Pennsylvania Teen Driver Safety Program Planning & Evaluation Guidebook

Planning Programs

Selecting and Adapting Interventions

Evaluating Performance

The Children's Hospital of Philadelphia® RESEARCH INSTITUTE

CENTER FOR INJURY RESEARCH AND PREVENTION

Acknowledgements

Authors

Linda Fleisher, PhD, MPH, Co-Principal Investigator

Flaura Winston, MD, PhD, Co-Principal Investigator

Katherine Halkyard, MPH, CHES, Coordinator

Emily Sykes, BS, Coordinator

Ronni Kessler, MS, Coordinator

Dominique G. Ruggieri, Ph.D, Project Consultant

Contributors

Deanna Brown, BS, Research Assistant II

Geoffrey Crankshaw, BA, BS, Project Coordinator, CTSP

Rachel Bryson, Director of Communications, American Trauma Society

Robert Mott, Program Coordinator, South Central PA Highway Safety

Funding Source

Pennsylvania Department of Transportation

Acknowledgements

The Children's Hospital of Philadelphia Advisory Board

Tara Schane, North Central Highway Safety Network

Barbara Zortman, Center for Traffic Safety, York

Geoffrey Crankshaw, NW Regional Highway Safety, Erie

Nicole Barnett, Allegheny County Health Department

Tracy Fox, North Central Highway Safety Network

Donna Ferraro, Street Smarts, Philadelphia

Chris Smith, Community Traffic Safety Project, Lycoming

Robert Mott, South Central PA Highway Safety

Lori Aguilera, Chester County Highway Safety Project

PA Department of Transportation Highway Safety Office, Bureau of Maintenance and Operations, & Press Office

Welcome! Ready to Get Started?

The goal of this Program Planning and Evaluation Guidebook is to provide Pennsylvania Community Traffic Safety Program staff with **an in-depth overview of tried-and-true program planning, implementation and evaluation methods** used by public health professionals and health educators across the globe.

This guidebook is intended to teach you the basic skills of **how to learn about your community's traffic safety issues and needs, how to leverage that information to maximize program impact**, and finally, **how to measure impact to revise programs** for the future.

This guidebook was **created specifically with teen driver safety programs in mind**, and we use teen driver safety in the examples and activities throughout.

Table of Contents

SECTION 1: PROGRAM PLANNING

Guidebook Videos Can Be Accessed on This Playlist via the CHOP Program Planning and Evaluation YouTube Channel

Table of Contents

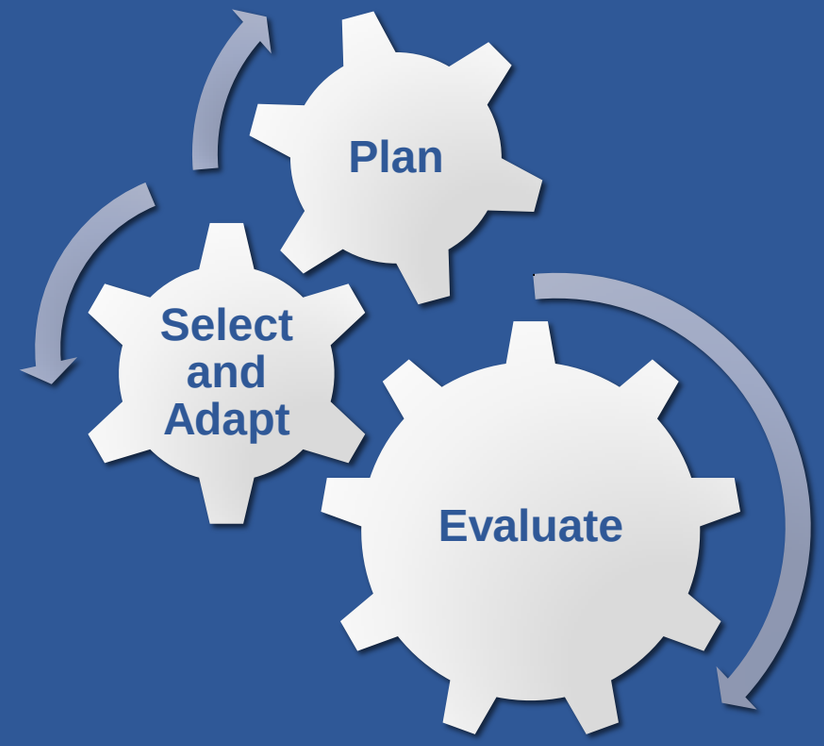
SECTION 2: SELECTING AND ADAPTING PROGRAMS AND INTERVENTIONS

Guidebook Videos Can Be Accessed on This Playlist via the CHOP Program Planning and Evaluation YouTube Channel

Table of Contents

SECTION 3: PROGRAM EVALUATION

Guidebook Videos Can Be Accessed on This Playlist via the CHOP Program Planning and Evaluation YouTube Channel



SECTION 1: PROGRAM PLANNING

Chapter 1: The Fundamentals of Program Planning

Chapter 2: Conducting a Community Needs Assessment: Part 1

Chapter 3: Conducting a Community Needs Assessment: Part 2

Chapter 4: Writing Goals and SMART Objectives for Your Traffic Safety Program

Chapter 5: Creating and Using a Program Logic Model

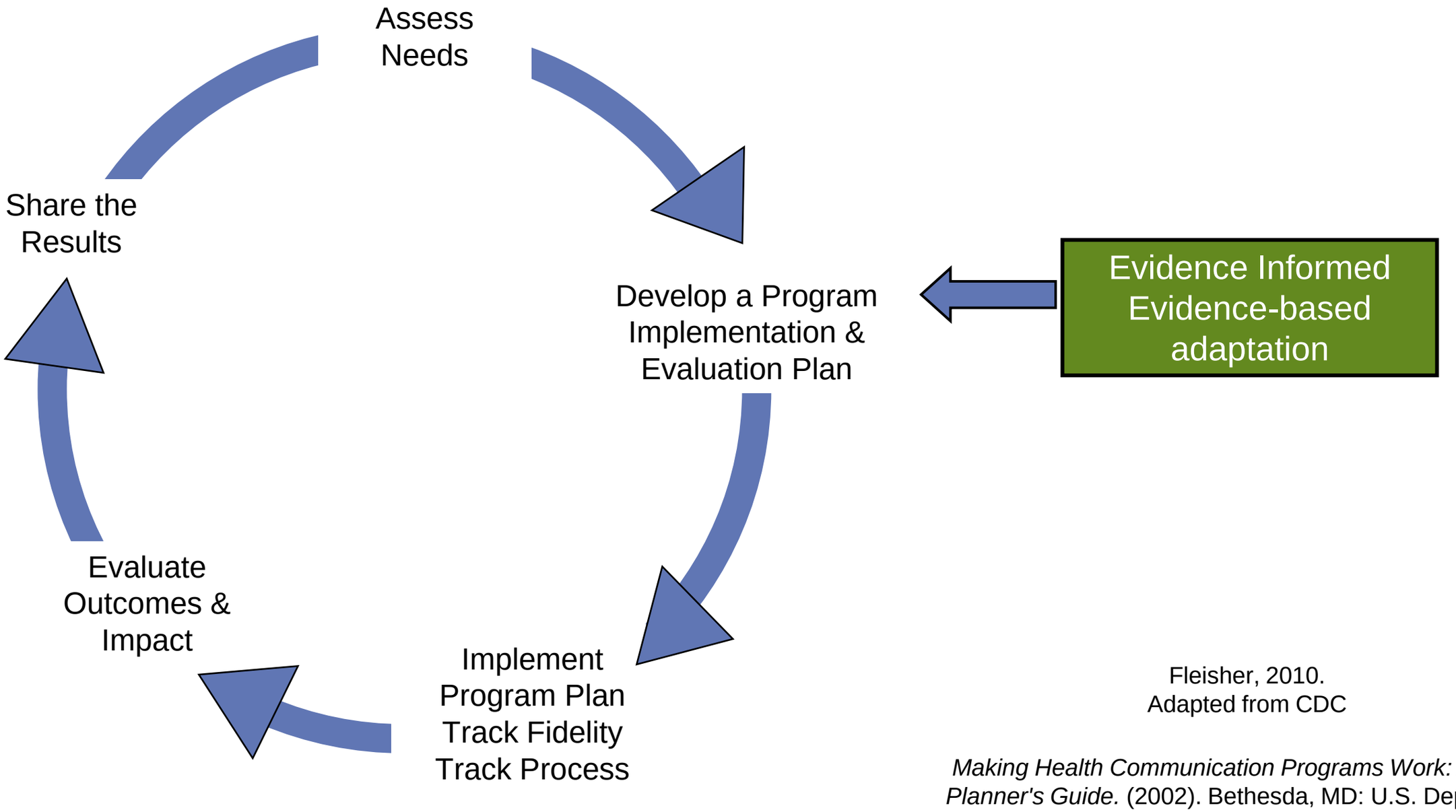
CHAPTER 1:

THE FUNDAMENTALS OF PROGRAM PLANNING

The program planning, implementation and evaluation cycle

Key concepts / stages in program planning and evaluation

Overview: The Program Planning, Implementation and Evaluation Cycle



Fleisher, 2010.
Adapted from CDC

Making Health Communication Programs Work: A Planner's Guide. (2002). Bethesda, MD: U.S. Dept. of Health and Human Services, Public Health Service, National Institutes of Health.

Key Concepts / Stages in Program Planning & Evaluation

1. What is the problem?
   - What are the issues facing your community?
2. Who is your target audience?
   - Who are those most impacted by the issues?

3. How will you solve the problem?
   - Define your program goals
4. Choose your intervention/program
   - What kind of programs will address the issue to meet your goals?
5. How will you measure progress?
   - Define your program objectives and success metrics

CHAPTER 2:

CONDUCTING A COMMUNITY NEEDS ASSESSMENT: PART 1 (STEPS 1 TO 3)

What is a needs assessment and why is it valuable and helpful?

Step 1: Analyzing the Problem

Step 2: Defining Objectives and Behaviors

Step 3: Formulating Needs Assessment Questions

Preparing to conduct a needs assessment ***(worksheet)***

Developing questions and objectives ***(worksheet)***

Starting at the Beginning

Using a Needs Assessment to Understand Issues In Your Community

- What is a need?
  - A need means something that specifically relates to a particular group or community

- What is a community needs assessment?
  - A community needs assessment is a common procedure that can help you better understand the issues faced by your community
  - It is the process of identifying, analyzing and prioritizing needs of a priority population
  - Involves collecting data from community members to understand their health problems or concern
  - The results of a needs assessment guide future action

Step 1: Analyzing the Problem

We ultimately want to address these 5 key questions:

1. What is the problem?
   - Why does it exist?
2. Who or what is causing it?
   - For whom is it a problem?
3. When did it first occur or become significant?
   - To what extent is it occurring?
4. What is currently being done to resolve identified needs? What seems to be effective?
   - Are there adequate resources available?
5. Can the problem be solved in a reasonable amount of time?

Ask yourself…

So begin by asking yourself these 3 questions:

1. What are you trying to accomplish with your program(s)?

2. How much time do you have to gather needs data?

3. What groups of people are you targeting?

Activity Break:
Preparing to Conduct a Needs Assessment

1. What do you want to learn?
2. Who do you want to hear from?
3. How will you hear from them? What methods might you use to gather input?
   - National Database
   - Survey
   - Interviews (one-on-one)
   - Focus groups (small groups of 5-10)
   - Delphi Panel (community leaders)

You will learn more about how to create needs assessment objectives and what methods to use later on.

Use This Worksheet to Help You Prepare to Conduct a Community Needs Assessment

What do you want to learn about your community?	Who do you want to hear from?	How will you hear from them? What methods might you use to gather input?
1.	1.	1.
2.	2.	2.
3.	3.	3.

Step 2a: Define Objectives

- What do you want to learn about your community related to traffic safety?
- These should be high-level objectives that you can answer with quantitative and qualitative data

Example Objectives:

1. Determine number of teens injured in distracted driving crashes and factors that contribute to crashes
2. Determine number of teens who do/do not receive formal drivers' education and how it impacts distracted driving crash rates
3. Assess teens' attitudes toward current driver safety programs offered in school that focus on distracted driving

Step 2b: Clearly Define Behavior

- Who does what behavior and under what circumstance?
- **Example for Distracted Driving:**
  - Any activity that could divert a person's attention away from the task of driving

Questions to guide you:

1. What are the advantages of ... (abstaining from distracted driving)?
2. What are the disadvantages of ...?
3. What makes it easier to ...?
4. What makes it more difficult to ...?
5. Who wants the driver to...?
6. Who does not want the driver to...?
7. How important are they to the driver?

Step 3: Formulate Needs Assessment Questions

What questions do you need answered to help you develop the best program for your community population?

Example Questions:

- How frequently does the problem occur?
- How many people are affected?
- For what amount of time are they affected?
- How severe is the effect?
- How important is the problem perceived to be by the target group?
- How important is the problem perceived to be by others?
- How likely is it that we can solve/significantly improve the problem?

Step 3: Formulate Needs Assessment Questions

Teen Driver Safety Examples

High level objective: Determine number of teens injured in distracted driving crashes and factors that contribute to crashes

Example Needs Assessment Questions for Distracted Driving Issues:

- How many teen drivers are in your community?
- What are total crash, injury, and fatality rates among these teen drivers? How have they changed over the past decade?
- Of the total crashes, how many crashes are due to distracted driving?
- What are income and education levels of families in your community? Race/ethnicity characteristics? Are certain groups of teens more at risk for distracted driving crashes?
- How many and what kind of traffic safety programs are currently available to teen drivers in your community? How many focus on distracted driving?
- How many teens are reached by traffic safety programs focused on teen driving?
- What are teens' reactions to/attitudes toward current traffic safety programs focused on teen driving?

Putting It All Together – Steps 1 - 3

<table>
<tr><th colspan="2">1) Problem</th></tr>
<tr><td colspan="2">Teens in our community are at risk for crashes caused by distracted driving.</td></tr>
<tr><th>2a) Objective</th><th>3) Needs Assessment Questions</th></tr>
<tr><td rowspan="2">Determine number of teens injured in distracted driving crashes and factors that contribute to crashes</td><td>How many teen drivers are in our community?</td></tr>
<tr><td rowspan="2">What are total crash, injury, and fatality rates among these teen drivers? How have they changed over the past decade?</td></tr>
<tr><th>2b) Behavior</th></tr>
<tr><td rowspan="3">What makes it more difficult for teens to avoid distracted driving behaviors?</td><td>Of the total crashes, how many crashes are due to distracted driving?</td></tr>
<tr><td>How many and what kind of traffic safety programs are currently available to teen drivers in your community? How many focus on distracted driving?</td></tr>
<tr><td>How many teens are reached by traffic safety programs focused on distracted driving?</td></tr>
</table>

Your Turn! Needs Assessment Steps 1 - 3

1) Problem	
2a) Objective	**3) Needs Assessment Questions**
2b) Behavior	

CHAPTER 3:

CONDUCTING A COMMUNITY NEEDS ASSESSMENT: PART 1 (STEP 4)

Step 4: Gathering Data for Community Needs Assessment

Gathering existing data

Collecting and interpreting new data

Quantitative and Qualitative methods

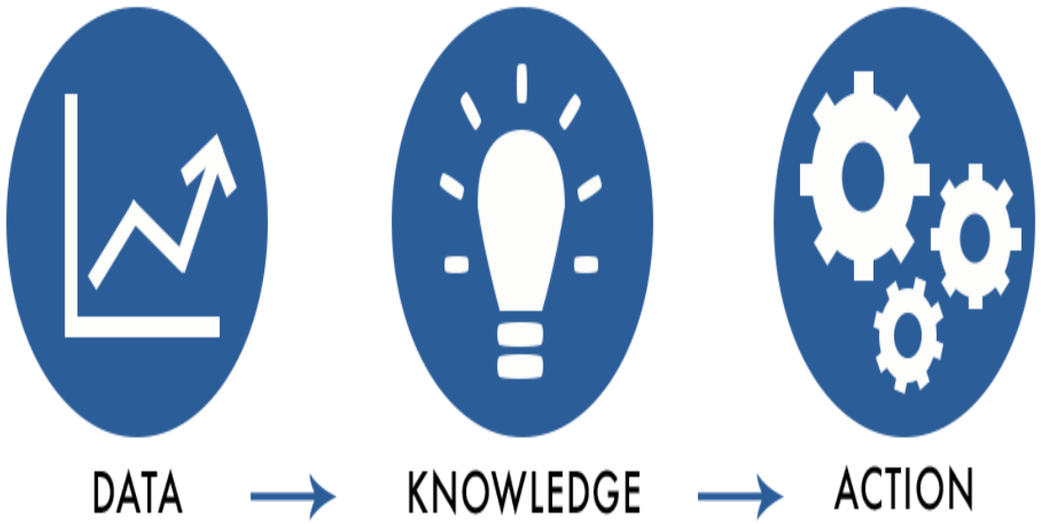
What questions will you ask to collect new data? (worksheet)

Pulling it all together – your needs assessment steps

Step 4: Gathering Data for Community Needs Assessment

- What is a key indicator or measure that will help you find information about each of your questions?

- What data sources should you use?
  - Using Existing Data
    - Information that was collected by someone else that you can analyze or re-analyze
    - This is also called “Secondary Data”
  - Collecting New Data
    - Original data that you collect and analyze
    - This is also called “Primary Data”



Using Existing Data Sources

- Review Existing Data Sources
  - What additional data do you need to answer your needs assessment questions?
- Some Helpful Existing Data Sources Include:
  - Literature Review of Reports and Peer Reviewed Articles
  - National Databases:

See the **Resource Book** for additional data resources.

NHTSA
http://www.nhtsa.gov/

Youth Risk Behavior Surveillance
http://www.cdc.gov/healthyyouth/data/yrbs/index.htm

Data from Youth Risk Behavior Surveillance
https://nccd.cdc.gov/Youthonline/App/Default.aspx

Teen Driver Source
http://www.teendriversource.org

PennDOT's Crash Data Tool
https://www.dotcrashinfo.pa.gov/PCIT/welcome.html

Motor Vehicle Safety (CDC)
http://www.cdc.gov/MotorVehicleSafety/Teen_Drivers/teendrivers_factsheet.html

Insurance Institute for Highway Safety
http://www.iihs.org/iihs/topics/t/teenagers/fatalityfacts/teenagers

CDC's WISQARS™ (Web-based Injury Statistics Query and Reporting System)
https://www.cdc.gov/injury/wisqars/

Existing Data

- Advantages
  - Makes use of what already is available
  - Can be gathered and analyzed relatively quickly
  - Easy to chart changes of issues over time
- Disadvantages
  - Indicators are often indirect (not what you are searching for directly)
  - Available information may be outdated
  - Typically quantitative results from surveys

Collecting New Data

- Collect new data
  - Survey data
    - online, paper-pencil, automated response systems
  - Key informant interviews
  - Focus group interviews
  - Community forums

Collecting New Data

- Advantages
  - Primary, current data collected from your specific community and target audience
  - Can tailor data collection methods and measurements to what you want to learn from your needs assessment
- Disadvantages
  - Needs high budgetary and staff resources
  - Requires knowledge of data collection methods and experience collecting and analyzing data

Many Ways To Gather Community Data
Quantitative Data

Quantitative methods express their results in numbers

- "How many?" or "How much?" or "How often?"
- Examples include:
  - Databases – national/state crash databases
  - National/state surveys – CDC YRBS, NHTSA Questionnaires
  - Other community or school-based surveys, research surveys

- Best for:
  - Making comparisons
  - Making a case to policy makers or community leaders
  - Tracking progress over time

Quantitative Approaches

Data Collection

- **Surveys**
- **Automatic Response Systems**
- **Structured interviews** (interviewee must choose from selection of responses)

See Chapter 12 for an entire chapter with detailed information about using Quantitative Approaches

Data Analysis

- **Excel**- convenient for basic data analysis/crunching numbers
- **SPSS**- Statistical Package for the Social Sciences
  - One of the most popular statistical packages
  - Can perform highly complex data manipulation and analysis with simple instructions

Surveys

Advantages

1. Quick and inexpensive
2. Questionnaires are usually easy to prepare
3. Contact in the information gathering process may help legitimize interventions for later implementation

Disadvantages (if not done well)

1. Information from convenience studies may be biased – age, occupation, education, income
2. Information from "providers" of services as opposed to "customers" of services may not be accurate
3. Number of informants surveyed may be too small to generalize findings to total community

Quantitative Data Collection Example

NW Regional Highway Safety Group

Student Personal Risk Assessment from Geof Crankshaw

Goal: to look at how teenagers choose to take risks

Plan: conducted an inquiry at different schools in the Erie, Crawford and Forest county areas

Who: range of rural and urban educational backgrounds

How: students were given a list of ten activities to rank from “1” (Perceived High Risk) to “5” (Perceived Low Risk)

What the Assessment Looked Like (see next slide)

- To simplify, six of the activities are cited in the table Student Personal Risk Assessment
- The horizontal rows compare the six activities of a particular group assessment while the vertical columns compare the group responses to each activity
- The higher percentage in the boxes represents a higher percentage of risk behavior

STUDENT PERSONAL RISK ASSESSMENT

RISK ACTIVITIES →	Smoking Cigarettes		Driving W/O Seatbelt		Binge Drinking		Driving while drunk		Bungee Jumping		Smoking Marijuana		
STUDENT GROUPS ↓	Group Total Rating	Percentage of Rating	Group Total Rating	Percentage of Rating	Group Total Rating	Percentage of Rating	Group Total Rating	Percentage of Rating	Group Total Rating	Percentage of Rating	Group Total Rating	Percentage of Rating	Group Maximun Rating
Corry High School 18 students July 17, 2013	24	27%	29	32%	23	26%	24	27%	62	69%	33	37%	90
Corry High School 51 students July 17, 2013	79	31%	105	41%	76	30%	63	25%	180	71%	92	36%	255
Physician Assistant (freshmen) 22 students October 3, 2013	30	27%	98	89%	28	25%	22	20%	78	71%	27	25%	110
Physician Assistant (freshmen) 37 students October 8, 2013	44	24%	150	81%	54	29%	39	21%	140	7600%	54	29%	185
Greenville High School 12 students December 13, 2013	19	32%	32	53%	20	33%	18	30%	39	65%	27	45%	60
Erie County Teen Driving Competition 34 students April 7, 2014	55	32%	54	32%	45	26%	39	23%	109	64%	53	31%	170
Crawford County Teen Driving Competition 21 students April 8, 2014	34	32%	26	25%	23	22%	21	20%	58	55%	23	22%	105
Venango & Forest County Teen Driving Competition 20 students April 9, 2014	33	33%	31	31%	24	24%	20	20%	67	67%	25	25%	100
Fort LeBouef High School 39 students April 28, 2014	67	34%	96	49%	64	33%	43	22%	119	61%	81	42%	195
Fort LeBouef High School 31 students April 29, 2014	54	35%	51	33%	54	35%	33	21%	95	61%	61	39%	155
Total Students: 285	439	31%	672	47%	411	29%	322	23%	947	66%	476	33%	1425

Activities are rated on a scale of 1 to 5.

- Rating an activity with a "1" (Low) means you consider the activity to be too risky to engage in.
- Rating an activity with a "5" (High) means you consider the risk to be worth it.

Resource: Human Relations Media; Dying High: Teens in the ER; Exercise #4, "Your Personal Risk Meter".

Human Relations Media/Your Personal Risk Meter/2003©

Quantitative Data Collection Example Student Personal Risk Assessment from Geof Crankshaw

How will Quantitative Data Contribute to Your Needs Assessment?

- Quantitative data typically answers questions like “How many?” or “How much?” or “How often?”
- This type of data compares apples to apples – everything or everyone is measured by the same standard.
- You can compare the answers of different groups or communities to each other
- This creates opportunity for relatively simple data analysis

Many Ways To Gather Community Data
Qualitative Data

- *Qualitative methods* are those that express their results in words, ideas, and concepts
  - "How?" or "Why?"
- Examples include:
  - Focus groups with teens or parents
  - Interviews with government officials
  - **EXAMPLE**: teenager's reactions to what they want to learn about in teen driver safety education programs, their behaviors

- Best for:
  - Understanding the realities of a complex issue
  - Gaining a deeper understanding of an issue
  - Establishing a personal connection with the community

Qualitative Approaches

Data Collection

- Focus Groups
- Interviews
- Community Forums
- Workshops

See Chapter 13 for an entire chapter with detailed information about using Qualitative Approaches

Data Analysis

- Face to Face
  - Using recording devices to facilitate notetaking
  - Have someone also take notes
  - Be as thorough as possible
  - Record your thoughts within 24-48 hours
  - Thematic Analysis – simple to complex

Focus Groups

Advantages

1. Relatively easy to undertake
2. Results can be obtained in a short period of time
3. Social interaction in the group produces freer and more complex responses
4. The researcher can probe for clarification and solicit greater detail
5. Responses have high face validity due to the clarity of the context and detail of the discussion

Disadvantages

1. Requires highly skilled moderator
2. Groups are often difficult to assemble
3. Individual responses are not independent of one another
4. Because the group is hand-selected, the results may not be representative of the general population

Interviews

Advantages

- Useful for gaining insight and context into a topic
- Allows respondents to describe what is important to them
- Useful for gathering quotes and stories
- Useful for when it's difficult to bring a group together (e.g. working parents)
- Some topics that are too personal for focus groups work well one-on-one

Disadvantages

- Sometimes hard to find diversity of opinions and perspectives
- Can be more time consuming in implementation
- Requires a skilled interviewer

Community Forum

Advantages

1. Inexpensive and easy
2. Input comes from a wide range of people
3. May have good public relations as well as planning benefits

Disadvantages

1. Those who attend may not be representative of total community but may represent special interest groups
2. Participants may try to use the forum as a gripe session
3. Public meeting may heighten expectations beyond what the program may reasonably expect to deliver

How Will Qualitative Data Contribute to Your Needs Assessment?

- Focus needs assessment on particular issues of concern
- Obtain fairly concrete statements about needs
- Increase awareness about agencies and services
- Informed perspective from those working "in the trenches"

Community, religious, and other leaders	Program administrators and Non-governmental organizations	Public officials
People experiencing the problem you are trying to address	Service providers (health care providers, outreach workers)	Others with expertise, such as behavioral scientists

Example Interview/Focus Group Needs Assessment Questions

- Community Issues:
  - What do you think are the top traffic safety issues in your community?
  - What do you think are the main things that cause drivers to get into car accidents?
- Barriers and Facilitators to Current/Future Initiative Success:
  - What makes it easier to deliver programs?
  - What makes it hard to deliver programs?

Example Interview/Focus Group Needs Assessment Questions

- Changes Needed to Current Initiatives:
  - What information or training do you think is most needed for drivers in your community?
    - Are there things missing from the current programs that you think need to be added?
    - Are current programs/initiatives meeting your expectations?
  - What feedback do you hear from (students/parents/teachers/community members) about traffic safety education programs?
    - What do they say about them?
    - What programs do they think they like the most?
  - How would you change the current programs to make them have more of an impact in your community?

Activity Break:
Preparing to Conduct a Needs Assessment

- What questions will you ask during interviews or focus groups?
- Here are some topic ideas:
- Traffic Safety Issues in Your Community
- Barriers/Facilitators to Behavior Change
- Feedback on Current Programs
- Barriers/Facilitators to Program Impact and Success

What questions would you ask during your interviews and/or focus groups?
1.
2.
3.
4.

Summary

Qualitative Data	Quantitative Data
• Deals with descriptions • Data can be observed, not measured • Feelings, small actions, perceptions • Qualitative → Quality	• Deals with numbers • Data which can be measured • Length, height, cost, members, age • Quantitative → Quantity
Example: Freshman Class <u>Qualitative Data:</u> • Friendly demeanors • Civic minded • Positive school spirit	**Example: Freshman Class** <u>Quantitative Data:</u> • 672 students • 394 girls, 278 boys • 18% have driver's license • 150 students have participated in traffic safety programs

Putting It All Together: Needs Assessment Steps 1 - 4

Problem				
Teens in our community are at risk for crashes caused by distracted driving				
Objective	**Question**	**Indicator/Measure**	**Data Source**	**Analysis**
Determine number of teens injured in distracted driving crashes and factors that contribute to crashes.	Of the total teen driver crashes in our community, how many crashes are due to distracted driving?	# total teen driver crashes in 1 year span # total teen driver crashes due to distraction in 1 year span # distracted/# total	State Crash Data	Quantitative - Frequencies
	How many and what kind of traffic safety programs are currently available to teen drivers in your community? How many focus on distracted driving?	List of current teen driver programs offered in schools Categorize by focus	Program portfolio	Quantitative - frequencies
	How many teens are reached by traffic safety programs focused on distracted driving?	Assessment of program records to determine program reach (# schools, # students, by county, by school type (private, public))	Program/event records	Quantitative - frequencies
	How do teens feel about current distracted driving education programs?	Attitudes/perceptions toward current programs Perceived impact of programs on teens	Focus groups with teens that had attended past programs	Qualitative – code & summarize transcripts

Your Turn! Needs Assessment Steps 1 - 4

Problem				
Objective:	**Question:**	**Indicator/Measure:**	**Data Source:**	**Analysis:**

CHAPTER 4a: WRITING GOALS AND SMART OBJECTIVES FOR YOUR TRAFFIC SAFETY PROGRAM

What are SMART objectives and how can they help your program?

How to write SMART objectives: 4 key questions to ask yourself

Defining objectives within reach

The Key to Evaluation: Defining Clear Objectives

- **SMART Objectives Approach**
  - **Specific**
    - Well defined
  - **Measureable**
    - Know if the goal is obtainable and how far away completion is
  - **Achievable**
    - Agreement with stakeholders regarding what the goals should be
  - **Realistic**
    - Within the availability of resources, knowledge and time
  - **Time-Bound**
    - Allows enough time to achieve the goal

Step 1.1 – Writing SMART Objectives

4 Key questions to ask:

1. What will change?
2. Who will experience the change?
3. How much will they change?
4. By when?

Example “SMART” Behavioral Outcome:

- By 2020 (*time*), teen drivers over 16 years old in Philadelphia (*specific – who?*) will have a 15% decrease in crashes caused by distracted driving (*measureable, achievable, realistic*).

SMART questions to ask yourself

Specific	Measurable	Achievable	Realistic	Time-Bound
Is the outcome described with strong action verbs such as conduct, develop, build, plan, or execute? Who will be involved? Did we get their input? Are actions assigned to specific people/groups? Will this outcome lead to the desired results?	How will we know that change has occurred? (What are the metrics?) How will we collect metrics?	Can it be done in the proposed timeframe? Are the limitations and constraints understood? Can we achieve this outcome with the resources available?	Do we have the resources available to achieve this outcome? Is it possible to achieve this outcome? What is the baseline for the population? Their priorities?	Over what time frame does this outcome need to be achieved? 

Adapted from the CDC

Step 1.2 – Defining Objectives Within Reach

Too Long Term? Break Them Down…

Short-term outcomes (e.g., 1-3 years)	**Intermediate-term outcomes** (e.g., 4-6 years)	**Long-term outcomes** (e.g., 7-10 years)
• Focus on changes in knowledge, awareness, attitudes, and behavioral intentions • Ex., increased awareness of risks associated with not wearing a seat belt	• Focus on changes in skills and behaviors • Ex., increased seatbelt use among teen drivers	• Focus on changes in morbidity, mortality, and quality of life • Ex., reduced crash and injury rates among teen drivers

Writing Specific Goals/Objectives For Your Program

- Program goals and objectives establish criteria and standards against which you can determine program performance

Goal	Objective
• 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. Examples: 1) Specifies the driver safety problem or teen driver safety health risk factors; 2) Identifies the target population(s) for your program → teenagers	• 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. Criteria: SMART attributes are used to develop a clearly-defined objective.

CDC (2016). Developing Program Goals and Measurable Objectives. Accessed at:http://www.cdc.gov/std/Program/pupestd/Developing%20Program%20Goals%20and%20Objectives.pdf

Goals and SMART Objectives
What Do They Look Like?

Program Goal	Reduce Teen Driver Crash Rates	
SMART Objectives	By 2020, teen drivers over 16 years old in Philadelphia will have a 15% decrease in texting and driving.	At the end of the program, at least 75% of students will acknowledge that distracted driving is dangerous.

CHAPTER 4b: SMART OBJECTIVES – YOUR TURN!

Writing specific SMART goals/objectives for your program (worksheet)

SMART Objective Exercise

- You are working on an intervention that will increase teens' awareness about the dangers of texting and driving.
- Performance Measure: proportion of students who engage in distracted driving behaviors

- *How can this be re-written to be SMART?*

  Upon completion of the texting and driving intervention *(specific, time-based)*, 80% (*realistic, achievable*) of 16 year-old adolescents *(specific)* will be able to describe at least 2 major risks associated with texting and driving *(measurable)*.

SMART Objective Exercise – Example

When it is time to define the goals and objectives for your program, this template will walk you through the process of developing ***specific, measurable, achievable, realistic, and time-based*** objectives. Once you have created the goals of your program, it is time to think about objectives and activities needed to accomplish these goals. You can use the following tables to help you develop SMART objectives to reach your goals:

GOAL: Increase teens' awareness about the dangers of texting and driving.

Not-so-SMART objective 1a: Participants will be aware of the major risks associated with texting and driving.	
Key Component	**Objective**
Specific - What is the specific task?	16 y.o. adolescents learning more about risks of texting and driving
Measurable - What are the standards or parameters?	Describe at least 2 major risks associated with texting and driving
Achievable - Is the task feasible?	Yes
Realistic - Are sufficient resources available?	Yes- program materials and instructors
Time-Bound - What are the start and end dates?	Beginning and completion of the texting and driving intervention
SMART objective 1a: Upon completion of the texting and driving intervention *(specific, time-based)*, 16 y.o.adolescents *(specific)* will be able to describe at least 2 major risks associated with texting and driving *(measurable)*.	

SMART Objective Exercise – Your Turn

When it is time to define the goals and objectives for your program, this template will walk you through the process of developing ***specific, measurable, achievable, realistic, and time-based*** objectives. Once you have created the goals of your program, it is time to think about objectives and activities needed to accomplish these goals. You can use the following tables to help you develop SMART objectives to reach your goals:

GOAL: Increase teens' awareness about the dangers of texting and driving.

Not-so-SMART objective 1a: Participants will reduce unsafe driving behaviors such as texting and driving.	
Key Component	**Objective**
Specific - What is the specific task?	
Measurable - What are the standards or parameters?	
Achievable - Is the task feasible?	
Realistic - Are sufficient resources available?	
Time-Bound - What are the start and end dates?	
SMART objective 1a:	

SMART Objective Exercise – Your Turn

When it is time to define the goals and objectives for your program, this template will walk you through the process of developing ***specific, measurable, achievable, realistic, and time-based*** objectives. Once you have created the goals of your program, it is time to think about objectives and activities needed to accomplish these goals. You can use the following tables to help you develop SMART objectives to reach your goals:

GOAL: Increase teens' awareness about the dangers of texting and driving.

Not-so-SMART objective 1a: Participants will share information about texting and driving with family and friends.	
Key Component	**Objective**
Specific - What is the specific task?	
Measurable - What are the standards or parameters?	
Achievable - Is the task feasible?	
Realistic - Are sufficient resources available?	
Time-Bound - What are the start and end dates?	
SMART objective 1a:	

CHAPTER 5:

CREATING AND USING A PROGRAM LOGIC MODEL

What is a logic model and how can it be helpful?

What does a logic model look like?

Defining your inputs, outputs, and outcomes

Designing your logic model (worksheet)

The value of revising your logic model: why to revisit, reassess, and revise

What is a Logic Model?

- Program “road map” or “compass”
- Presents a picture of how your effort or initiative is supposed to work
- Lays out what you're trying to accomplish and how

- Logic Models and evaluation:
  - Logic Models link processes to eventual effects in a clear and simple way that can be tested
  - If…, then…
    - If this program element is implemented, then an improvement in behavior can be measured

How Can a Logic Model Be Helpful?

- **Focus: clear step-wise goals**
  - What change do you hope to see, by whom, over what time period?
- **Action: tied to true outcomes**
  - **Evidence-based** “If-Then” relationships
  - Measureable outcomes help you confirm what is working or revise what isn’t working
- **Context: assess beliefs and environment**
  - What beliefs do you have?
  - What people and external factors associated with the program influence what you can do?

How Can a Logic Model Be Helpful?

- **During program planning**
  - Clarify program strategy, goals, outcomes
  - Write grant proposals
  - Set priorities, timelines
  - Identify required resources, partnerships

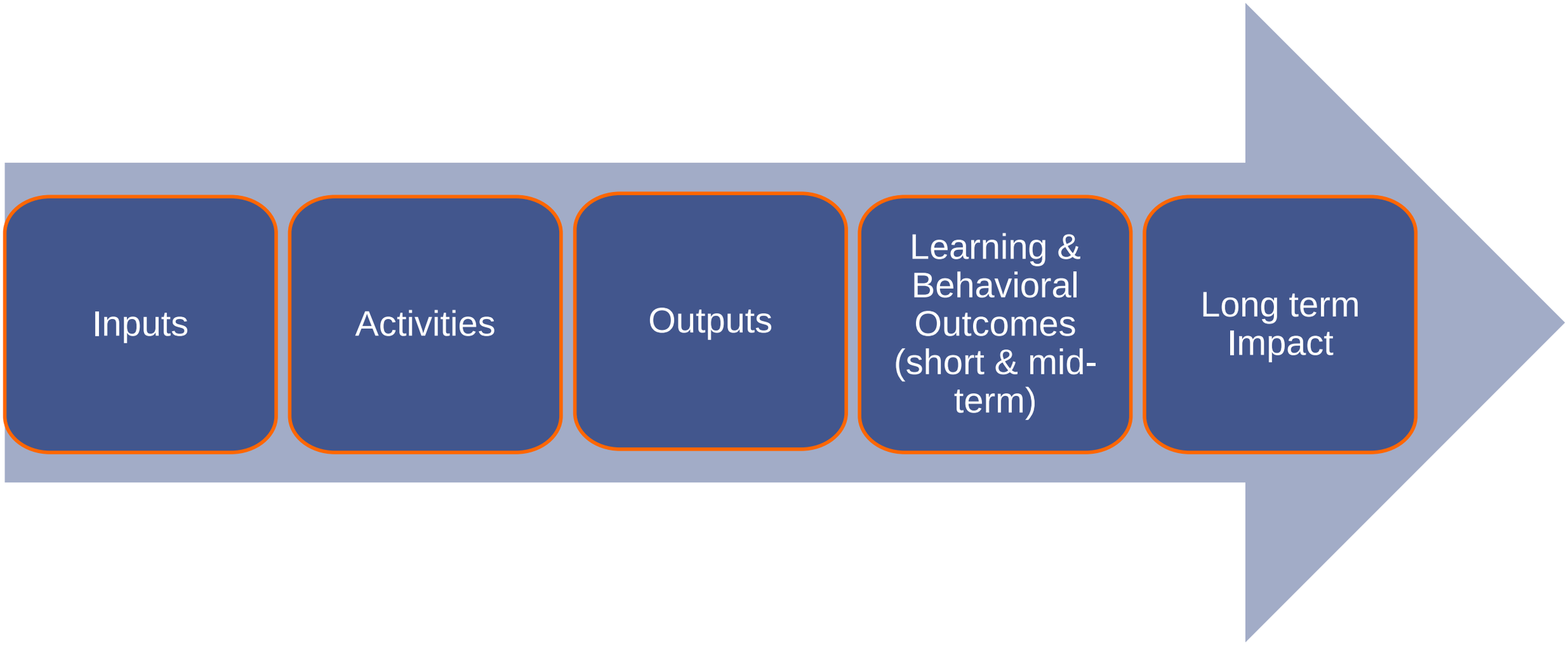
- **During program implementation**
  - Develop program resource/activity inventory
  - Make adjustments, reduce unintended effects

How Can a Logic Model Be Helpful?

- **During program evaluation**
  - Define metrics to measure accomplishments
  - Describe link between program activities and outcomes
  - Identify differences between ideal program and actual operation

- **For advocacy**
  - Tell a story about the program
  - Justify how it will work
  - Explain how resource investments will be used

What does a logic model look like?



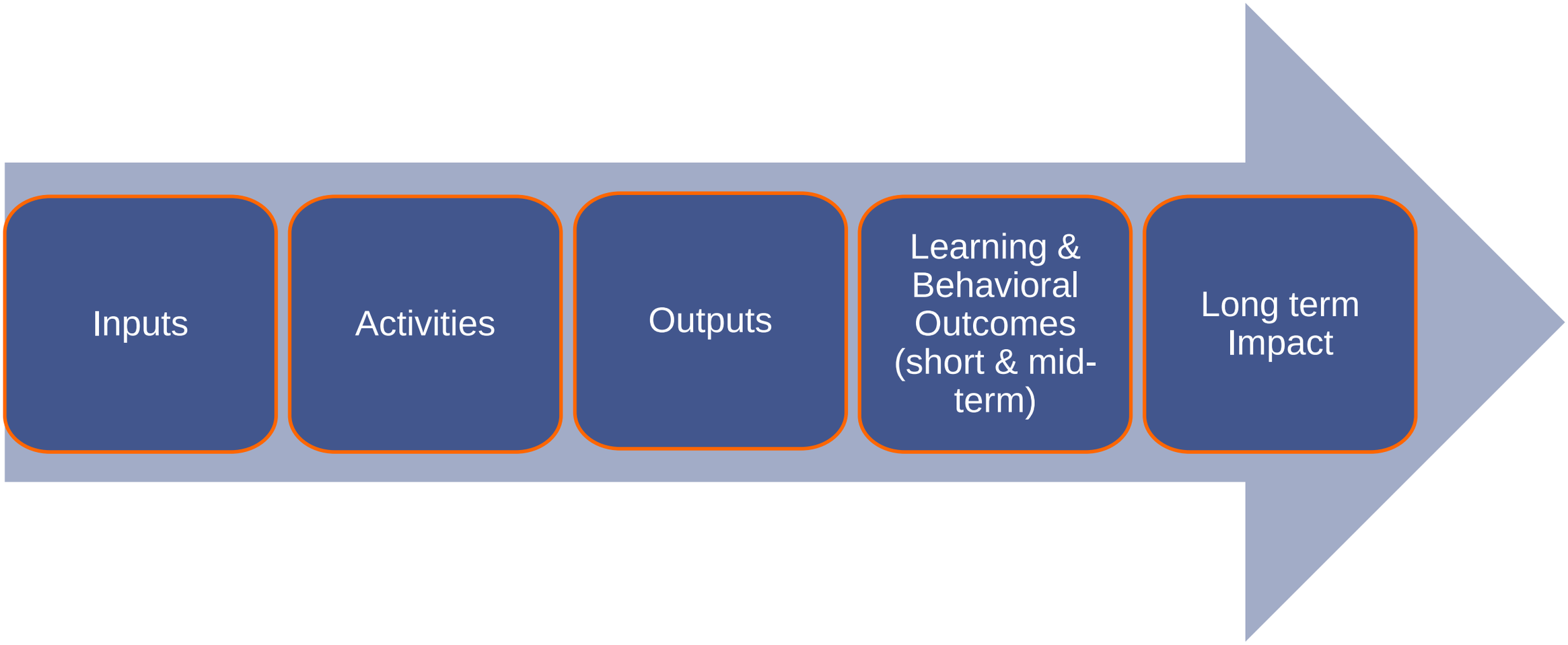
Let's take a closer look…

Process Objectives and Measures

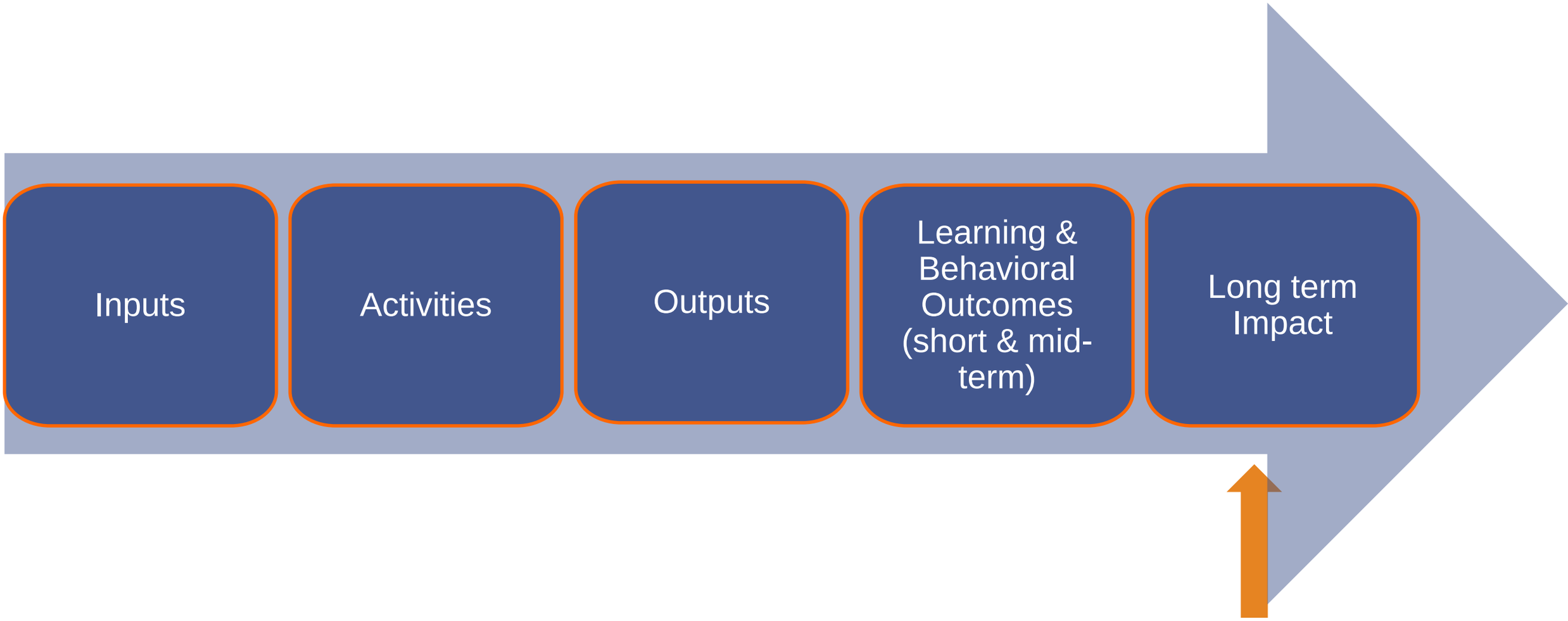
Impact & Outcome Objectives and Measures

Inputs	Activities	Outputs	Outcomes (short, mid, long-term)
Resources Needed	**Services/ Programs, What You Do**	**Products, Participation**	**Benefits for Target Population**
• Money • Staff • Community Partners • Volunteers • Equipment	• Assess • Teach • Train • Inform	• Classes taught • Sessions completed • Participants served	• New knowledge • Increased skills • Changed attitudes • Modified behavior • Improved health / quality of life

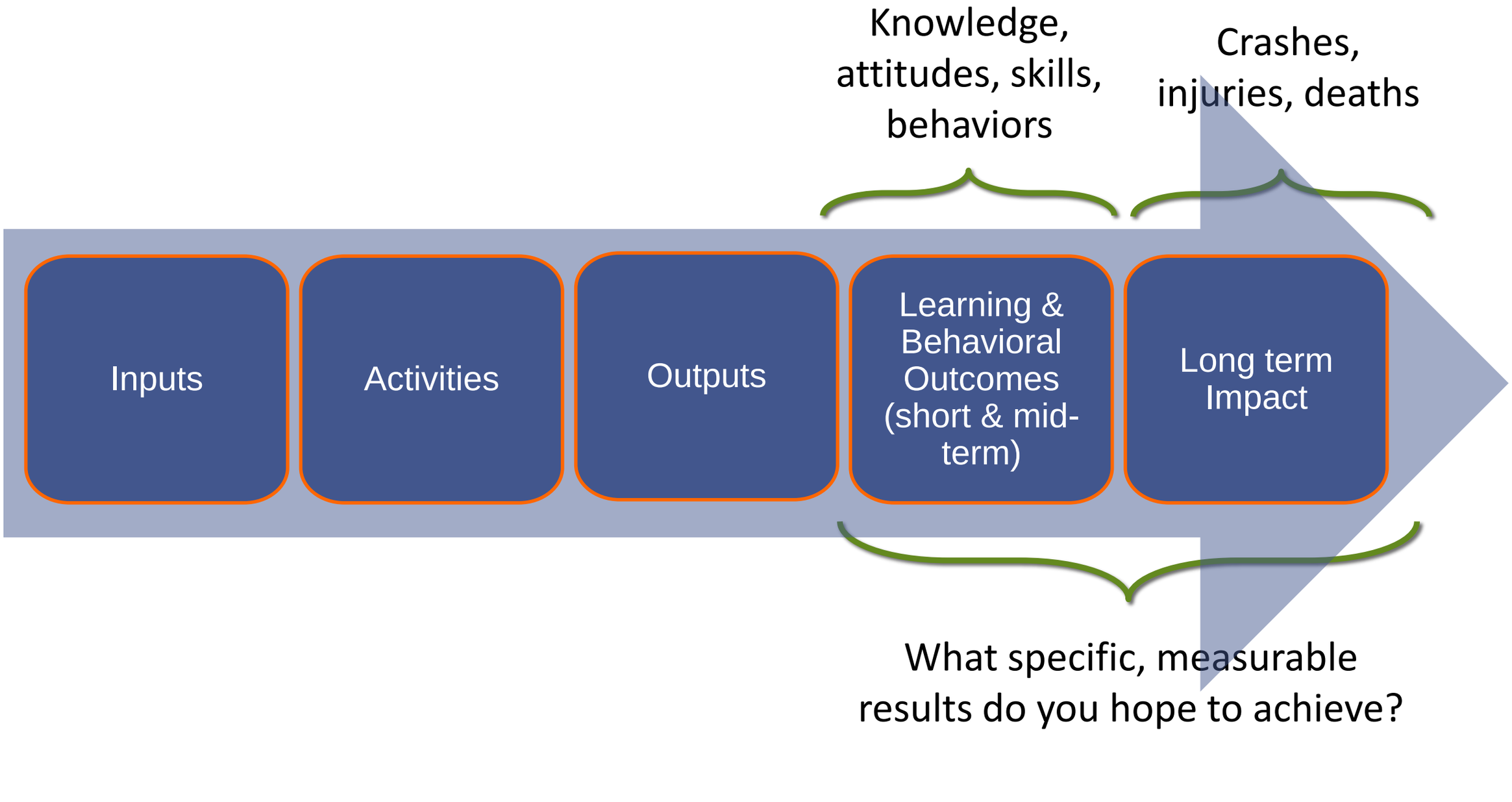
A Logic Model Moves Left To Right….



….But You Design From Right To Left



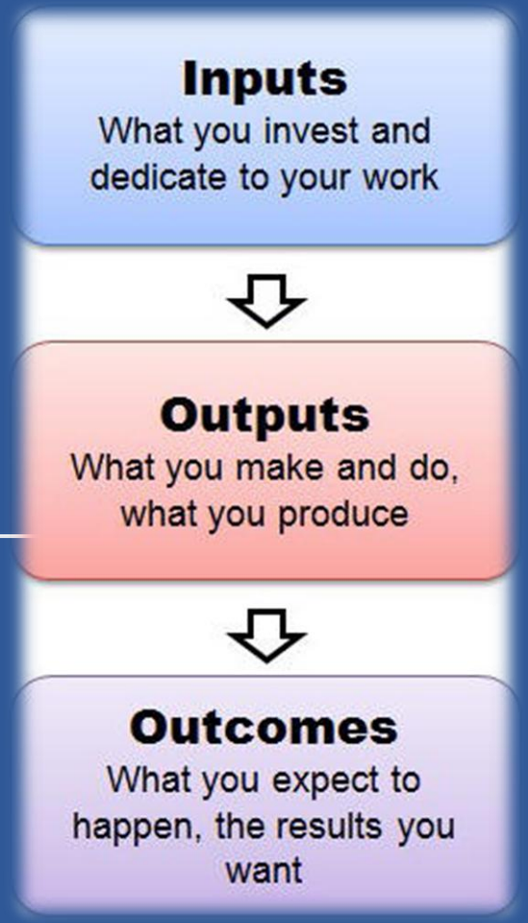
Step 1: Where Do You Want To Go? Define Key Outcomes/Objectives



Defining Inputs, Outputs and Outcomes

How can knowing these elements help you move forward in your program?

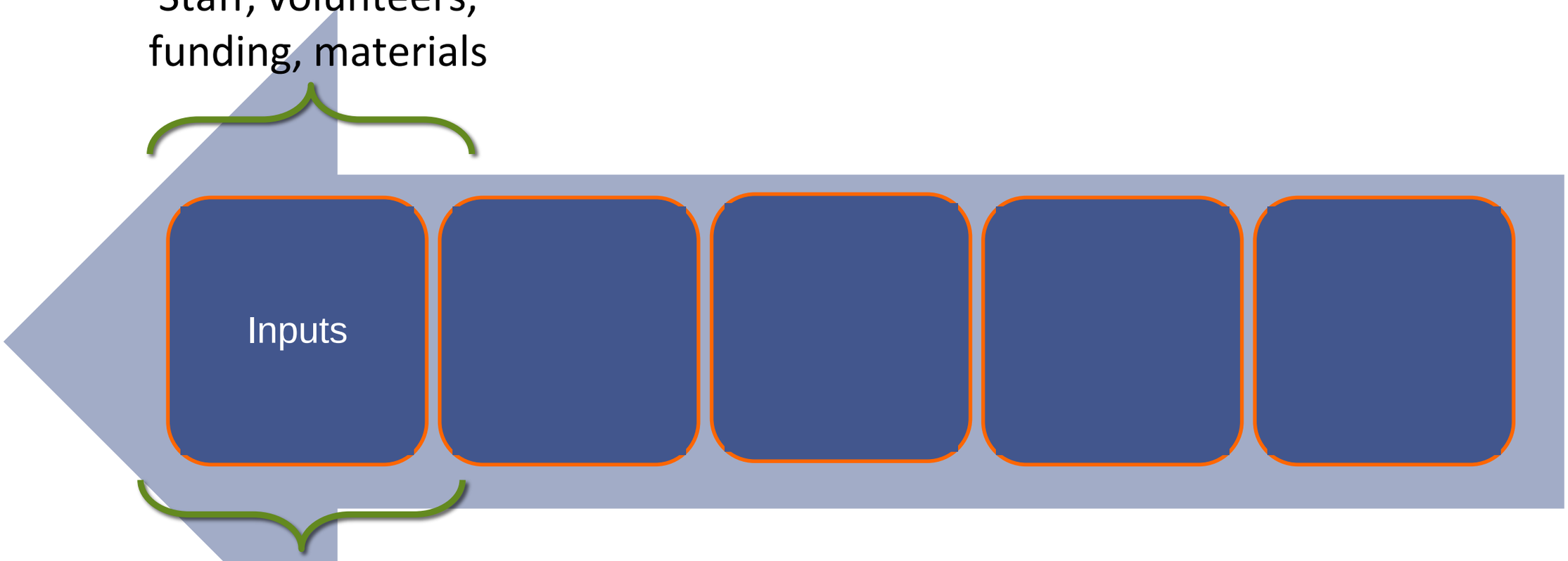
Pulling your logic model together, and preparing to modify over time



Step 2: What Do You Have To Get You There?

Take Stock of Your Resources

Staff, volunteers, funding, materials



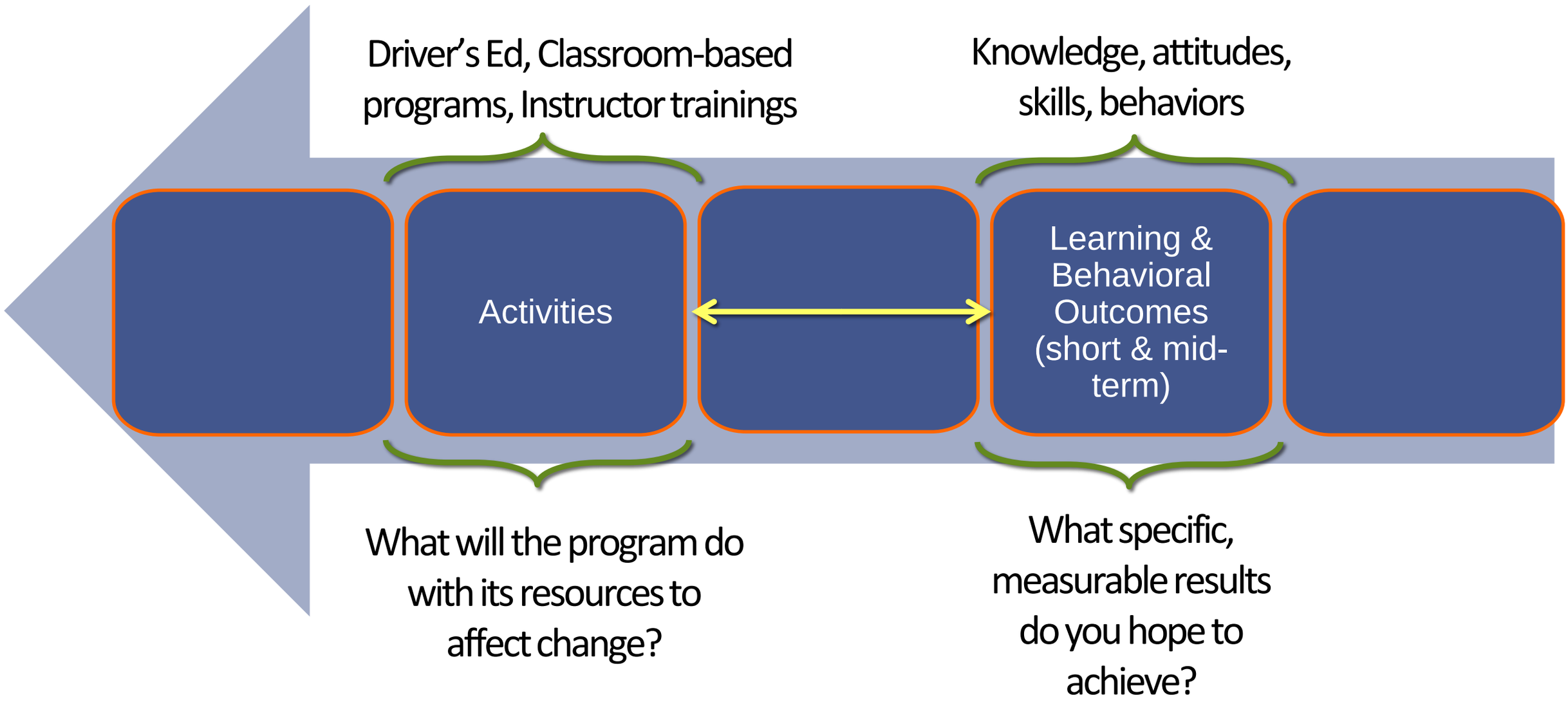
What resources or raw materials are used to conduct the program?

Inputs Drive the SMART Outcomes of your Program

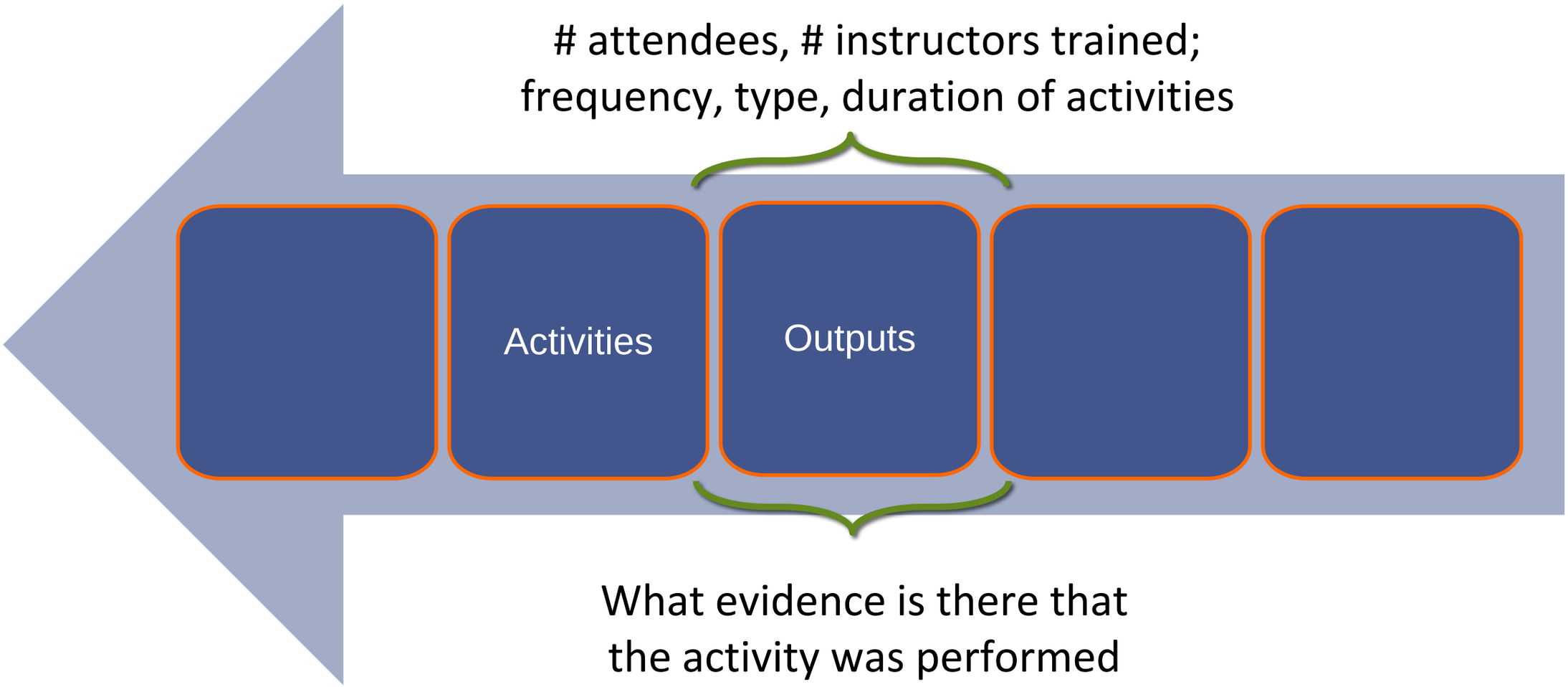
- Take stock of your available "inputs" and redefine outcomes, as appropriate
  - Funding
  - People
  - Expertise
  - Partnerships
  - Etc.

Inputs

Step 3: Define Program Activities Must be Linked to Behavioral Objectives



Step 4: Define Outputs
Meaningful Measures of Activity



Outputs = Direct Products of Program Activities

- Meaningful measures of activity fidelity
  - Was the activity conducted as intended?
  - Did it reach adequate metrics? ***Set Targets***
- Examples:
  - # Community events held
  - # Participants at a teen safe driving event
  - # Drivers' Ed instructors trained
  - # Visits to website
  - # Laws passed
  - % of Participants who report changed attitudes regarding distracted driving
  - % of Participants who demonstrate increased knowledge regarding distracted driving

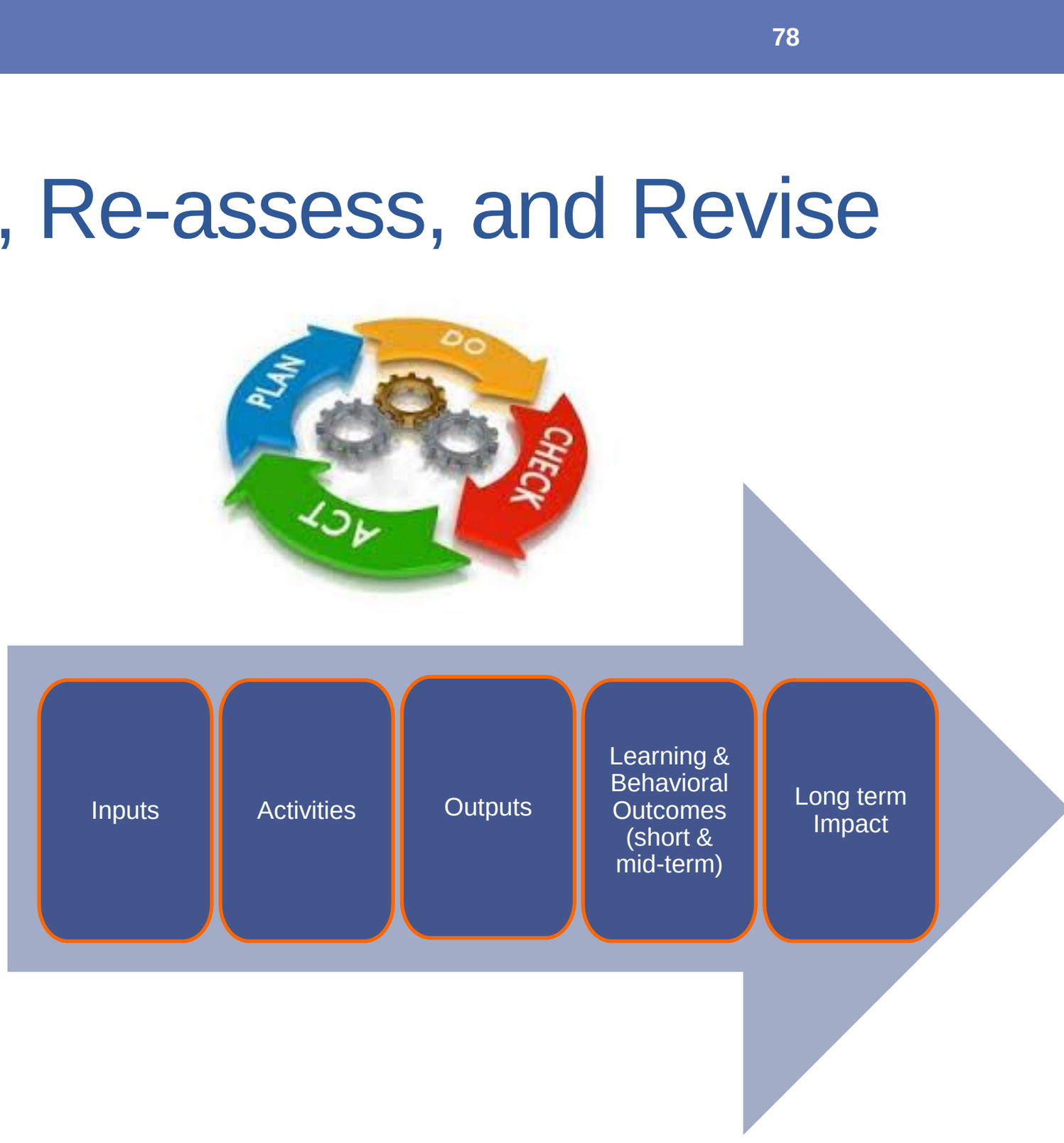
Your Turn – Designing a Logic Model

Program Goal: _____

Inputs / Resources	Activities	Outputs	Outcomes
What personnel, money, expertise, etc. are needed?	**What will you do with your program's participants?**	**What will your activity produce: data, classes, brochures, etc.?**	**What are the benefits you want participants to have as a result of your program?**

Final Step: Revisit, Re-assess, and Revise

- Does your logic model make sense? Is it complete?
- Don’t let it sit in a drawer! Modify your model over time:
  - Redefine boundaries of your program
  - Clarify or reframe outcomes
  - Elaborate links
  - Expand/modify activities



SECTION 2: SELECTING AND ADAPTING PROGRAMS AND INTERVENTIONS

Chapter 6: Choosing Community Programs and Interventions

Chapter 7: Evidence-Based Programs

Chapter 8: Program Adaptation

CHAPTER 6:

CHOOSING COMMUNITY PROGRAMS AND INTERVENTIONS

Considerations for choosing a program or intervention

Prioritizing community issues and assessing needs

How to assess for feasibility

Characteristics of successful programs

Determining if interventions done by others are appropriate for your purpose (worksheet)

Considerations for Choosing a Program/Intervention

Basic Plan for Assessment and Adaption

1. Use Your Needs Assessment to Prioritize Community Issues
2. Assess Audience Needs
3. Review Programs
4. Choose the Right Program Based on Feasibility Assessment
5. Prioritize Community Issues Based on Feasibility and Importance
6. Consider Characteristics of Successful Programs

Step 1: Use Your Needs Assessment to Prioritize Community Issues

- What is the problem?
- Does the community see it as a problem?
- Who is affected by the problem?
- Is there date to confirm the extent of the problem?

Step 2: Assess Audience Needs

- Who is the target audience? Are there multiple audiences?
- Are there unique characteristics of the audience?
- What media or community organizations might be channels?

Step 3: Review Programs

- Is there a program already developed and evaluated?
- Does it address your audience needs?
- Is it feasible?
- Are there other programs that you have heard about through colleagues?

See the **Teen Traffic Safety Program Database** for examples of programs across the nation which might be helpful for you to review and adapt.

Step 4: Choose the Right Program Based on Feasibility Assessment

- A structured process to help program planners to assess the ease of implementing a single program or to choose the most appropriate program from among several possibilities

See the **Teen Traffic Safety Program Database** for examples of programs across the nation which might be helpful for you to review and adapt.

Feasibility Factors to Consider

- Resources
- Target Population
- Organizational Climate
- Community Climate
- Evaluability
- Future Sustainability

In other words, ask yourself:

- What type of resources are needed?
- Will my organization support this?
- Do we have the expertise? If not, can we find it?

Step 5: Prioritize Community Issues Based on Feasibility and Importance

- The findings from your needs assessment can help guide which community issues you should address with a program.
- This table can help you assess the importance of an issue identified from your needs assessment vs your ability to impact change.
- Can you address a key issue and also deliver high impact?
  - If yes, then it's a fairly feasible issue to address through a program
  - If no, then you might want to consider tackling a different issue

	High Change/Feasibility	Low Change/Feasibility
High Importance	Yes	Yes, if it's important to try
Low Importance	Yes, if it is easy to do	No

Example of an Issue Prioritization Table: Teens Using Phones While Driving

	More important	Less important
More feasible or changeable	• Teens understanding risks associated with calling/texting while driving • Providing programs and resources to educate teens about these risks	
Less feasible or changeable	• History of phone use while driving/ past tickets for texting while driving	• Outlawing use of phones in cars altogether

How to Assess a Program for Potential Success

1. Select and align program components with the priorities identified in your needs assessment

2. Determine if necessary resources are available to implement and sustain program

3. Identify organizational barriers and facilitating factors that can affect program implementation

4. Identify policies that support program or need to be changed to enable program to succeed

Characteristics of Successful Programs

- Comprehensive, flexible, responsive, and persevering
- See children in the context of families
- Deal with families as parts of neighborhoods and communities
- Have a long-term preventive orientation, a clear mission, and continue to evolve over time
- Managed by competent and committed individuals with clearly identifiable skills
- Staff are trained and supported to provide high quality, responsive service
- Collaborative both internally and externally
- Generally have a set of relationships and core values that strengthen their sense of shared purpose

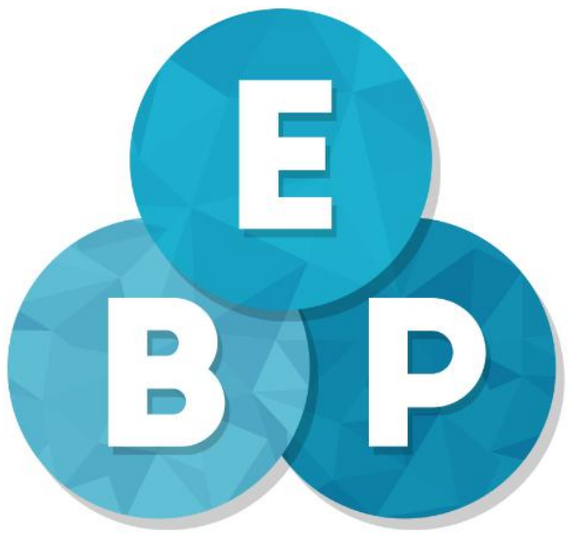
Lisbeth Schorr (1997). Common Purpose: Strengthening Families and Neighborhoods to Rebuild America (New York: Anchor Books, Doubleday)

Determining If Others' Interventions Are Right For You

What is the intervention?	
Is it appropriate for our purpose?	
Is it effective?	
Is it simple?	
Is it practical?	
Is it compatible to our situation?	
Additional Comments:	

CHAPTER 7: EVIDENCE-BASED PROGRAMS

What are evidence-based programs?
Advantages and disadvantages of evidence-based programs
Characteristics of evidence-based programs
Understanding evidence



Evidence-Based Programs: Why the Fuss?

- More federal funders are requiring program planners to use evidence-based programs
- Some consider evidence that is proven through research
- Some consider evidence that is derived from experience or practice
- The best evidence-based programs may have a combination of research and practice-based evidence

What Are Evidence Based Programs?

Diagram from Belgian Red Cross-Flanders (2013). *Annual Report -- Research and Development Strategy*

Considers the **previous circumstances** in which a program/intervention was implemented

and

the **current circumstances** in which the program is being considered for implementation

Advantages of Using Evidence-Based Programs

- Effective for the target populations
- Cost effective
- Reduce the time it takes to develop a program
- Reduce the time it takes to research a community
- Help narrow the evaluation

Disadvantages of Evidence-Based Programs

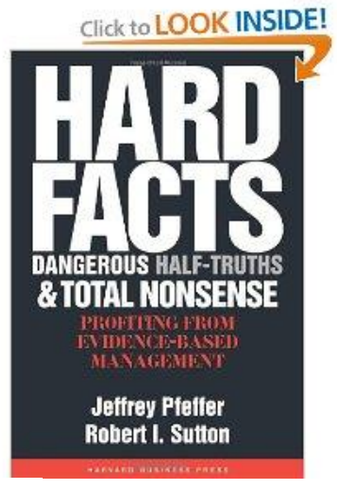
- Can limit flexibility or creativity
  - You can be creative by changing the reading level to fit your communities' needs or making the language more culturally relevant
- Can take more resources than you can afford
- Implementing evidence-based programs can be difficult
- Not always easy to find out what evidence-based programs are or where to find them

Key Characteristics of Evidence-Based Programs

- Intervention based on best possible science
- Problem solving is multidisciplinary
- Theory and systematic program planning
- Follow sound evaluation principles
- Results are disseminated to others who need to know

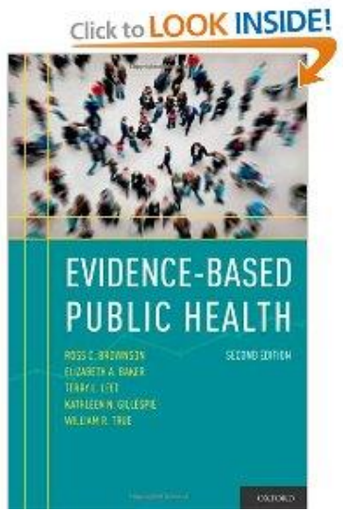
What is Evidence?

"the available body of facts or information indicating whether a belief or proposition is true or valid"



In public health practice, a collection of

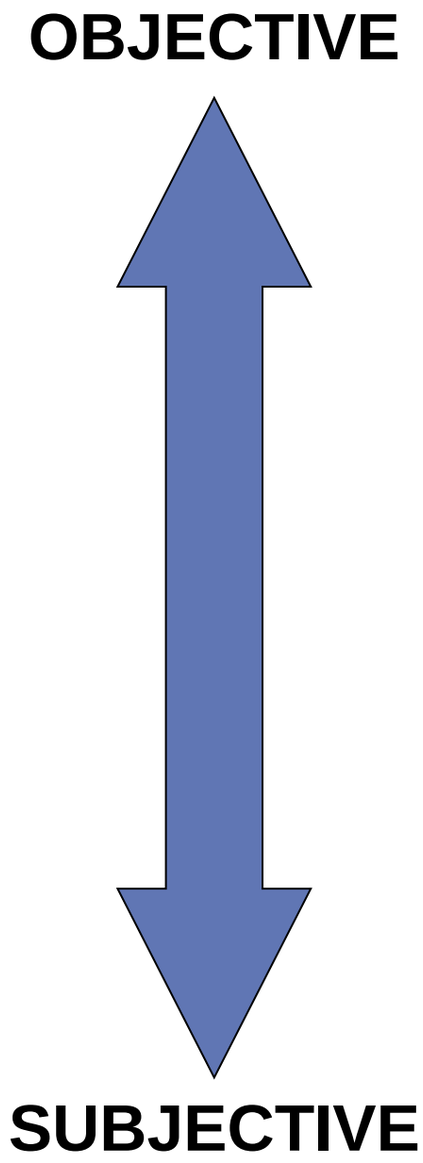
- Data or scientific evidence (guidelines)
- Input from community members
- Input from other stakeholders
- Professional experience



Brownson RC, Baker EA, Leet TL, Gillespie KN, Evidence-Based Public Health. New York: Oxford University Press; 2003

What Is Evidence?

- Surveillance Data
- Systematic Reviews of Multiple Intervention Studies
- An Intervention Research Study
- Program Evaluation
- Word of Mouth
- Personal Experience



Continuum of Evidence - *Review*

Weak Evidence

- That's the way we always did it
- The "powers that be" want this
- My gut says so

Evidence-Informed

- Determine extent of the problem – census, registry
- Review literature
- Find similar programs
- Talk to colleagues doing similar types of programs
- Talk to experts in the field
- Consensus

Evidence-Based

- Replication Studies
- Multiple Sites
- Well designed research with outcome and impact results
- Programs in Resource Guide

Evidence Based Adaptation

- Identify needed adaptations – content or delivery
- Determine level of fidelity
- Use adaptation guidelines
- Fit

Developed by Linda Fleisher, 2005

Evidence-Based Program Example

The Children's Hospital *of* Philadelphia® | RESEARCH INSTITUTE
CENTER FOR INJURY RESEARCH AND PREVENTION

TeenDrivingPlan Practice Guide

Welcome to the *TeenDrivingPlan Practice Guide* and congratulations on being serious about supervising your teen's practice driving. You are preparing your teen for an exciting and dangerous milestone – driving. High quality practice driving is critical because a major reason why teens crash is their inexperience behind-the-wheel. Research shows that drivers need a variety of practice in a wide range of driving environments to prevent them from committing dangerous driving errors. However, many teens do not get this kind of practice. To address this problem we developed the TeenDrivingPlan (TDP), a web-based intervention to help parents effectively supervise their teens' driving practice.

1. Welcome and Introduction
2. Driving Environments
3. Tip Sheet: Make the Most of the Learner Permit
4. Tip Sheet: The Intermediate Period
5. Videos

A randomized-controlled trial found that teens with families that followed the TDP program were **65% less likely** to make dangerous driving errors. These families also increased their variety of practice to boost driving performance.

The *TeenDrivingPlan Practice Guide* includes information and tools from the TDP program to help families make the most out of their practice time together:

VIDEOS

The videos help parents learn to be better supervisors. Parents learn about creating the right learning environment, specific practice activities, common errors, and signs teens are starting to get the hang of it. (You can watch the videos even before your teenager has his or her permit.) Access the videos by clicking on their images in this document or by visiting the TeenDrivingPlan Channel on YouTube.

GOALS

The Goal Guide will help remind you of your goals for each drive. A portion of the practice drives should be focused on learning a specific goal or goals. We recommend no more than three goals per driving session. You can print the Goal Guide to keep in your car or download it to an electronic device here.

LOG

The Logging and Rating Tool helps families track their practice by driving environments and record where their teens need more work. Experts agree that novice drivers need somewhere between 65 to 120 hours of supervised driving practice, but there is more to learning than just how much you practice. You can print the Logging and Rating Tool to keep in your car or download it to an electronic device here.

We recommend providing constructive and realistic feedback to your teenager for each drive. Since these conversations can be sensitive, watch these videos for parenting tips on communicating with your teen.

This Guide also includes tip sheets for Making the Most of the Learner Period and The Intermediate Period.

Disclaimer: *The content presented in TeenDrivingPlan Practice Guide is adapted from the web-based version of the TeenDrivingPlan, which is not yet publicly available. This guide is not intended to replace formal instruction by a qualified driver instructor. TeenDrivingPlan Practice Guide (2016). Center for Injury Research and Prevention, Research Institute at The Children's Hospital of Philadelphia.*

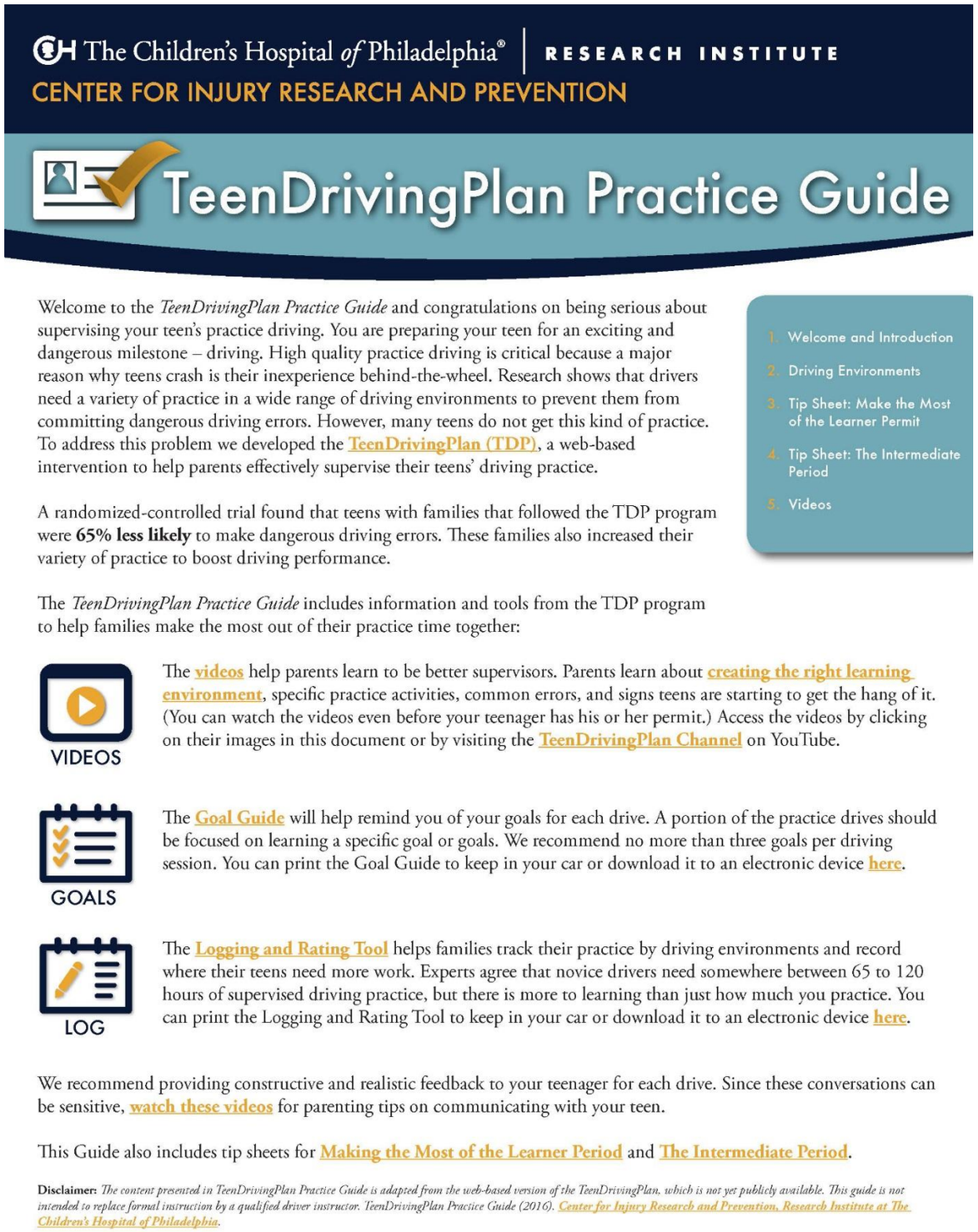
CHOP's TeenDrivingPlan (TDP) is an interactive web-based program to help parents more effectively supervise driving practice.

TDP has three components:

1. Learn
2. Plan
3. Log

This site is filled with the latest teen driver research and evidence-based strategies

Evidence-Based Program Example



The Children's Hospital *of* Philadelphia® | RESEARCH INSTITUTE
CENTER FOR INJURY RESEARCH AND PREVENTION

TeenDrivingPlan Practice Guide

Welcome to the *TeenDrivingPlan Practice Guide* and congratulations on being serious about supervising your teen's practice driving. You are preparing your teen for an exciting and dangerous milestone – driving. High quality practice driving is critical because a major reason why teens crash is their inexperience behind-the-wheel. Research shows that drivers need a variety of practice in a wide range of driving environments to prevent them from committing dangerous driving errors. However, many teens do not get this kind of practice. To address this problem we developed the TeenDrivingPlan (TDP), a web-based intervention to help parents effectively supervise their teens' driving practice.

1. Welcome and Introduction
2. Driving Environments
3. Tip Sheet: Make the Most of the Learner Permit
4. Tip Sheet: The Intermediate Period
5. Videos

A randomized-controlled trial found that teens with families that followed the TDP program were **65% less likely** to make dangerous driving errors. These families also increased their variety of practice to boost driving performance.

The *TeenDrivingPlan Practice Guide* includes information and tools from the TDP program to help families make the most out of their practice time together:

VIDEOS

The videos help parents learn to be better supervisors. Parents learn about creating the right learning environment, specific practice activities, common errors, and signs teens are starting to get the hang of it. (You can watch the videos even before your teenager has his or her permit.) Access the videos by clicking on their images in this document or by visiting the TeenDrivingPlan Channel on YouTube.

GOALS

The Goal Guide will help remind you of your goals for each drive. A portion of the practice drives should be focused on learning a specific goal or goals. We recommend no more than three goals per driving session. You can print the Goal Guide to keep in your car or download it to an electronic device here.

LOG

The Logging and Rating Tool helps families track their practice by driving environments and record where their teens need more work. Experts agree that novice drivers need somewhere between 65 to 120 hours of supervised driving practice, but there is more to learning than just how much you practice. You can print the Logging and Rating Tool to keep in your car or download it to an electronic device here.

We recommend providing constructive and realistic feedback to your teenager for each drive. Since these conversations can be sensitive, watch these videos for parenting tips on communicating with your teen.

This Guide also includes tip sheets for Making the Most of the Learner Period and The Intermediate Period.

Disclaimer: *The content presented in TeenDrivingPlan Practice Guide is adapted from the web-based version of the TeenDrivingPlan, which is not yet publicly available. This guide is not intended to replace formal instruction by a qualified driver instructor. TeenDrivingPlan Practice Guide (2016). Center for Injury Research and Prevention, Research Institute at The Children's Hospital of Philadelphia.*

The development of TDP involved:

- 5 years of formative research
- Randomized controlled trial of young drivers and their parent supervisors

Follow this link for more information:

http://www.teendriversource.org/more_pages/page/teen_driving_plan_tdp/researcher

CHAPTER 8a:
PROGRAM ADAPTATION: THE FUNDAMENTALS

Why to adapt evidence-based programs

Core components for modifying: acceptable vs. unacceptable

Why Should Evidence-Based Programs Be Adapted?

- Interventions are not always one-size-fits-all
- When the setting or the population is different, they may need to be adapted
- There are principles of adaptation and guidelines for making any adaptation successful!

"There is nothing inherently superior about any intervention method or any method of social change…

It always depends on the appropriate fit of the intervention with the person or population and their circumstances, and the delivery setting."

Green and Kreuter – Health Program Planning-an Educational and Ecological approach, 4th Edition, 2005, p.195

What Is Adaptation?

- The process or state of changing to fit new circumstances or conditions, or the resulting change
- Extent to which an innovation is changed or modified by the implementer in the process of its adoption and implementation

Rogers, 2003, Diffusion of innovations (5th ed.). New York: Free Press.

Adaptation of Evidence Based Programs: Key Terms

- **Program Adaptation:** deliberate or accidental modification of a program

- **Core Components:** elements of an approach or program that fundamentally define its nature and are most likely to account for its main effects (from theory, logic models, empirical evidence)

- **Program Fidelity:** closeness between the developed and defined components of a program and its actual implementation in a given setting

- **Program Fit:** the degree to which a program has been adapted to incorporate setting and audience characteristics in planning

What Are Core Components of a Program?

- **Program Structure and Audience:** the basic design or organization of the intervention, including:
  - the number of sessions
  - the setting
  - key descriptors of the target population (such as age or primary characteristics)
- **Content:** the type of information, learner objectives, or skill-building activities included in the program
- **Delivery:** the method used to transmit the program to the target audience

Defining the Extent of Adaptation

- What will need to be changed?
- Is it the delivery, the content, the audience?
- As you deviate from the original program, be careful of the assumptions about the outcomes

Acceptable Modifications

- Changing language – Translating and/or modifying vocabulary
- Replacing cultural references
- Modifying some aspects of activities, such as physical contact
- Adding relevant, evidence-based content to make the program more appealing to participants

O'Connor, C., Small, S.A. & Cooney, S.M. (2007). Program fidelity and adaptation: Meeting local needs without compromising program effectiveness. What Works, Wisconsin Research to Practice Series, 4. Madison, WI: University of Wisconsin–Madison/Extension.

Risky or Unacceptable Modifications

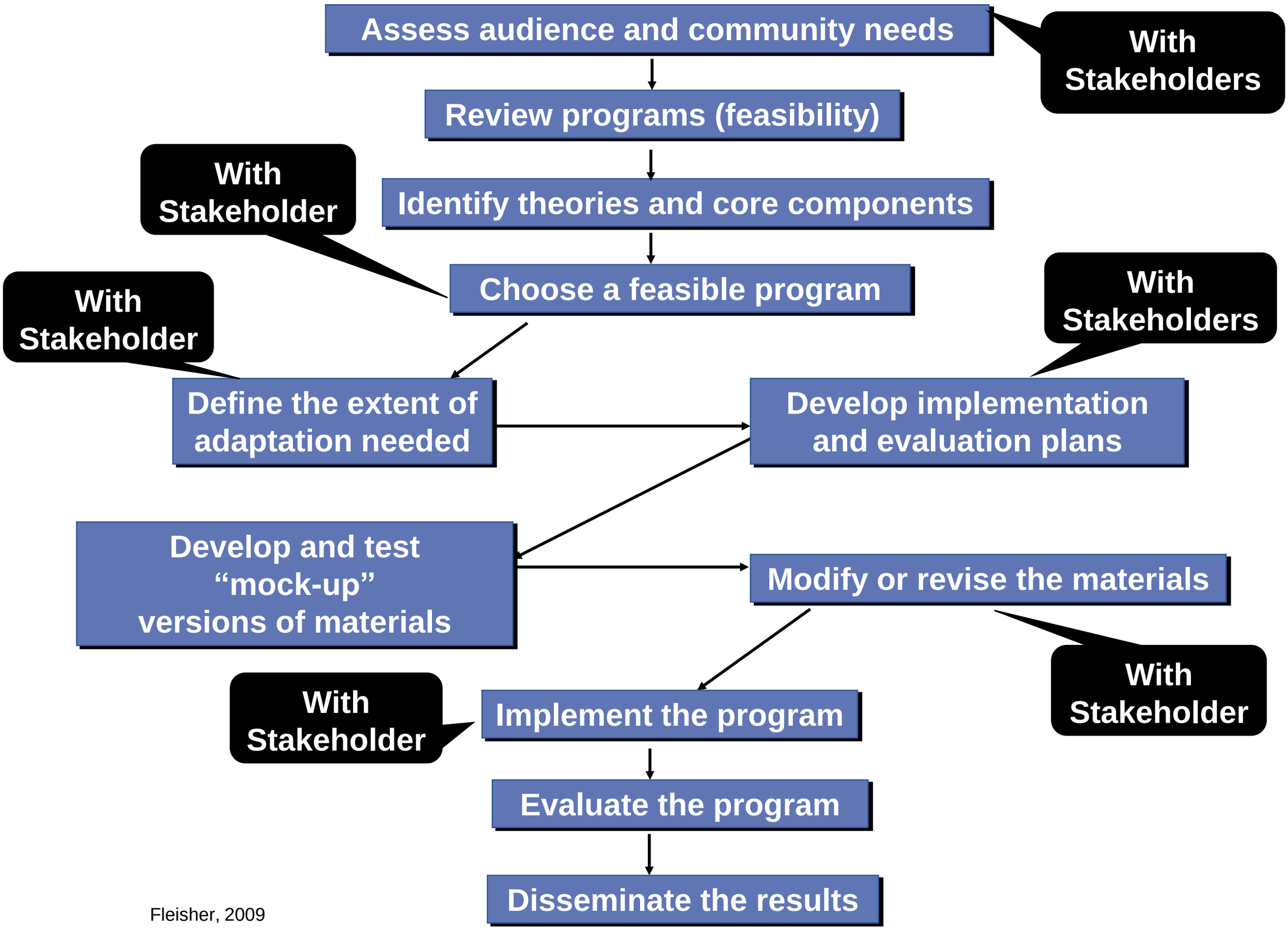
- Lowering the level of participant engagement
- Reducing the number or length of sessions
- Eliminating key messages or skills learned
- Removing topics
- Using staff or volunteers who are not adequately trained or qualified
- Using fewer staff members than recommended

Program Adaptation Checklist

- ✓ Objectives
- ✓ Approach used – concepts and theory
- ✓ Content – educational level, depth of coverage, reading level, appropriateness for audience
- ✓ Level of understanding or acceptance
- ✓ Fit with community resources
- ✓ Channels of dissemination
- ✓ Terminology used
- ✓ Fit with your audience's culture
- ✓ Intended actions

CHAPTER 8b:
PROGRAM ADAPTATION: WHAT DOES THE PROCESS LOOK LIKE?

Breaking it down step-by-step
Adaptation checklist and steps
Considerations when adapting: key questions to ask yourself
Choosing and adapting community interventions (worksheet)
Assessing program strengths and weaknesses (worksheet)



Fleisher, 2009

Adaptation Steps

1. Assess audience needs and community environment (with stakeholders)
2. Identify a program and review the original research to understand the design and implementation fully
3. Review the program with stakeholders for feedback on appropriateness
4. Define the extent of adaptation needed for the objectives, methods, and materials
5. If needed, work with health education specialists or others to ensure that the adapted program maintains fidelity to the original design

Adaptation Steps

6. Develop “mock-up” versions of the adapted products
   - Identify what needs to be changed
   - Test revised materials with audience before going into the field
7. Pilot test the adaptation with representatives from your audience
8. Modify or revise the adapted program and products based on pilot feedback
9. Implement the program
10. Evaluate the effectiveness of your adapted program and products

Considerations When Adapting: Key Questions To Ask Yourself

- What will be involved in implementation?
- How long?
- How will you know it is being implemented as intended?
- Will you have the same results as the original research? Why or why not?
- What needs to be evaluated? Process, impact and/or outcome?
- How will this be done?

Choosing and Adapting Community Interventions

Answer each of these questions to guide you through the adaptation process.	
What will be involved in implementation?	
How long will it take?	
How will you know it is being implemented as intended?	
Will you have the same results as the original research? Why or why not?	
What needs to be evaluated? Process, impact and/or outcome?	
How will this be done?	

Choosing and Adapting Community Interventions

Check off these boxes if the constructs of the program you want to adapt align with your needs	
Objectives	
Approach used – concepts and theory	
Content – educational level, depth of coverage, reading level, appropriateness for audience	
Level of understanding or acceptance	
Fit with community resources	
Channels of dissemination	
Terminology used	
Fit with your audience's culture	
Intended action	

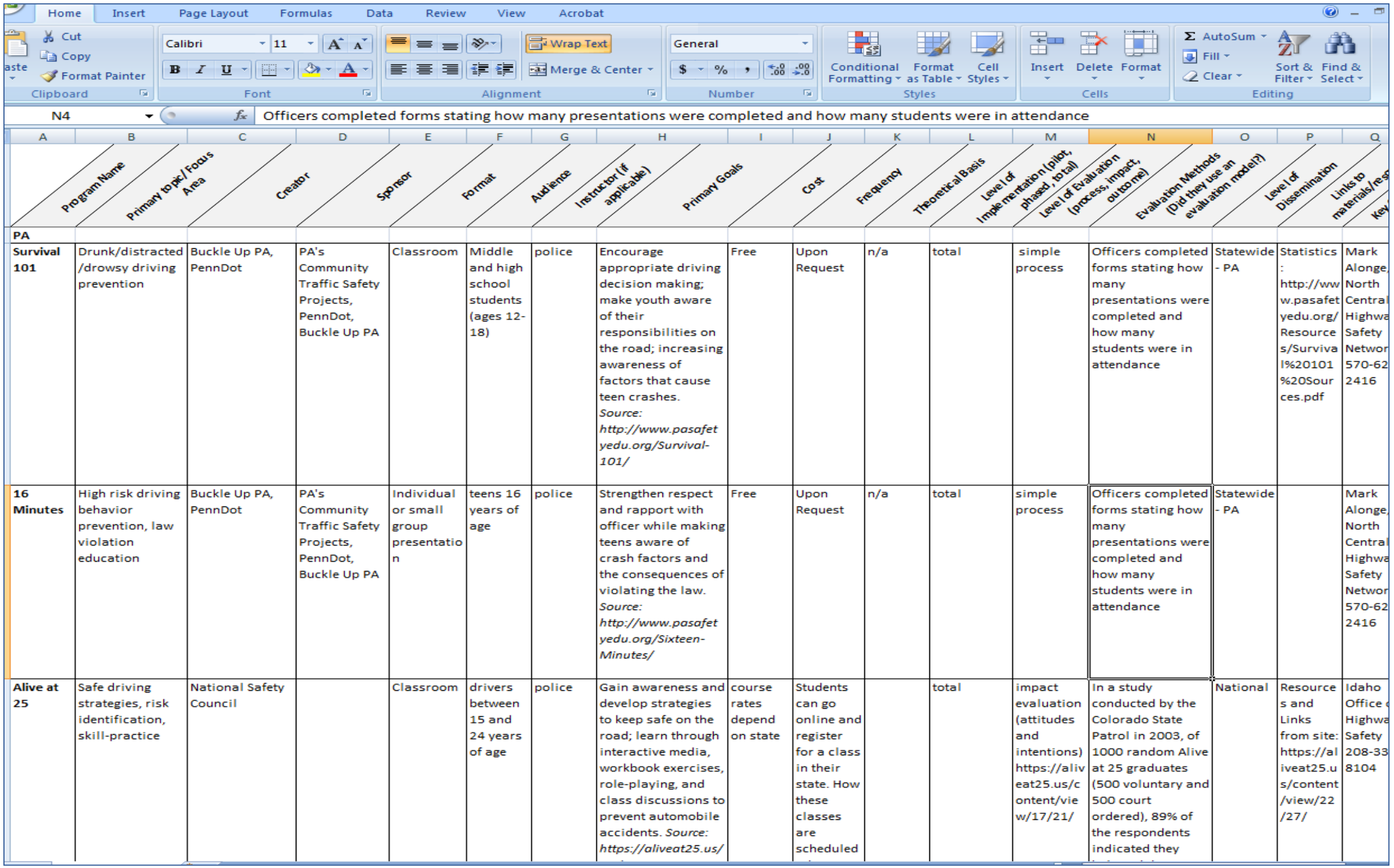
Assessing Program Strengths and Weaknesses

Assessing Program Strengths & Weaknesses Checklist	√
The goal/purpose of the program meet the following SMART goal concepts: • Specific • Measureable • Achievable • Results-focused/Relevant • Time-bound	
The program is based on a behavior change theory	
The program is consistent with the literature and/or national standards of practice for teen driver safety	
Program is age or developmentally appropriate for the target audience	
The personnel resources required to implement the program are commensurate with the resources of the intended location	
The overall costs to implement the program are commensurate with the resources of the intended location.	
The personnel resources required to implement the program are commensurate with the resources of local traffic safety organizations (CTSPs).	

Assessing Program Strengths and Weaknesses

A Research-tested intervention has the strongest level of scientific and practice-tested evidence validating a program's effectiveness, while an Emerging intervention is the weakest. Based on your overall assessment using the criteria listed above, is the program:	√
Research Tested	
• Generally based on underlying theory and/or logic	
• Efficacy/effectiveness has been tested in one or more research studies	
• There is clear intent to contribute to generalizable knowledge with a scientific protocol	
• Findings have been published in the peer review literature.	
Practice Tested	
• Generally based on underlying theory and/or logic	
• Has been evaluated in practice (impact or outcomes) but have not been tested in a more formal research study	
• Findings from studies of intervention may be published, but may not be peer reviewed.	
Emerging	
• May have process evaluation data	
• Intervention lacks underlying theory and evaluation and content may be based on current facts and statistics.	
• Lacks data from an evaluation (impact, outcome) demonstrating effects on one or more outcomes.	

Use the Teen Traffic Safety Program Database For Programs You Can Adapt



Home | Insert | Page Layout | Formulas | Data | Review | View | Acrobat

Cut | Copy | Format Painter — Clipboard

Calibri | 11 — Font

Wrap Text | Merge & Center — Alignment

General — Number

Conditional Formatting | Format as Table | Cell Styles — Styles

Insert | Delete | Format — Cells

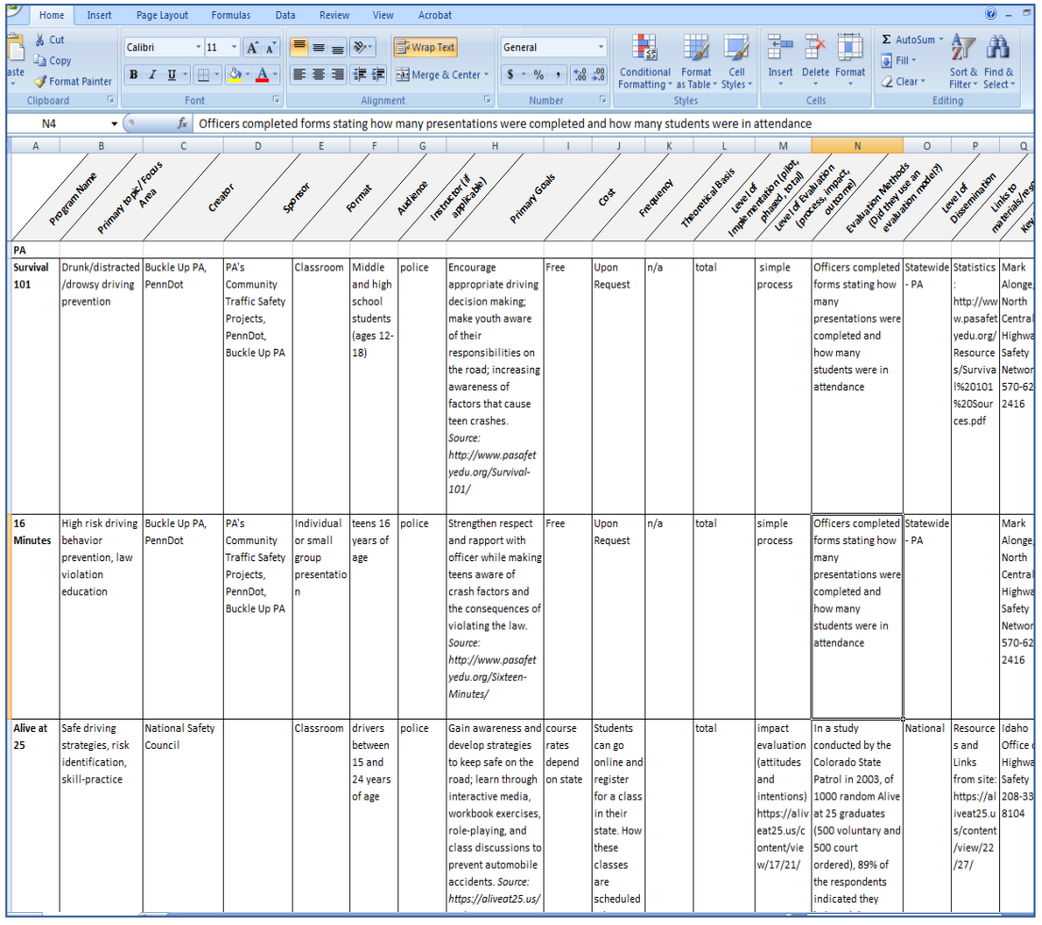
AutoSum | Fill | Clear | Sort & Filter | Find & Select — Editing

N4 | Officers completed forms stating how many presentations were completed and how many students were in attendance

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
	Program Name	Primary topic/Focus Area	Creator	Sponsor	Format	Audience	Instructor (if applicable)	Primary Goals	Cost	Frequency	Theoretical Basis	Level of Implementation (pilot, phased, total)	Level of Evaluation (process, impact, outcome)	Evaluation Methods (Did they use an evaluation model?)	Level of Dissemination	Links to materials/res	Key
	PA																
	Survival 101	Drunk/distracted /drowsy driving prevention	Buckle Up PA, PennDot	PA's Community Traffic Safety Projects, PennDot, Buckle Up PA	Classroom	Middle and high school students (ages 12-18)	police	Encourage appropriate driving decision making; make youth aware of their responsibilities on the road; increasing awareness of factors that cause teen crashes. *Source: http://www.pasafetyedu.org/Survival-101/*	Free	Upon Request	n/a	total	simple process	Officers completed forms stating how many presentations were completed and how many students were in attendance	Statewide - PA	Statistics: http://www.pasafetyedu.org/Resources/Survival%20101%20Sources.pdf	Mark Alonge, North Central Highwa Safety Networ 570-62 2416
	16 Minutes	High risk driving behavior prevention, law violation education	Buckle Up PA, PennDot	PA's Community Traffic Safety Projects, PennDot, Buckle Up PA	Individual or small group presentation	teens 16 years of age	police	Strengthen respect and rapport with officer while making teens aware of crash factors and the consequences of violating the law. *Source: http://www.pasafetyedu.org/Sixteen-Minutes/*	Free	Upon Request	n/a	total	simple process	Officers completed forms stating how many presentations were completed and how many students were in attendance	Statewide - PA		Mark Alonge, North Central Highwa Safety Networ 570-62 2416
	Alive at 25	Safe driving strategies, risk identification, skill-practice	National Safety Council		Classroom	drivers between 15 and 24 years of age	police	Gain awareness and develop strategies to keep safe on the road; learn through interactive media, workbook exercises, role-playing, and class discussions to prevent automobile accidents. *Source: https://aliveat25.us/*	course rates depend on state	Students can go online and register for a class in their state. How these classes are scheduled		total	impact evaluation (attitudes and intentions) https://aliveat25.us/content/view/17/21/	In a study conducted by the Colorado State Patrol in 2003, of 1000 random Alive at 25 graduates (500 voluntary and 500 court ordered), 89% of the respondents indicated they	National	Resources and Links from site: https://aliveat25.us/content/view/22/27/	Idaho Office Highwa Safety 208-33 8104

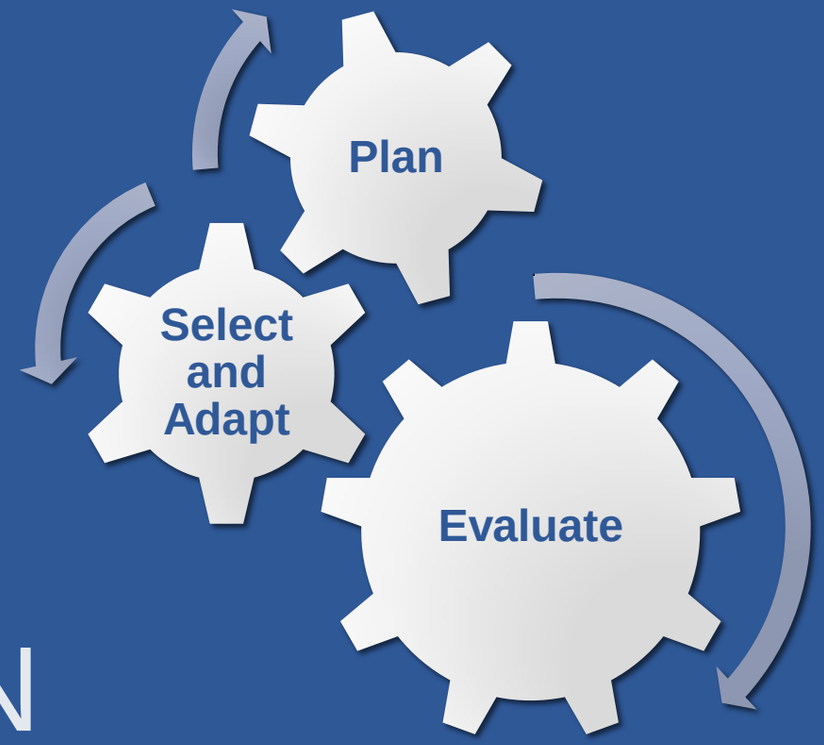
Teen Traffic Safety Program Database: What's Included For You?

- Details including, but not limited to:
  - Program type, creator, and sponsor
  - Program format and who acts as the instructor (if applicable)
  - Primary goals of the programs
  - Cost
  - Frequency
  - Level of implementation, evaluation, and dissemination
  - Links to program materials
  - Key contacts for your follow-up



N4: Officers completed forms stating how many presentations were completed and how many students were in attendance

Program Name	Primary topic/ Focus Area	Creator	Sponsor	Format	Audience	Instructor (if applicable)	Primary Goals	Cost	Frequency	Theoretical Basis	Level of Implementation (pilot, phased, total)	Level of Evaluation (process, impact, outcome)	Evaluation Methods (Did they use an evaluation model?)	Level of Dissemination	Links to materials/re
PA															
Survival 101	Drunk/distracted /drowsy driving prevention	Buckle Up PA, PennDot	PA's Community Traffic Safety Projects, PennDot, Buckle Up PA	Classroom	Middle and high school students (ages 12-18)	police	Encourage appropriate driving decision making; make youth aware of their responsibilities on the road; increasing awareness of factors that cause teen crashes. *Source: http://www.pasafetyedu.org/Survival-101/*	Free	Upon Request	n/a	total	simple process	Officers completed forms stating how many presentations were completed and how many students were in attendance	Statewide - PA	Statistics : http://www.pasafetyedu.org/Resources/Survival%20101%20Sources.pdf	Mark Alonge, North Central Highwa Safety Networ 570-622416
16 Minutes	High risk driving behavior prevention, law violation education	Buckle Up PA, PennDot	PA's Community Traffic Safety Projects, PennDot, Buckle Up PA	Individual or small group presentation	teens 16 years of age	police	Strengthen respect and rapport with officer while making teens aware of crash factors and the consequences of violating the law. *Source: http://www.pasafetyedu.org/Sixteen-Minutes/*	Free	Upon Request	n/a	total	simple process	Officers completed forms stating how many presentations were completed and how many students were in attendance	Statewide - PA		Mark Alonge, North Central Highwa Safety Networ 570-622416
Alive at 25	Safe driving strategies, risk identification, skill-practice	National Safety Council		Classroom	drivers between 15 and 24 years of age	police	Gain awareness and develop strategies to keep safe on the road; learn through interactive media, workbook exercises, role-playing, and class discussions to prevent automobile accidents. *Source: https://aliveat25.us/*	course rates depend on state	Students can go online and register for a class in their state. How these classes are scheduled		total	impact evaluation (attitudes and intentions) https://aliveat25.us/content/view/17/21/	In a study conducted by the Colorado State Patrol in 2003, of 1000 random Alive at 25 graduates (500 voluntary and 500 court ordered), 89% of the respondents indicated they	National	Resources and Links from site: https://aliveat25.us/content/view/22/27/	Idaho Office Highwa Safety 208-338104



SECTION 3: PROGRAM EVALUATION

Chapter 9: The Fundamentals of Program Evaluation

Chapter 10: Types of Program Evaluation

Chapter 11: Measuring Program Impact & Designing Evaluation Instruments

Chapter 12: Quantitative Data Collection (surveys, automated response systems)

Chapter 13: Qualitative Data Collection (interviews, focus groups)

CHAPTER 9:
THE FUNDAMENTALS OF PROGRAM EVALUATION

What is a program evaluation and why is it helpful?

Definitions – clarifying common terms in program evaluation

Top 10 reasons why program evaluation is neglected but shouldn't be by you

Fundamental questions to ask in a program evaluation

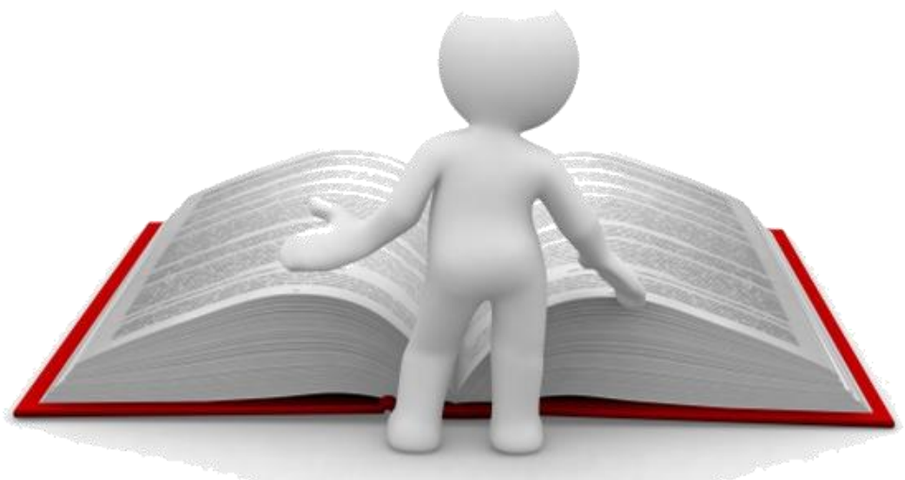
Let’s talk about evaluation…

Important questions to ask:

1. Who cares about the outcomes of your program?
2. Who is going to require the evaluation for funding?
3. What do they want to know?
4. What are the challenges you face in getting this information? In analyzing or using it?

Definitions – Clarifying the Terms

- Evaluation: the process of determining the merit, worth or value of something, or the product of that process (Scriven, 1991)
- Program Evaluation: the systematic collection of information about activities, characteristics, and outcomes of programs to make judgments about the program, improve effectiveness, and/or inform decisions about future programming (Patton, 1997)



Definitions – Clarifying the Terms

Goal: What is your overall end-goal for the program outcome?

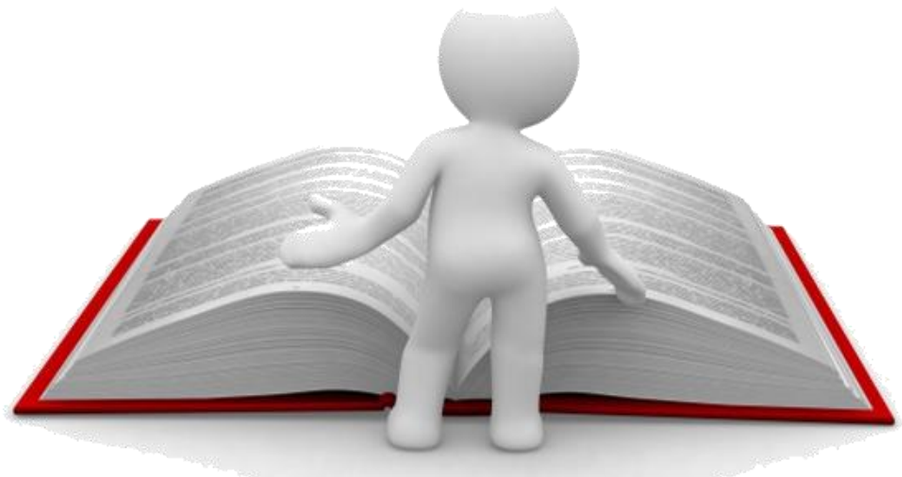
- Reduce crashes among teen drivers

Performance: What is the observable change?

- Reduce distracted driving among teen drivers

Performance Indicator: What is the benchmark?

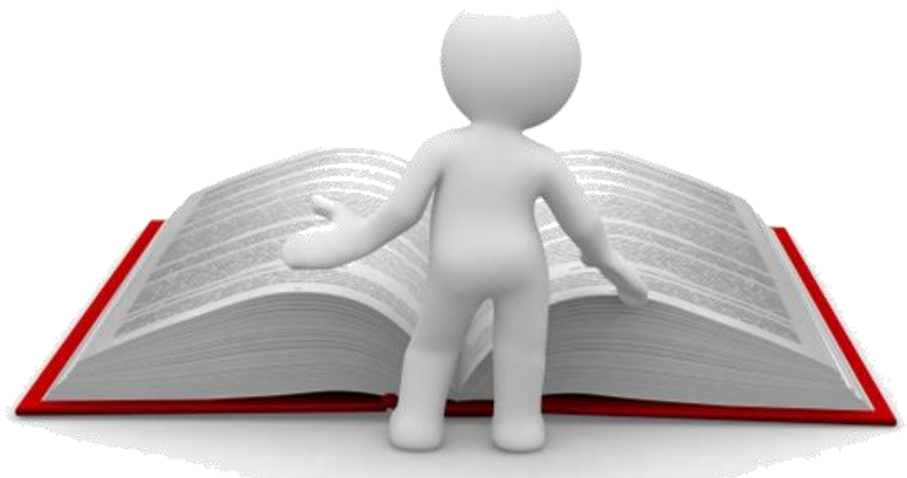
- Number of teens who report that they will not text and drive



Definitions – Clarifying the Terms

- **SMART Objective:** What specific measureable goal(s) do you want your program to accomplish?
  - At the end of 2017, there will be a 20% increase in teens who report that they will not text and drive after receiving the educational program.

- **Measurement:** What metric(s) will you use to measure your program's progress?
  - Conduct pre/post test using standardized items on knowledge and behavioral intentions



Reasons Evaluation is Neglected

1. No one asked for it
2. Previous experiences were a disaster
3. Leaders think they already know what works
4. Perceived costs outweigh the perceived benefits
5. Organizational members view evaluation as time consuming and laborious
6. Organizational members don't believe the results will be used
7. Evaluation is considered an add-on activity
8. There is a real or perceived lack of evaluation skills
9. Organizational members fear the impact of the evaluation findings
10. Organizational members misunderstand evaluation's purpose and role

Russ-eft & Preskill, 2001

Top 3 Ways Program Evaluation Can Help You Immediately:

1. **Know whether your program makes a difference**

2. **Make the best use of scarce resources**

3. **Lead to policy changes and support with data-driven information**

Program Evaluation Can Also Help You:

- Determine **who** is best served by your program and **who else** needs to be reached
  - Individual, family, group, school, community, etc.
- Determine **what** are the key elements of your program
  - Which aspects are most helpful, least helpful, harmful in leading to change
- Determine **where** and **when** the program is best delivered
- Determine **why** program is important – important for fundraising/coalition building
  - Costs versus benefits of the program
- Determine **how** to best deliver the program
  - Increase program participation, improve implementation plan

Developing Evaluation Questions

- What do you want your project to accomplish?
- How will you know if you accomplished your goals?
- What activities will your project undertake to accomplish your goals?
- What factors might help/hinder you reaching your goals?
- What will you want to tell others about your project?

Standard Questions to Ask About a Program Include:

- Does it work?
- How does it work?
- Why does it work?
- For what groups does it work?
- Under what conditions does it work?
- What attributes make it work?
- How do benefits compare with costs?
- Can it be replicated?

Another Way to State Evaluation Objectives – In Terms of Change:

- Source of the change? – intervention(s)
- Who will change? – participants, organization
- What will change? – knowledge, attitudes, intentions, behaviors, policies
- When will it change? – after education, 6 months, 2 years?
- How will it change? – reported change in attitudes, intent, increased use of . . .
- How much will it change? – 20% increase in . . . 75% will report that . . .
- How long will the change last? – over a one year period, participants will . . .

CHAPTER 10:
TYPES OF PROGRAM EVALUATION

Types of program evaluation: formative, process, impact, outcome

Focusing your evaluation design

Different designs for impact and outcome evaluation – what are the options?

Performing Program Evaluation

- Why is evaluation important?
  - Because it can greatly improve the management and effectiveness of your organization and it's programs

- What are the different types of evaluation?
  - Formative
  - Process
  - Impact
  - Outcome

CDC. (2016). Types of Evaluation. Accessed at: http://www.cdc.gov/std/Program/pupestd/Types%20of%20Evaluation.pdf

Performing Program Evaluation

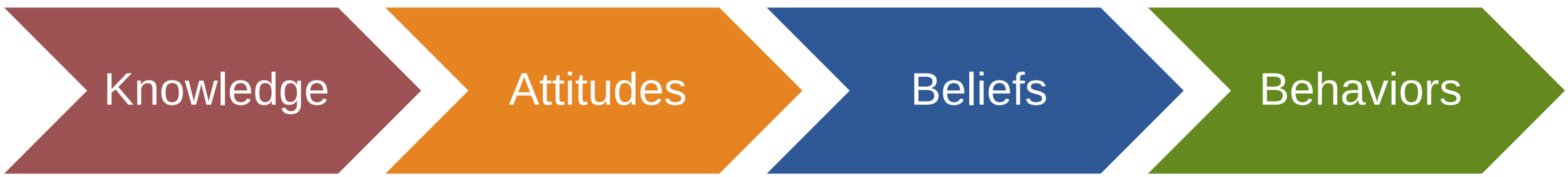
Evaluation Type	When To Use	What It Shows	Why Is It Useful?
Formative Evaluation (Needs Assessment)	During the development of a new program When an existing program is being modified or is being used in a new setting or with a new population	Whether the proposed program elements are likely to be needed, understood, and accepted by the population you want to reach The extent to which an evaluation is possible, based on the goals and objectives	It allows for modifications to be made to the plan before full implementation begins Maximizes the likelihood that the program will succeed
Process Evaluation (Program Monitoring)	As soon as program implementation begins During operation of an existing program	How well the program is working The extent to which the program is being implemented as designed Whether the program is accessible and acceptable to its target population	Provides an early warning for any problems that may occur Allows programs to monitor how well their program plans and activities are working
Impact Evaluation (Objectives-Based Evaluation)	After the program has made contact with at least one person or group in the target population	The degree to which the program is having an effect on the target population's behaviors	Tells whether the program is being effective in meeting it's objectives
Outcome Evaluation	During the operation of an existing program at appropriate intervals At the end of a program	The degree to which the program meets its ultimate goal (i.e., number of teen driver crashes reduced)	Provides evidence for use in policy and funding decisions

Focusing the Evaluation Design

- Consider purpose (formative, process, impact, outcome?)
- Consider the budget
- Identify who will want to see or use the results of the evaluation
- Choose Your Evaluation Methods:
  - Qualitative (focus groups, minutes, logs, etc.)
  - Quantitative (pre-experimental, quasi-experimental, experimental designs)

Impact and Outcome Evaluation

- Short-term or long-term effects on knowledge, attitudes, beliefs, behaviors
- Probably more realistic endpoints for most public health programs and policies
- Uses quantitative or qualitative data
- Fidelity – how similar are the results to the original program (if adapted)?



Outcome Evaluation Designs

Evaluation Design	Major Limitations
Randomized Experiment • Members of intended audience are randomly assigned to either the program (intervention group) or not (control group) • Usually, the same series of questions is asked pre- and post intervention • Differences between the two groups show program effects	• Less generalizable or have low external validity because of tight controls on program delivery and participant selection • Delivery during the evaluation may differ significantly from delivery when the program is widely implemented • Difficult to maintain integrity of intervention and control groups; group members may leave the groups at different rates of attrition • Often costly and time-consuming • May deprive the control group of positive benefits of the program
Quasi-Experiment • Members of the intended audience are split into control and intervention groups based simply upon who is exposed to the program and who is not	• Same as randomized experiments • Difficult to conclude that the program caused the observed effects because other differences between the two groups may exist
Before-and-After Studies (AKA Pre and Post Studies) • Information is collected before and after intervention from the same members to identify change from one time to another	• Difficult to say with certainty that the program (rather than some unmeasured variable) caused the observed change

Outcome Evaluation Designs

Evaluation Design	Major Limitations
Independent Cross-Sectional Studies • Information is collected before and after intervention, but it is collected from different intended audience members each time	• Cannot say with certainty that the program caused any observed change
Panel Studies • Information is collected at multiple times from the same members • When intended audience members are differentially exposed to the program, this design helps evaluators sort out the effects of different aspects of the program or different levels of exposure	• Generalizability may be compromised over time as participants age, leave, or respond to repeated questions on the same subject, they may no longer closely represent the intended audience • Can be difficult to say with certainty that the program caused the observed change
Time Series Analysis • Pre- and post intervention measures are collected multiple times from members • Use the pre-intervention data points to project what would have happened without the intervention and then compare the projection to what did happen using the post intervention data points	• Large number of pre- and post intervention data points are needed to model pre- and post intervention trends • Normally restricted to situations in which governmental or other groups routinely collect and publish statistics that can be used as the pre- and post intervention observations

CHAPTER 11:

MEASURING PROGRAM IMPACT AND DESIGNING EVALUATION INSTRUMENTS

- Performance measures or key performance indicators
- Choosing which performance measures are right for teen driver programs and which might be right for you to evaluate
- Quantitative & Qualitative methods for your evaluation
- Pulling it all together – examples of questions you might include in an evaluation for distracted teen driving

Choosing Performance Measures or Key Performance Indicators

- Performance measures are used for several different purposes:
  - Set specific goals
  - Connect goals to actions
  - Allocate resources
  - Monitor and evaluate progress
  - Communicate the priorities, results, and the value to society of various traffic safety program areas and activities

- You can use performance measures to track progress of your program over time; compare (across sites, across programs)

You May Be Familiar With These….

Traffic Safety Facts

Traffic Tech – Technology Transfer Series

NHTSA www.nhtsa.gov

Number 374 April 2009

Traffic Safety Performance Measures for States and Federal Agencies

Several types of performance measures were developed to satisfy different needs:

- *Outcome measures* – used to set national and State goals, allocate resources and measure overall progress (may include crashes, injuries, or fatalities, and may be presented as numbers, rates, percentages, or ratios);
- *Behavioral measures* – provide a link between specific activities and outcomes by assessing whether the activities have influenced behavior (may include observed behavior on the road such as direct observations of seat belt use or vehicle speed, or self-reported behavior, program awareness, and attitudes obtained through surveys); and
- *Activity measures* – document program implementation and measure specific actions taken to reduce crashes, injuries and fatalities (a variety of actions taken by law enforcement, courts, media, education, and others).

Core Measures	Description	Data Sources
C-1	Number of traffic fatalities (3-year or 5-year moving averages)	FARS
C-2	Number of serious injuries in traffic crashes	State crash data files
C-3	Fatalities/VMT (including rural, urban, and total fatalities)	FARS, FHWA
C-4	Number of unrestrained passenger vehicle occupant fatalities, all seat positions	FARS
C-5	Number of fatalities in crashes involving a driver or motorcycle operator with a blood alcohol concentration of .08 g/dL or higher	FARS
C-6	Number of speeding-related fatalities	FARS
C-7	Number of motorcyclist fatalities	FARS
C-8	Number of unhelmeted motorcyclist fatalities	FARS
C-9	Number of drivers 20 or younger involved in fatal crashes	FARS
C-10	Number of pedestrian fatalities	FARS
B-1	Observed seat belt use for passenger vehicles, front seat outboard occupants	Survey
A-1	Number of seat belt citations issued during grant-funded enforcement activities	Grant activity reporting
A-2	Number of impaired-driving arrests made during grant-funded enforcement activities	Grant activity reporting
A-3	Number of speeding citations issued during grant-funded enforcement activities	Grant activity reporting

C = Core measures; B = Behavioral measure; A = Activity Measures

What Are Some Performance Measures For Teen Driver Programs?

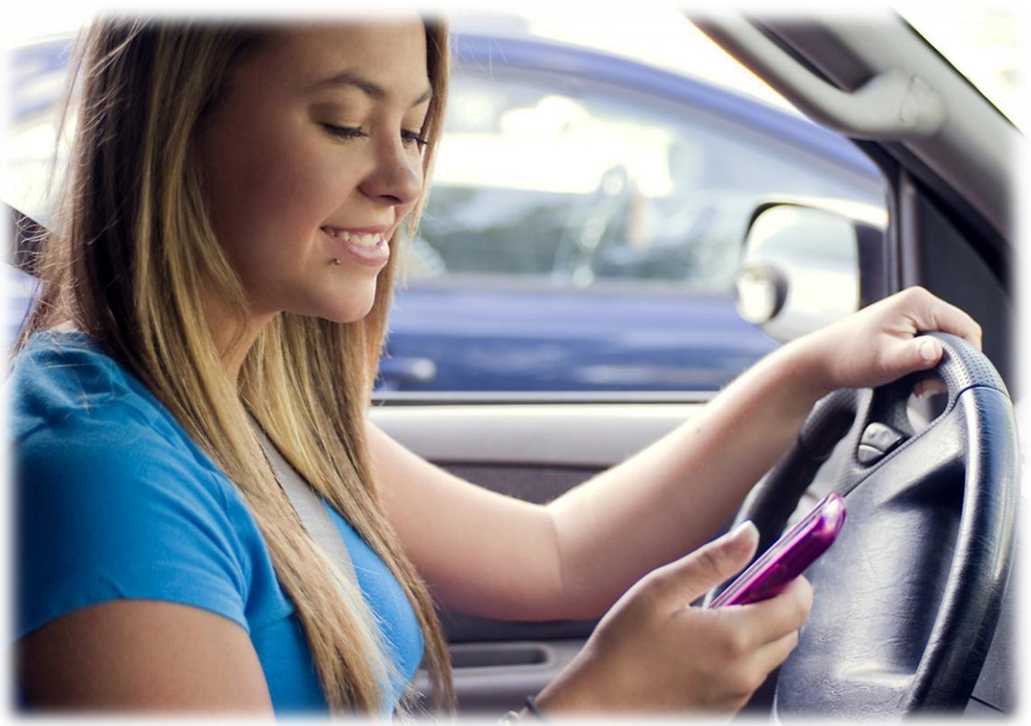
- Go beyond measures of participation & satisfaction
- Get to the SMART Performance Measures:
  - Attitudes
  - Knowledge
  - Skills
  - Behaviors
  - Self-Efficacy
  - Frequency
  - Behavioral Intentions

Defining the Performance Measures

- Attitudes: A relatively stable belief or feeling about a concept, person or object; can often be inferred by observing behaviors
- Knowledge: Awareness or familiarity with a concept; practical understanding of information
- Skills: Level of ability or expertise
- Behaviors: Way in which an individual acts or conducts themselves
- Self-Efficacy: Judgment of one's capability to accomplish a certain level of performance
- Frequency: Rate at which a particular behavior occurs
- Behavioral Intentions: A person's perceived likelihood or subjective probability that he or she will engage in a given behavior

What Teen Driving Issues Could Be Evaluated With These Measures?

1. Seat belt use – driver and passenger
2. Speeding
3. Distracted driving (phones, passengers)
4. Driving skill and experience
5. Impaired driving
6. Drowsy driving



Collecting Evaluation Data

Now that you've chosen your performance indicators, how will you collect data about them?

- Remember that:
  - *Quantitative methods* are those that express their results in numbers.
  - "How many?" or "How much?" or "How often?"
- *Qualitative methods* *are those that express their results in words, ideas, and concepts.*
  - "How?" or "Why?"

Quantitative and Qualitative Data Collection

Type of Data	Type of Tool	Method
Quantitative	Surveys	Phone, in-person, mail
	Record Reviews	Content Review
	Indicator Data	Census, BRFSS
	GIS (Geographic Information Systems)	GIS app data analysis
	Environmental Assessments	Primary data collection or review
Qualitative	Open-ended survey interviews	Phone, in-person, mail
	In-depth interviews	Phone, in-person
	Diaries	Self-administered
	Focus Groups	In-person, telephone
	Observations	Single or multiple, structured or unstructured
	Newspapers, other media	Content analysis

Types of Questions You Could Include

(see Resource Book for More Questions)

Example Performance Indicator: Distracted Driving

Key Construct	Question	Response	Source
Self-efficacy for not distracted driving	How likely are you to do or say something to your driver if they're talking on a handheld cell phone while driving?	a) Very likely, b) Somewhat likely, c) Somewhat unlikely, d) Very unlikely	2011 NHTSA National Phone survey on distracted driving attitudes and behaviors
Attitudes about distracted driving	Do you support a state law banning talking on a handheld phone while driving?	a)Yes, b) No, c) Don't know	NHTSA Distracted Driving Survey, 2011
Behaviors towards distracted driving	When you receive a text message while driving, how often do you answer the text?	a) On all driving trips, b) On most driving trips, c) Rarely, d) never	National Youthful Driver Survey
Behavioral Intentions toward distracted driving	*I would be more likely to give up using my cell phone while driving if: *my mom or dad made me do it, *my friends gave up their cell phones while driving, *I got a discount on my insurance, *There was a law against it, *I got my license taken away if I got caught, *I had to do it for only the first year of driving, *My parents had a way to find out if I was using my cell phone while driving.	a) Strongly disagree, b) Disagree, c) Neither agree or disagree, d) Agree, e) Strongly agree	National Youthful Driver Survey

Pulling It All Together – Distracted Driving

Goal	Reduce Teen Driver Crash Rates		
Performance Measure	Distracted Driving Behaviors		
SMART Objectives	By 2020, teen drivers over 16 years old in Philadelphia will have a 15% decrease in texting and driving.		At the end of the program, at least 75% of students will acknowledge that distracted driving is dangerous.
Measurement Categories	Frequency of Distracted Driving	Attitudes toward Distracted Driving	Behavioral Intention toward Avoiding Driving Distracted
Example Question Items	How often do you use your cell phone while driving? 1)Very often 2)Often 3)Rarely 4)Never	Agree or Disagree: It makes no difference to driving safety if the driver and passengers are dancing or singing along to music.	I would be more likely to give up using my cell phone while driving if (SA – SD): 1)My mom or dad made me do it 2)My friends gave up their cell phones while driving 3)I got a discount on my insurance, or there was a law against it 4)I got my license taken away if I got caught 5)I had to do it for only the first year of driving 6)My parents had a way to find out if I was using my cell phone while driving

CHAPTER 12a: QUANTITATIVE DATA COLLECTION

The values, benefits, and limitations of conducting surveys

Pre and Post surveys for program evaluation

Top Tips for Developing Successful Surveys

Examples for the types of questions you might want to ask

Surveys: Values, Benefits, and Limitations

Values/Benefits

1. Quick and inexpensive
2. Questionnaires are usually easy to prepare
3. Contact in the information gathering process may help legitimize interventions for later implementation

Limitations (if not done well)

1. Information from convenience studies may be biased – age, occupation, education, income
2. Information from "providers" of services as opposed to "customers" of services may not be accurate
3. Number of informants surveyed may be too small to generalize findings to total community

Commonly Used Survey Approaches

- Pre & Post Surveys
- Automatic Response System (ARS)

Pre- and Post-Program Surveys

- Pre & Post surveys should measure the same key constructs before and after implementation of your program.
- You want to assess whether or not your program has impacted teens' knowledge, attitudes, behaviors, etc.
- Both the Pre & Post Surveys can include questions about:
  - Demographics (age, race, gender, school, etc.)
  - Driving behaviors
  - Driving experience
  - Knowledge about driving laws & rules of the road
  - Etc.

How Should Pre-surveys Be Different From Post-surveys?

- Core questions should be the same on both pre and post surveys.

- Post Surveys can also include questions to assess program satisfaction and engagement (at the end)
  - What did you like most about the program?
  - How could the program be improved to have a greater impact?
  - How would you compare this program with other teen driver safety programs you have experienced?

Top Tips for Developing Successful Surveys

- Language Use
  - Should be simple and at a lower literacy level (avoid words that are more than two syllables when you can)
  - Avoid jargon or terms that aren't universal
- Close-ended questions (fixed response questions)
  - Ensure that respondents interpret questions the same way
  - Simplify your analysis later
- Open-ended questions (which allow people to write in their own response)
  - Are time consuming to ask
  - Require a lot of work to analyze

Top Tips for Developing Successful Surveys

- Question Wording
  - Avoid double-barreled questions (ask only one item per question)
  - Avoid using double-negatives / questions with “not” in them (e.g. *You should not use the best online survey software available.*)
  - Avoid too many agree-disagree questions (people are biased to agree)
  - Be clear with any terms/definitions you use
  - When using a rating scale:
    - Label clearly and consistently
    - Use between 5 and 7 fixed points
    - Use a middle category (neutral)

Top Tips for Developing Successful Surveys

- Question Ordering
  - Demographics at the end (start with the most important information)
  - Organize questions by block / theme
  - Order of questions can affect answers, so randomize questions when possible (with internet survey tools like *Survey Monkey*)

SurveyMonkey®

Types Of Questions You Could Include

Example: Distracted Driving

Key Construct	Question	Response	Source
Self-efficacy for not distracted driving	How likely are you to do or say something to your driver if they're talking on a handheld cell phone while driving?	a) Very likely, b) Somewhat likely, c) Not likely or Unlikely, d) Somewhat unlikely, d) Very unlikely	2011 NHTSA National Phone survey on distracted driving attitudes and behaviors
Attitudes about distracted driving	Do you support a state law banning talking on a handheld phone while driving?	a)Yes, b) No, c) Don't know	NHTSA Distracted Driving Survey, 2011
Behaviors towards distracted driving	When you receive a text message while driving, how often do you answer the text?	a) On all driving trips, b) On most driving trips, c) Rarely, d) Never	National Youthful Driver Survey
Behavioral Intentions toward distracted driving	I would be more likely to give up using my cell phone while driving if: *my mom or dad made me do it, *my friends gave up their cell phones while driving, *I got a discount on my insurance, there was a law against it, *I got my license taken away if I got caught, *I had to do it for only the first year of driving, *my parents had a way to find out if I was using my cell phone while driving.	a) Strongly disagree, b) Disagree, c) Neither agree or disagree, d) Agree, e) Strongly agree	National Youthful Driver Survey

Example Pre/Post Survey Questions: Demographics

- What is your race? (Select all those with which you identify)
  - American Indian or Alaska Native
  - Asian
  - Black or African-American
  - Native Hawaiian or Other Pacific Islander
  - White
  - More than one race
- What is your gender?
  - Male
  - Female
  - Transgender
  - Do not identify as male or female (gender non-conforming, gender queer)
- What type of school do you attend?
  - Public
  - Private
  - Home/cyber
- School name: _____

See the **Resource Book** for an example of a pre- and post-program survey which you can adapt and modify.

Example Pre/Post Survey Questions: Ratings Scale

To what extent do you agree with the following statements:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1) Seatbelts are just as likely to harm you as help you	1	2	3	4	5
2) Police in my community generally do not bother to write tickets for seatbelt violations	1	2	3	4	5
3) If I were in an accident, I would want to have my seatbelt on	1	2	3	4	5
4) Most motor vehicle accidents happen within five miles of home	1	2	3	4	5

Example Pre/Post Survey Questions: Agree/Disagree

When I wear my seatbelt, I do so because…

a) It's a habit	**YES**	**NO**	**DON’T KNOW**
b) I don't want to get a ticket	**YES**	**NO**	**DON’T KNOW**
c) I'm uncomfortable without it	**YES**	**NO**	**DON’T KNOW**
d) Others want me to wear it,	**YES**	**NO**	**DON’T KNOW**
e) It's the law	**YES**	**NO**	**DON’T KNOW**
f) I want to avoid serious injury or death	**YES**	**NO**	**DON’T KNOW**
g) I want to set a good example for others	**YES**	**NO**	**DON’T KNOW**
h) The people I'm with are wearing seat belts	**YES**	**NO**	**DON’T KNOW**
i) My car/truck/van has a bell, buzzer, or light that reminds me	**YES**	**NO**	**DON’T KNOW**

Example Pre/Post Survey Questions: Program Feedback

1. What did you like most about the Teen Driving Competition?
2. How could the Teen Driving Competition be improved to have a greater impact?
3. How would you compare this event with other highway traffic safety events you have experienced?

See the **Resource Book** for an example of a pre- and post-program survey which you can adapt and modify.

CHAPTER 12b: QUANTITATIVE DATA COLLECTION

Delivery methods, response rates, and how to improve your experience and the numbers

Paper-pencil vs Online vs Automatic Response Systems

How to get started with the analysis process and report results

Delivery Methods, Response Rates, and How to Improve Your Experience and the Numbers

Paper-Pencil Surveys (in-person or mailed)

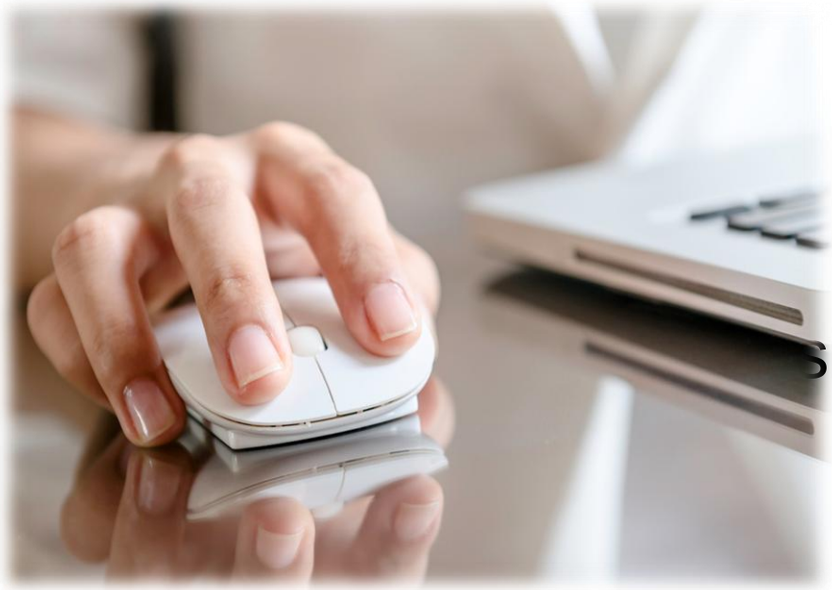
- Simple to complete
- Ideal for in-person workshops or programs to ensure that they are completed and submitted
  - Keep anonymous, when possible
- Often a lower response rate by mail
- Can be more time consuming for data entry and analysis
  - Consider delivery method when determining how many questions, types of questions, etc.
- Can improve response rates for mailed surveys with follow-up reminder phone calls

Delivery Methods, Response Rates, and How to Improve Your Experience and the Numbers

Online Surveys

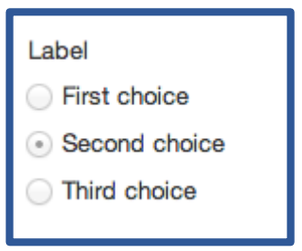
Survey Monkey & Google Forms are free and user-friendly

- Simple to complete
- Ideal for target audiences that are typically on their computers anyway
  - Keep anonymous, when possible
- Thanks to survey programs:
  - Less time consuming for data
  - Data entry isn't necessary and avoids errors by you from doing so



sis

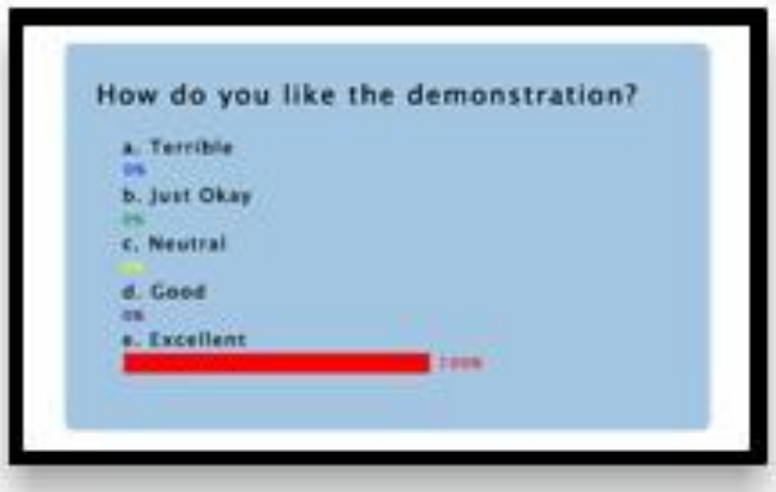
- Can improve response rates for online surveys with:
  - Follow-up emails to prompt/remind people to complete
  - Making a clear deadline for completion in your email
  - Using radio buttons instead of drop-down menu items for answer choices



Delivery Methods, Response Rates, and How to Improve Your Experience and the Numbers

Automatic Response System (ARS)

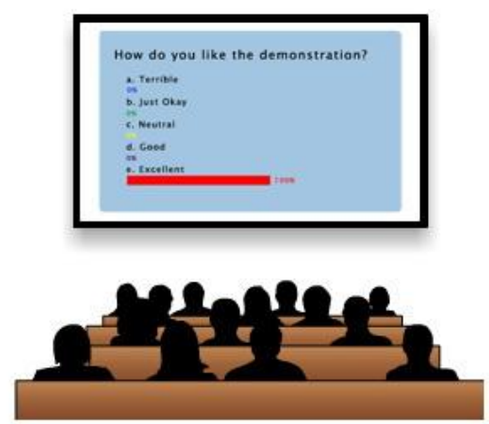
- What is an ARS?
  - An ARS combines wireless hardware with presentation software to create an interactive learning experience.



Delivery Methods, Response Rates, and How to Improve Your Experience and the Numbers

Automatic Response System (ARS)

- How does it work?
  - The Turning Technologies software is installed on your computer and it becomes a part of your Power Point toolbar
  - Each person in the audience receives a wireless remote (a “clicker”), and they use it to select answers to questions throughout the presentation
  - The presentation updates in real-time, displaying the audience responses in a graph

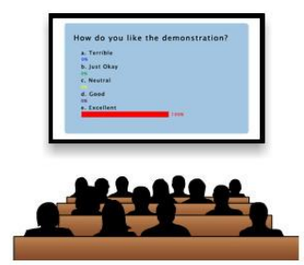


Delivery Methods, Response Rates, and How to Improve Your Experience and the Numbers

Automatic Response System (ARS)

- What are the benefits of using an ARS?
  - An ARS allows you to engage and collect data from every learner at your presentation.
  - It allows your to customize and personalize your instruction based on feedback from your audience.
  - The ARS compiles the data collected from each question, and saves it to an excel spreadsheet for you!

- Where can I learn more about how to use an ARS?
  - Turning Technologies Free online public classes
  - Turning Technologies Training Page



What Does ARS Look Like In Practice? Video Clip with Users

"I like the fact that they're getting immediate feedback"

"With this system…with this presentation…[the students] were more engaged."

Analyzing and Reporting Quantitative Findings

- Aggregate Results
  - Percentages, rates, categories
  - By theme / question block, trends over time, pre-post
  - Graphs, tables, bar charts

See the **Resource Book** for an example of quantitative findings

- Recognize Limitations
  - Limited sample sizes
  - One-point-in-time
  - Not necessarily representative
  - Inherent self-report bias
  - Numbers and closed-response answers lack depth or explanation, so follow-up interviews or focus groups may be needed

CHAPTER 13a: QUALITATIVE DATA COLLECTION

The benefits and limitations of focus groups and interviews

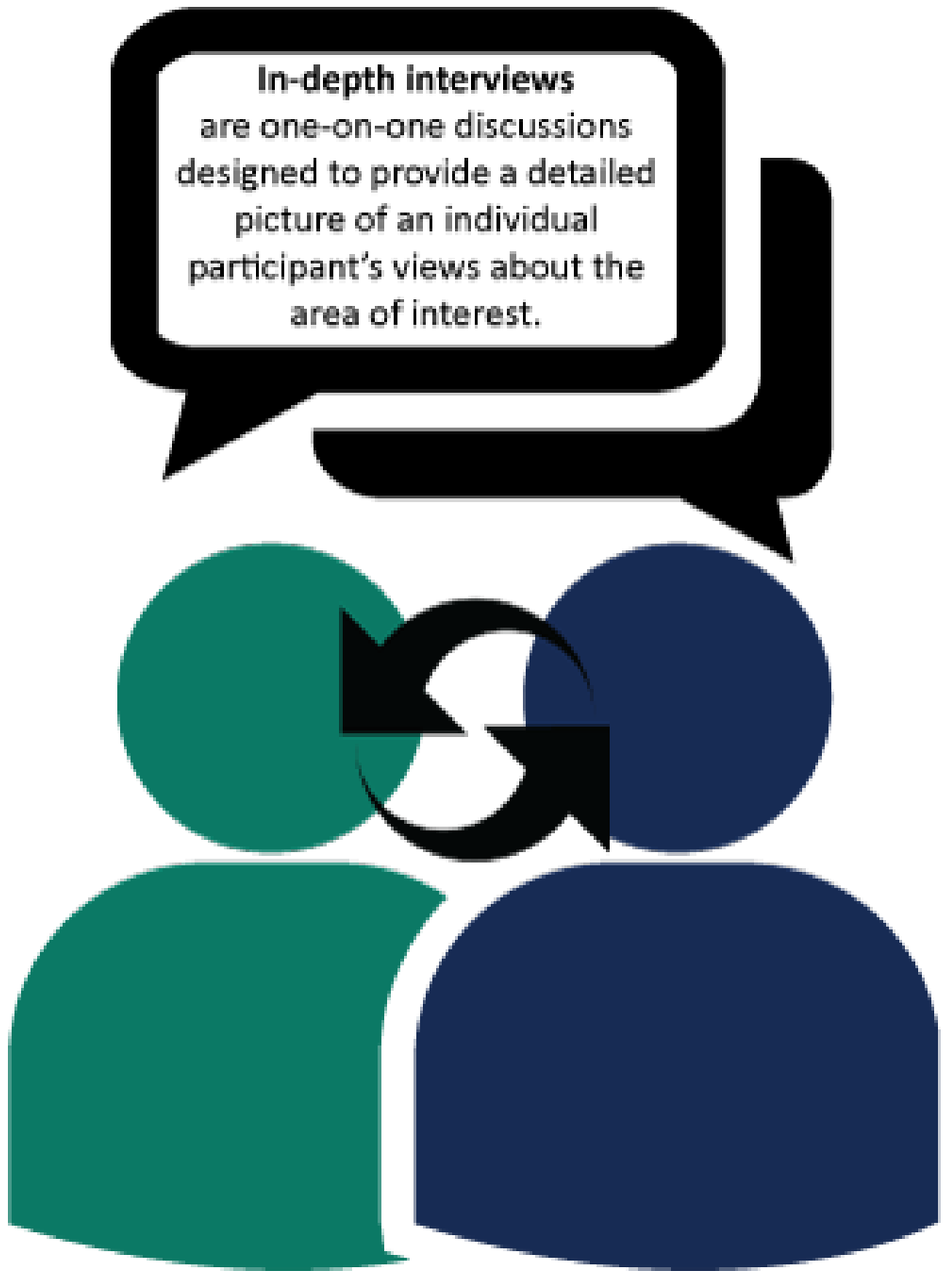
Focus groups and interviews: who, what, where, when, why, and how

Participants: how to identify, recruit, and incentivize

The do's and don'ts of developing questions

Examples for the types of questions you might want to include

Focus Groups vs Interviews



Health Compass – Health Communication Capacity Collaborative (2016). *How to conduct qualitative formative research., http://www.thehealthcompass.org/how-to-guides/how-conduct-qualitative-formative-research*

Focus Groups: Values, Benefits, and Limitations

Values and Benefits

1. Relatively easy to undertake
2. Results can be obtained in a short period of time
3. Social interaction in the group produces freer and more complex responses
4. The researcher can probe for clarification and solicit greater detail
5. Responses have high face validity due to the clarity of the context and detail of the discussion

Limitations

1. Requires highly skilled moderator
2. Groups are often difficult to assemble
3. Individual responses are not independent of one another
4. Because the group is hand-selected, the results may not be representative of the general population

Interviews: Values, Benefits, and Limitations

Values and Benefits

- Useful for gaining insight and context into a topic
- Allows respondents to describe what is important to them
- Useful for gathering quotes and stories
- Useful for when it's difficult to bring a group together (e.g. working parents)
- Some topics that are too personal for focus groups work well one-on-one

Limitations

- Sometimes hard to find diversity of opinions and perspectives
- Can be more time consuming in implementation
- Requires a skilled interviewer

A Closer Look at Focus Groups:
Who, What, Where, When, Why, and How

Who

- Approximately seven to ten people
- With common characteristics relating to discussion topic

What

- A carefully planned discussion
- To obtain perceptions of a defined interest area
- Typically 45 to 60 min

Where

- In a permissive, non-threatening environment

How

- Conducted by a trained interviewer (moderator, facilitator)
- Three focus groups are the minimum for a study

A Closer Look at Focus Groups:
Who, What, Where, When, Why, and How

Why

- To collect qualitative data
- To determine feelings, perceptions and manner of thinking of participants regarding products, services, programs or opportunities
- Attitudes and perceptions are developed in part by interaction with other people
- To promote self-disclosure among participants
- It's dangerous to take "customers" for granted

A Closer Look at Focus Groups:
Who, What, Where, When, Why, and How

When

- Before a program begins, during a program, or after a program ends

- Focus groups are effective when
  - People have something to share (motivations)
  - The goal is to understand human behavior

- Focus groups are not effective when
  - People are divided or angry
  - The goal is to gather factual information

A Closer Look at Interviews:
Who, What, Where, When, Why, and How

Who

- One-on-one interviews with individuals who represent important constituencies with knowledge or experience about your issue

What

- A carefully planned interview
- Interview guide (not more than 10 questions per interview)
- Typically not more than 60 minutes per interview

Where

- In a permissive, non-threatening environment
- Sometimes over the phone

Why

- Provides rich data
- Probing allows for clarity and increased understanding
- Allows respondents to express their understanding in their own terms

A Closer Look at Interviews:
Who, What, Where, When, Why, and How

When

- Before a program begins, during a program, or after a program ends
- At a time that works best for the participant

How

- Conducted by a trained interviewer whenever possible
- Numbers for a study commonly range from 8 to 30, depending on topic and length
- The interviewer develops rapport with the interviewee and makes him/her feel comfortable
- Can take advantage of unexpected "leads" while keeping the interview on track
- Non-judgmental probing for more detail:
  - Can you give me an example to help me better understand what you mean? What makes you say that? How come?

Participants: How to Identify

- Participants are similar for focus groups and interviews
- General selection rules:
  - Set exact specification (inclusion/exclusion criteria)
  - Maintain control of the selection process
  - Use the resources of the sponsoring organization in recruiting
  - Beware of bias
  - Develop a pool of eligible participants and then randomly select (when possible)

Participants: How to Recruit

- Use your contacts and resources to nominate others or themselves
- Piggyback
- On location
- Random phone screening
- Ads in newspapers and bulletin boards
- Social media postings

Participants: How to Incentivize

- Money ($20-$50)
- Gift card
- Food
- Gifts
- Transportation reimbursement (if public transit necessary)
- Positive, upbeat invitation

Top Tips for Developing Successful Interview & Focus Group Questions

- Language Use
  - Should be simple and clear
  - Neutral and non-judgmental
  - Explain any new terms, concepts, or ideas participants may not already know

- Question Ordering
  - Warm-up questions at the beginning should be broad and pull in your participants without asking them to divulge too much
  - Organize questions by block / theme

Top Tips for Developing Successful Interview & Focus Group Questions

- Question Wording
  - Avoid double-barreled questions (ask only one item per question)
  - Avoid using double-negatives / questions with “not” in them (e.g. *You should not use the best online survey software available.*)
  - Avoid close-ended questions
  - Be prepared with probing questions, but also open to exploring new leads

Example Open-Ended Questions for Interviews or Focus Groups

1. What kinds of experiences have you had with regards to drivers education or behind-the-wheel training?
   - FOLLOW-UP: What were the greatest challenges from those experience? Benefits? Limitations?
2. How do you think your driving skills compare to other people your age?
3. How have your driving experiences with your license compared with those from when you had your learners permit?
   - PROBE: How have your skills changed? Do you drive on different kinds of roads? If so, what kinds?
4. What are your biggest fears about driving?
   - FOLLOW-UP: What do you think are common fears that other teens might have about driving that you don't have? Why don't you have those same fears?
5. Do you know anyone who has had a serious accident from distracted driving?
   - PROBE: Can you tell me about their experiences? What were the causes of the accident and what were the outcomes?

CHAPTER 13b: QUALITATIVE DATA COLLECTION

Preparing for focus groups and interviews

Moderator skills

Tips for how the process and troubleshooting common problems

How to get started with the analysis process and report results

Preparing for Focus Groups and Interviews: Systematic Notification Procedures

1. Set meeting times for interviews
2. Contact potential participants by phone or in person (2 weeks before meeting time)
3. Send a personalized invitation
4. Phone (or contact) each person the day before the focus group

Moderator Skills

If you are moderating a focus group, make sure you…

- Are mentally prepared
- Select an appropriate location
- Record the discussion (with permission)
- Use an assistant moderator to take notes & help with discussion
- Use purposeful small talk
- Have a smooth & snappy introduction
- Use pauses and probes to allow people time to communicate
- Use subtle group control
- Control reactions to participants
- Use appropriate conclusion

Beginning the Focus Group Discussion

The first few moments are critical

- Create a thoughtful, permissive atmosphere
- Provide the ground rules
- Set the tone

Recommended introduction pattern:

- Welcome
- Overview and topic
- Ground rules
- First question

Asking Questions That Yield Powerful Information

- Use open-ended questions
- Avoid dichotomous questions
- "Why?" is rarely asked
- Use "think back" questions
- Carefully prepare focus questions
- Ask un-cued questions first, cued questions second
- Consider standardized questions

Ending Questions

Summary question

"Is this an adequate summary?“

All things considered question

Ask participants to reflect on the entire discussion and then offer their positions or opinions

Final question

"Have we missed anything?”

Troubleshooting for Focus Groups: Preparing for Common Pitfalls

- You ask a question and no one talks and/or you generally have quiet participants in the group:
  - Give time for them to process
  - Ask them if you need to repeat
  - Ask it in another way
  - Kindly turn to someone and ask them to get the ball rolling
- You have a person who dominates the discussion:
  - Validate his/her contributions
  - Remember he/she might be unaware
  - Ask to hear from someone else specifically (“Sue, you’ve been kind of quiet. What do you think of this?”)
  - Ask the group how their experiences compare (“How do others’ experiences compare to what Megan has been saying?”)

Troubleshooting for Focus Groups: Preparing for Common Pitfalls

- You have a “know-it-all” in the group:
  - Validate his/her contributions
  - Express appreciation for him/her sharing
  - Remind the group that there are no right or wrong answers and you’re there to hear about a range of opinions and experiences
  - Ask the group how their experiences compare (“How do others’ experiences compare to what Megan has been saying?”)
- You find yourself running out of time:
  - Skip upcoming questions that are similar to what has already been discussed
  - Tell participants that “in the interest of time, I’d like for us to transition to a new area”
  - Avoid the temptation to move to a new question after only one or two people have responded
  - Avoid temptation to just get agreement/disagreement head nods

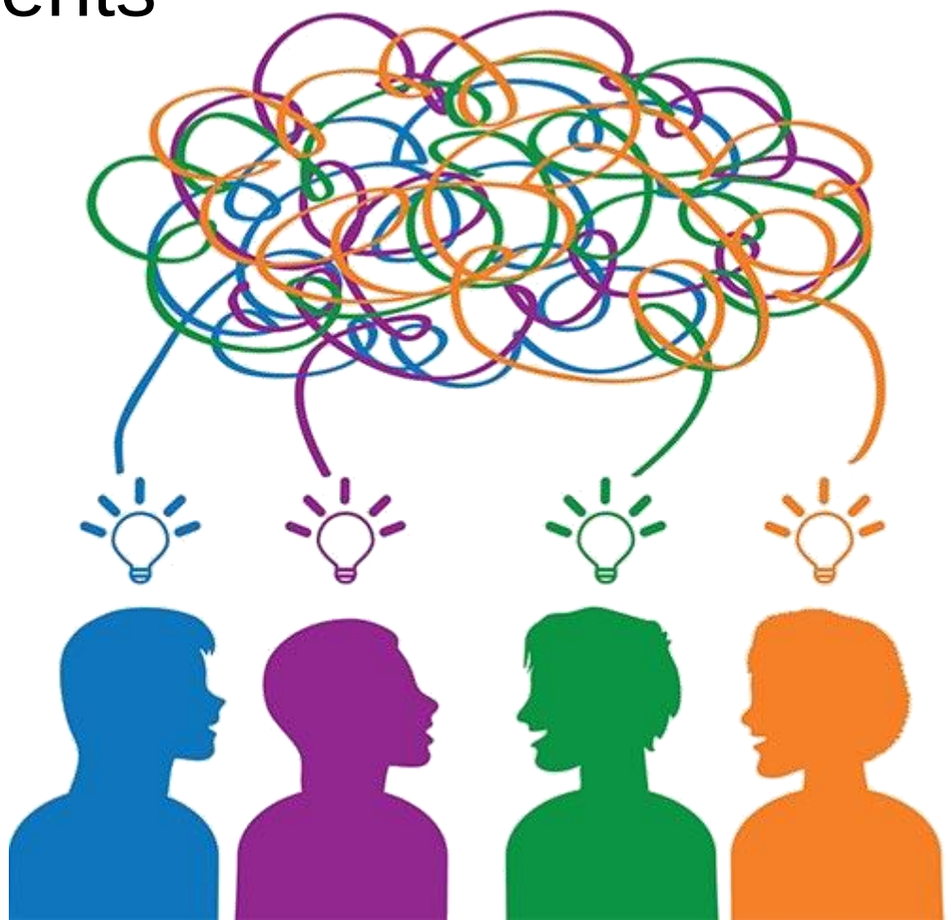
Systematic Analysis Process

- Start while still in the group
- Immediately after the focus group
  - De-brief with your note-taker and update notes about the experience
- Soon after the focus group
  - Within 24 hours, analyze each individual focus group
  - Review audio, revise questions for future groups if needed
- Later
  - Within days, analyze the series of focus groups for themes
  - Involve at least one other person
- Finally, prepare the report

Focus Group Analysis Tips

When analyzing focus group data for themes, consider…

- Words
- Context
- Internal consistency
- Frequency or extensiveness of comments
- Intensity of the comments
- Specificity of responses
- Find the big ideas
- Look for differing view points and inconsistencies



Reporting Your Qualitative Findings

- Be Thoughtful
  - Strive for enlightenment
  - Group themes and sub-themes
  - Make points memorable with quotes
  - Use narrative or bulleted format
  - Include both positive and negative feedback
- Spell Out Communication Strategy
  - Report, newsletter, presentation, etc
- Recognize Limitations
  - Limited sample sizes
  - One-point-in-time
  - Not necessarily representative
  - Inherent self-report bias
  - May need follow-up surveys to validate some of the findings

See the **Resource Book** for an example of qualitative findings