought out program evaluation.

Research Impact Topic Guides

From Nancy Courtney, Research Impact Librarian, University Libraries: Research Impact
http://guides.osu.edu/researchimpact

From the Health Sciences Library: Measuring Scholarly Impact https://hslguides.osu.edu/researchimpact

Both of these guides provide information related to telling the story of your research on the whole, especially when reporting metrics out to administration or promotion and tenure dossiers. The section on Research Impact Models in the HSL guide can help you think broadly about how you might have impact for even individual projects.

Librarian Assistance

Both University Libraries and the Health Sciences Library provide expert information assistance through the use of subject or liaison librarians. Below, find the names and contact info for a selection of relevant areas. All subject area librarians can be found at https://library.osu.edu/subject-librarians (University Libraries) and https://hsl.osu.edu/service-areas/education/services/liaison-librarians (HSL).

What can librarians assist you with?

- assist with search strategy development and refinement to find relevant journal and research literature
- recommend resources to meet your particular information needs
- refer you to other helpful library services to support research, education, and patient care (if appropriate)
- provide instructional sessions to classes, clinical groups/departments, or other groups on searching the literature, managing citations, accessing library resources, and using information to support an evidence-based approach

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>Librarian</th>
<th>OSU Name.#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Health</td>
<td>Fern Cheek</td>
<td>Cheek.27</td>
</tr>
<tr>
<td>Economics, Journalism, Political Science</td>
<td>Hilary Bussell</td>
<td>Bussell.21</td>
</tr>
<tr>
<td>Dietetics, Hospitality Management, Human Sciences, Human Development and Family Studies, Kinesiology, Sociology</td>
<td>Tracey Overbey</td>
<td>Overbey.13</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>Jessica Page (interim)</td>
<td>Page.84</td>
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<tr>
<td>Medicine</td>
<td>Stephanie Schulte</td>
<td>Schulte.109</td>
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<td>Nursing</td>
<td>Kerry Dhakal</td>
<td>Dhakal.9</td>
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<tr>
<td>Business and Management</td>
<td>Ash Faulkner</td>
<td>Faulkner.172</td>
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<tr>
<td>Social Work, Psychology, Women’s, Gender, and Sexuality Studies</td>
<td>Cynthia Preston</td>
<td>Preston.7</td>
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</table>
Selected Resources on Theory of Change


Tools for Planning & Implementing Program Evaluation

September 17, 2018, OSU Opioid Innovation Fund Learning Series

Julianna Nemeth, PhD
Assistant Professor
The Ohio State University College of Public Health
Division of Health Behavior and Health Promotion
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The content of today’s presentation came from:

- **Enhancing Program Performance with Logic Models** (an online training from University of Wisconsin Extension)

- **TGIF Evaluation Project** (Funded by The Women’s Fund of Central Ohio, in partnership with HelpLine of Delaware and Morrow Counties and Youth to Youth; Project Evaluator: Nemeth JM)

- **Building a Community of Practice to Enhance Access and Shift Attitudes toward Working with Individuals with Mental Health Disabilities and/or Traumatic Brain Injuries** (Award PI: Neylon, Ohio Domestic Violence Network; OSU IRB PI & Project Evaluator: Nemeth JM) OVC 2016-XV-GX-K012
Goals

• See how the logic model helps determine what you will evaluate - the focus of your evaluation.
• See how the logic model helps you determine meaningful and useful evaluation questions - know what to measure.
• Understand indicators and know what information best answers your evaluation questions.
• Be able to identify appropriate timing for data collection.
Program Evaluation is...

**Evaluation** <A systematic method for collecting, analyzing, and using data to examine the effectiveness and efficiency of programs and, as importantly, to contribute to continuous program improvement>

**Program** <Any set of related activities undertaken to achieve an intended outcome. Program is defined broadly to include policies; interventions; environmental, systems, and media initiatives; and other efforts. It also encompasses preparedness efforts as well as research, capacity, and infrastructure efforts.>

Effective program evaluation is a systematic way to improve and account for public health actions.

https://www.cdc.gov/eval/index.htm
A framework for Public Health Evaluation...

Centers for Disease Control and Prevention. Framework for program evaluation in public health. MMWR 1999;48 (No. RR-11)
Logic Model & 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?
A logic model...

<is a simplified picture of a program, initiative, or intervention that is a response to a given situation>

• Shows a **logical relationship** among the **resources** that are invested, the **activities** that take place, and the **benefits** or changes that result.

• Some call this **program theory** (Weiss, 1998) or the program's **theory of action** (Patton, 1997). It is a "plausible, sensible model of how a program is supposed to work." (Bickman, 1987, p. 5).

• Is the core of program planning, management, and evaluation.
A logic model is the 1st step to evaluation...

• It helps determine **when and what to evaluate** so that evaluation resources are used effectively and efficiently.

• Through evaluation, we test and verify the reality of the **program theory** – how we believe the program will work.

• A logic model helps us focus on appropriate **process and outcome measures**.
A logic model in its simplest form...

A logic model answers the questions:

- What is *invested*?
- What is *done*?
- What *results*?
A logic model shows the relationships between:

- **Inputs** <the resources that go into a program & allow us to achieve our desired output>

- **Outputs** <the activities conducted or products created that reach targeted populations and lead to outcomes>

- **Outcomes-Impact** <changes or benefits that occur for individuals, families, groups, businesses, organizations, and communities as a result of participating in activities or receiving products of the program>
Outcomes occur on a continuum:

- Shorter-term Achievements
- Medium-term Achievements
- Longer-term Achievements
A logic model framework includes 6 primary components.

1. **SITUATION**
   - What we invest
     - Staff
     - Volunteers
     - Time
     - Money
     - Research base
     - Materials
     - Equipment
     - Technology
     - Partners

2. **PRIORITIES**
   - What we do
     - Conduct workshops, meetings
     - Deliver services
     - Develop products, curriculum, resources
     - Train
     - Provide counseling
     - Assess
     - Facilitate
     - Partner
     - Work with media
   - Who we reach
     - Participants
     - Clients
     - Agencies
     - Decision-makers
     - Customers

3. **Outputs**
   - Activities
   - Participation

4. **Outcomes - Impact**
   - Short Term
   - Medium Term
   - Long Term
     - 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

5. **Assumptions**

6. **External Factors**
1. The situation (the foundation) & priorities

The setting or situation <a complex of sociopolitical, environmental, and economic conditions for which your program intends to impact>

This may be the most important step!

- What is the problem/issue?
- Why is this a problem? (What causes the problem?)
- For whom (individual, household, group, community, society in general) does this problem exist?
- Who has a stake in the problem? (Who cares whether it is resolved or not?)
- What do we know about the problem/issue/people that are involved? What research, experience do we have? What do existing research and experience say?
1. The situation (the foundation) & priorities

Multiple factors influence your focus and priorities:

- Mission & values
- Resources & expertise
- Experience & history
- What you know about the situation
- What others are doing in relation to the problem.

- What criteria will you use for setting priorities?
- Who will help in setting priorities? How?
2. **Inputs** <the resources and contributions that you and others make to the effort>

Inputs allow us to create outputs.
3. Outputs <activities, services, events, and products that reach people (individuals, groups, agencies) who participate or who are targeted>

Outputs are intended to lead to specific outcomes.
4. **Outcomes** <the direct results or benefits for individuals, families, groups, communities, organizations, or systems>

Outcomes may be positive, negative, neutral, intended, or unintended.
4. **Outcomes** <the direct results or benefits for individuals, families, groups, communities, organizations, or systems>

Outcomes may be positive, negative, neutral, intended, or unintended.
4. **Outcomes** <the direct results or benefits for individuals, families, groups, communities, organizations, or systems>

Outcomes may be positive, negative, neutral, intended, or unintended.
Logic Model for: **Thank Goodness I’m Female Project (TGIF) Program**

Created by: Julianna Nemeth

**Situation:** Bullying was identified as one of the three top issues facing youth in schools by school administrators in Delaware County through a Delaware County PEACE (Prevention Education in All Classroom Environments) Collaborative survey in the Spring of 2010. Also in the Spring of 2010, Relational Aggression (RA), also known as female bullying, was identified by a member of the Stand Up Leadership Team (young led peer prevention collaborative in Delaware County) as an issue impacting girls in her school district, leading to school absenteeism and negative social and health related impacts. Collaboratively, Helpline and Youth to Youth developed Thank Goodness I’m Female (TGIF), a program for middle school girls to deal with relational aggression while forming, encouraging and maintaining healthy, positive friendships. TGIF decreases incidents of relational aggression between girls by making what is invisible visible to adults, having girls teach other girls important lessons, and giving girls the tools to develop positive self-concepts and build healthier relationships with others.

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Outputs Specific to Primary Population</th>
<th>Immediate</th>
<th>Mediating</th>
<th>Ultimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>HelpLine of Delaware and Morrow County, Inc. &amp; Youth to Youth (Y-to-Y) Collaboration</td>
<td>Training for TGIF High School (HS) Mentors</td>
<td>The TGIF group will help participants:</td>
<td>One semester participation in the GAL group will help participants:</td>
<td>Reduce the incidents of relational aggression between girls (female bullying)</td>
</tr>
<tr>
<td>Abbey Fields (Student Visionary)</td>
<td>Implementation of 8 Thank Goodness I’m Female (TGIF) Group One Hour Sessions</td>
<td>• increase in knowledge about relational aggression</td>
<td>• increase in developmental assets concerning:</td>
<td>Girls engage in healthy and supportive relationships with other girls</td>
</tr>
<tr>
<td>Funding (Women’s Fund of Central Ohio)</td>
<td>• HS Mentors</td>
<td>• increase in relational aggression</td>
<td>1. Support</td>
<td>Women engage in healthy and supportive relationships with other women</td>
</tr>
<tr>
<td>Thank Goodness I’m Female Curriculum 8 sessions focused on:</td>
<td>• 30 6th Grade Youth</td>
<td>“defending” bystander behaviors</td>
<td>2. Empowerment</td>
<td></td>
</tr>
<tr>
<td>• relational aggression</td>
<td>• Adult Staff from HelpLine or Y-to-Y</td>
<td></td>
<td>3. Boundaries &amp; Expectations</td>
<td></td>
</tr>
<tr>
<td>• alliance building</td>
<td>Social Norming Campaign</td>
<td></td>
<td>4. Constructive Use of Time</td>
<td></td>
</tr>
<tr>
<td>• anger</td>
<td>Implementation of Girl Action League GAL Meetings (2 x a month)</td>
<td></td>
<td>5. Commitment to Learning</td>
<td></td>
</tr>
<tr>
<td>• healthy friendships</td>
<td>• Graduates of TGIF</td>
<td></td>
<td>6. Positive Values</td>
<td></td>
</tr>
<tr>
<td>• self defense</td>
<td>• Adult Staff from HelpLine or Y-to-Y</td>
<td></td>
<td>7. Social Competence</td>
<td></td>
</tr>
<tr>
<td>• action planning</td>
<td>Socializing for Social Change Event</td>
<td>The TGIF program will provide:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HelpLine’s Youth Empowerment Coordinator (1 FTE)</td>
<td>• TGIF &amp; GAL participants</td>
<td>• An environment free from physical and psychological harm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Youth to Youth Staff (1FTE)</td>
<td>• Their Parents</td>
<td>• Appropriate Structure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HS &amp; MS School Cooperation and Donated Space (Buckeye valley Middle &amp; High School; Westerville South High School &amp; Genoa Middle School)</td>
<td>• School Administrators</td>
<td>• Supportive relationships</td>
<td></td>
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<tr>
<td></td>
<td>Summer “Bridge” Activities</td>
<td>• Opportunities to belong</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TGIF Led Social Change Initiatives</td>
<td>• Build positive social norms</td>
<td></td>
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</tbody>
</table>

(See next page for Secondary Target Populations and desired Outcomes)
Program goals and objectives establish criteria and standards against which you can determine program performance. You will need to identify the goals and objectives of the program component or intervention you plan to evaluate. Logic models are a useful tool that can help you do this.

<table>
<thead>
<tr>
<th>Goal</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>A broad statement about the long-term expectation of what should happen as a result of your program (the desired result). Serves as the foundation for developing your program objectives. <strong>Criteria:</strong> 1) Specifies the STD problem or STD-related health risk factors; 2) Identifies the target population(s) for your program.</td>
<td>Statements describing the results to be achieved, and the manner in which they will be achieved. You usually need multiple objectives to address a single goal. <strong>Criteria:</strong> SMART attributes are used to develop a clearly-defined objective.</td>
</tr>
</tbody>
</table>
MISTAKES IN SETTING GOALS

- too BIG
- too MANY
- not SPECIFIC
- not WRITTEN
Attributes of **SMART** objectives:

- **Specific:** includes the “who”, “what”, and “where”. Use only one action verb to avoid issues with measuring success.

- **Measurable:** focuses on “how much” change is expected.

- **Achievable:** realistic given program resources and planned implementation.

- **Relevant:** relates directly to program/activity goals.

- **Time-bound:** focuses on “when” the objective will be achieved.

Objectives can be **process** or **outcome** oriented.
Process objectives describe the activities/services/strategies that will be delivered as part of implementing the program. Process objectives, by their nature, are usually short-term.

**Example of a SMART process objective:**
By (month/year), (X%) of providers who reported incorrect gonorrhea treatment in County Z will be contacted within 1 month.

Outcome objectives specify the intended effect of the program in the target population or end result of a program. The outcome objective focuses on what your target population(s) will know or will be able to do as a result of your program/activity.

**Example of a SMART outcome objective:**
By (month/year), increase the percentage from (X%) to (Y%) of providers in County Z that fully adhere to the CDC-STD treatment guidelines for appropriate treatment of gonorrhea. [Intermediate objective]
Outcome objectives can be classified as short-term, intermediate, or long-term. Well-written and clearly defined objectives will help you monitor your progress toward achieving your program goals.

**Short-term outcome objectives** are the initial expected changes in your target population(s) after implementing certain activities or interventions (e.g., changes in knowledge, skills, and attitudes).

**Intermediate outcome objectives** are those interim results that provide a sense of progress toward reaching the long-term objectives (e.g., changes in behavior, norms, and policy).

**Long-term objectives** are achieved only after the program has been in place for some time (e.g., changes in mortality, morbidity, quality of life).
Note: Objectives are different from listing program activities. Objectives are statements that describe the results to be achieved and help monitor progress towards program goals. Activities are the actual events that take place as part of the program. Following is an example of how program activities differ from objectives.

Example: Activity versus Objective

**Goal:** Reduce gonorrhea rates among male adolescents in County Z.

**Activity:** Educate providers on appropriate treatment for gonorrhea.

**SMART process objective:** By (month/year), (X%) of providers who reported incorrect gonorrhea treatment in County Z will be contacted within 1 month.
I am SMART

Specific
Measurable
Achievable
Relevant
Time Limited
Building a Community of Practice to Enhance Access and Shift Attitudes toward Working with Individuals with Mental Health Disabilities and Traumatic Brain Injuries – Logic Model

**Background:** Mental health vulnerability and traumatic brain injury are highly prevalent among domestic violence survivors. Domestic violence service agencies are not uniformly equipped to handle the service needs of survivors with mental health disability and traumatic brain injury.

**Evaluation Research Question:** Does saturation of several local partner agencies with intensive training and technical assistance while sprinkling training and technical assistance across local domestic violence agencies in the state cause a positive shift in attitudes of shelter staff and thus a positive shift in service delivery in working with survivors of domestic violence who have mental health and traumatic brain injuries disabilities?

**Goal 1: Getting Ready (Year 1)**

**Process Objective 1.1a-d:** By December 2017, ODVN will develop a Disability Action Plan re: serving survivors with varying MH ability & TBI that includes training, recommended policies and procedures, technical assistance menu, and resources for domestic violence project partners.

**Process Objective 1.2:** By October 2017, formalized collaboration with steering committee (5 project partner agencies, ODVN & statewide subject experts) is established.

**Outputs, bi-annually:**
- # of training/technical assistance materials developed
- # of training/technical assistance visits requested
- # of technical assistance requests completed
- # of training modules/curricula developed
- # of hours of training delivered
- # of training modules delivered
- # of online training modules completed
- # of training evaluation surveys collected
- # of improvement initiatives completed
- # of individuals trained (in person, live webinar)

**Goal 2: Saturation of 5 Project Partner agencies & Establishment of Community of Practice from Steering Committee (Year 2)**

**Process Objective 2.1:** By October 2018, ODVN guides the full implementation of the Disability Action Plan in domestic violence project partner agencies.

**Short-term Outcome Objective 2.1:** By October 2018, knowledge & attitudes of project partner staff re: MH & TBI shift from baseline positively by 25%.

**Process Objective 2.2:** By October 2018, a community of practice exists to provide modeling and support for domestic violence programs and allied professionals in serving survivors with varying MH abilities & TBI.

**Short-term Outcome Objective 2.2:** By October 2018, community of practice’s confidence in peer support modeling regarding MH & TBI service delivery shift positively from baseline by 25%.

**Goal 3: Sprinkling to other local DV agencies and allied Professionals with help of Community of Practice (Year 3)**

**Process Objective 3.1:** In 2019, the Community of Practice, in collaboration with ODVN, sprinkles Disability Action Plan implementation to other DV agencies and allied professional across Ohio.

**Short-term Outcome Objective 3.1:** For DV staff from agencies receiving Year 3 services, upon receipt of Disability Action Plan services, knowledge re: MH & TBI service delivery for dv survivors shifts by 25%.

**Project-term Outcome Objective:** By January 2019, survivors with mental health and traumatic brain injury disabilities from saturated agencies will report higher degree of confidence in and improved feeling regarding advocacy services when compared to a group of comparable survivors from 2017.

**Ultimate Outcome Objective:** Survivors are better served and have increased access to services for mental health and traumatic brain injury disabilities.
Why use a logic model?

- Brings detail to broad goals; helps in planning, evaluation, implementation, and communications.
- Helps to **identify gaps** in our program logic and **clarifies assumptions** so success may be more likely.
- Builds understanding and **promotes consensus** about what the program is and how it will work--builds buy-in and teamwork.
- **Makes underlying beliefs explicit.**
- Helps to **clarify what is appropriate to evaluate**, and when, so that evaluation resources are used wisely.
- **Summarizes complex programs** to communicate with stakeholders, funders, audiences.
- **Enables effective competition** for resources. (Many funders request logic models in their grant requests.)
Logic Model & 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?
The connection between the logic model and evaluation...

The logic model describes your program or initiative: what it is expected to achieve and how.

Evaluation helps you know how well that program or initiative actually works. "What worked, what didn't, why?" "How can we make it better?"
How do logic models help in evaluation?

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<tr>
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<tr>
<td><strong>Focus</strong></td>
<td>determine what to evaluate</td>
</tr>
<tr>
<td><strong>Questions</strong></td>
<td>determine appropriate questions for your evaluation</td>
</tr>
<tr>
<td><strong>Indicators</strong></td>
<td>know what information to collect to answer those questions</td>
</tr>
<tr>
<td><strong>Timing</strong></td>
<td>know when to collect data</td>
</tr>
<tr>
<td><strong>Data Collection</strong></td>
<td>determine data collection – sources, methods, sample, instrumentation</td>
</tr>
</tbody>
</table>

Logic models can help improve program design so that evaluation is more useful and effective.
1. Logic models guide the focus of evaluation

The logic model describes the program. One of the greatest benefits of the logic model is that it clarifies what the program is. Understanding what the program is, is the first step in any evaluation.
2. Logic models help us generate questions that the evaluation needs to be designed to measure.

This is directly connected to the type of evaluation you are conducting.
Common types of evaluation (questions) include:
needs, process, outcome, and impact
The 4 types of evaluation:

- Needs assessment
- Process evaluation
- Outcome evaluation
- Impact evaluation
Needs Assessment:

<A type of evaluation that determines what is essential for existence or performance (needs versus wants) and to help set priorities (e.g., is more money needed to support day care).>
Questions about needs:

• Who has what need(s)?
• What is the level of concern/interest--among whom?
• What currently exists to address the identified need(s)?
• What changes do people see as possible or important?
• What does research/experience say about the need(s)?
• Is there sufficient political support for addressing the need?
• How did the need(s) get identified--whose voices were heard? Whose weren't?
• What assumptions are we making?
Process Evaluation:

<A type of evaluation that examines what goes on while a program is in progress. The evaluation assesses what the program is, how it is working, whom it is reaching and how (e.g., are participants attending as anticipated).>
Questions about process:

- What does the program actually consist of? How effective is the program design?
- Whom are we reaching? How does that compare to whom we targeted?
- Who participates in what activities? Who doesn't? Does everyone have equal access?
- What teaching/learning strategies are used? What seems to work--for whom?
- How effective are the staff?
- How is the program operating? What internal programmatic or organizational factors are affecting program performance?
- What resources are invested? Are resources sufficient/adequate?
- How many volunteers are involved? What do they do? Strengths? Weaknesses?
- Which activities/methods are more effective for which participants?
- How much does the program cost per unit of service?
- To what extent are participants, community members, volunteers, partners, donors satisfied?
- To what extent is the program being implemented as planned? Why? Why not?
- Are our assumptions about program process correct?
- What external factors are affecting the way the program is operating?
Outcome Evaluation:

< A type of evaluation to determine what results from a program and its consequences for people (e.g., increased knowledge; changes in attitudes, behavior, etc.)>
Questions about outcome:

• What difference does the program make?
• To what extent was the program successful, in what ways, for whom?
• Who benefits and how?
• What learning, action, and/or conditions have changed/improved as a result of the program? At what cost?
• Did we accomplish what we promised? What didn't we accomplish?
• What, if any, are unintended or negative consequences?
• What did we learn?
Impact Evaluation:

< A type of evaluation that determines the net causal effects of the program beyond its immediate results. Impact evaluation often involves a comparison of what appeared after the program with what would have appeared without the program (e.g., mortality rates).>
Questions about impact:

- What difference does the program make?
- Who benefits and how?
- What learning, action, and/or conditions have changed/improved as a result of the program? At what cost?
- Did we accomplish what we promised? What didn't we accomplish?
- What, if any, are unintended or negative consequences?
- What did we learn?
- What is the net impact?
Questions based on intention....

Formative questions are asked during the program--while the program is operating. They may be asked on an ongoing basis or at periodic times over the course of the program's life. The questions are usually asked for the purpose of program improvement—to receive immediate feedback and input in order to know how things are going and what improvements—corrections and/or additions—might be needed.

Examples of formative evaluation questions
• To what extent are the parents that we targeted for this program attending? Are they completing the program?
• Are all youth participating in all sessions? If not, why not?
• Are the mentors spending the expected amount of time with the students?
• Do people appear to be learning?
• What seems to be working, not working? For whom? Why?
Questions based on intention....

**Summative questions** ask about what resulted, what was effective. These questions are *asked at or after completion of the program* (or a phase of the program). They are asked largely for the *purpose of deciding whether to continue, extend, or terminate a program*.

Examples of summative evaluation questions
- To what extent did communication problems decline as a result of the cross-cultural training program?
- Do participants shop differently as a result of their participation in the program? How?
- Given the results, was the program worth the costs?
3. Logic models direct choice of evaluation indicators

An indicator <the evidence or information that represents the phenomenon you are asking about.>
How would we measure (aka. What’s the indicator) of...

- High blood pressure?
- Plant stress due to drought?
- The popularity of a movie?
Indicators must be...

**Direct.** An indicator should measure as directly as possible what it is intended to measure. For example, if the outcome being measured is a reduction in teen smoking, then the best indicator is the number and percent of teens smoking. The number and percent of teens that receive cessation counseling does not directly measure the outcome of interest. However, sometimes we do not have direct measures or we are constrained by time and resources. Then, we have to use proxy, or less direct, measures.

**Specific.** Indicators need to be stated so that anyone would understand it in the same way and the data that are to be collected. Example indicator: number and percent of farmers who adopt risk management practices in the past year. In this example, we do not know which risk management practices are to be measured, which farmers or what time period constitutes the past year.

**Useful.** Indicators need to help us understand what it is we are measuring! The indicator should provide information that helps us understand and improve our programs.

**Practical.** Costs and time involved in data collection are important considerations. Though difficult to estimate, the cost of collecting data for an indicator should not exceed the utility of the information collected. Reasonable costs, however, are to be expected.

**Culturally appropriate.** Indicators must be relevant to the cultural context. What makes sense or is appropriate in one culture, may not be in another. Test your assumptions.

**Adequate.** There is no correct number or type of indicators. The number of indicators you choose depends upon what you are measuring, the level of information you need, and the resources available. Often more than one indicator is necessary. More than five, however, may mean that what you are measuring is too broad, complex or not well understood. Indicators need to express all possible aspects of what you are measuring: possible negative or detrimental aspects as well as the positive. Consider what the negative effects or spin-offs may be and include indicators for these.
4. Logic models direct the timing of data collection.

Data collection can occur at:
- Baseline
- Beginning of program--specific event/activity
- During implementation
- End of program--end of specific event/activity
- Monthly, quarterly, annually
- Follow-up: when?
Evaluation designs...

FTER ONLY (post program)
In this design, evaluation is done after the program is completed; for example, a postprogram survey or end-of-session questionnaire. It is a common design but the least reliable because we do not know what things looked like before the program.

RETROSPECTIVE (post program)
In this design, participants are asked to recall or reflect on their situation, knowledge, attitude, behavior, etc. prior to the program. It is commonly used in education and outreach programs but memory can be faulty.

BEFORE-AFTER (before and after program)
Program recipients or situations are looked at before the program and then again after the program; for example, pre-post tests; before and after observations of behaviors. This is commonly used in educational program evaluation and differences between Time 1 and Time 2 are often attributed to the program. But, many other things can happen over the course of a program that affect the observed change other than the program.
Evaluation designs...

DURING (additional data "during" the program)
Collecting information at multiple times during the course of a program is a way to identify the association between program events and outcomes. Data can be collected on program activities and services as well as on participant progress. This design appears not to be commonly used in community-based evaluation probably because of time and resources needed in data collection.

TIME SERIES (multiple points before and after the program)
Time series involve a series of measurements at intervals before the program begins and after it ends. It strengthens the simple before-after design by documenting pre and post patterns and stability of the change. Ensure that other external factors didn't coincide with the program and influence the observed change.

CASE STUDY
A case study design uses multiple sources of information and multiple methods to provide an in-depth and comprehensive understanding of the program. Its strength lies in its comprehensiveness and exploration of reasons for observed effects.
All designs can be strengthened by adding a comparison (people, groups, sites).

- **Comparison groups** refer to groups that are not selected at random but are from the same population. (When they are selected at random, they are called control groups.)

- The **purpose** of a comparison group is **to add assurance that the program (the intervention) caused the observed effects**, not something else.

- It is **essential** that the comparison be **very similar** to the program group.
An example from TGIF of why comparison groups are critical...

**INCIDENTS OF AGGRESSION TOWARDS PEERS IN PAST SEMESTER**

<table>
<thead>
<tr>
<th>Control</th>
<th>TGIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline: 0.8</td>
<td>0.72</td>
</tr>
<tr>
<td>2nd Follow-up: 1.39</td>
<td>0.85</td>
</tr>
</tbody>
</table>
VICTIMIZATION INCIDENTS FROM PEERS IN PAST SEMESTER

Baseline  |  2nd Follow-up
---|---
Control  |  TGIF
4.18  |  3.2
4.75  |  5.24
We can collect data by...

- Survey
  - Mail (surface, electronic)
  - Telephone
  - On-site
- Interview
  - Structured/unstructured
- Case study
- Observation
- Portfolio reviews
- Tests
- Journals
Also consider if you need a sample...

- Will you use a sample or include the whole population? If you do sample, what type of sample will you use? Do you need to be able to generalize your findings to the whole population? What size will your sample be?

- Decisions about sampling usually depend on the purpose of the evaluation, the questions you are asking, the size of the population, and the methods you are using to collect information.
Plan backwards, Implement Forwards
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