"Build, Share, Grow"

Metrics and Evaluation

Outdoors Empowered Network

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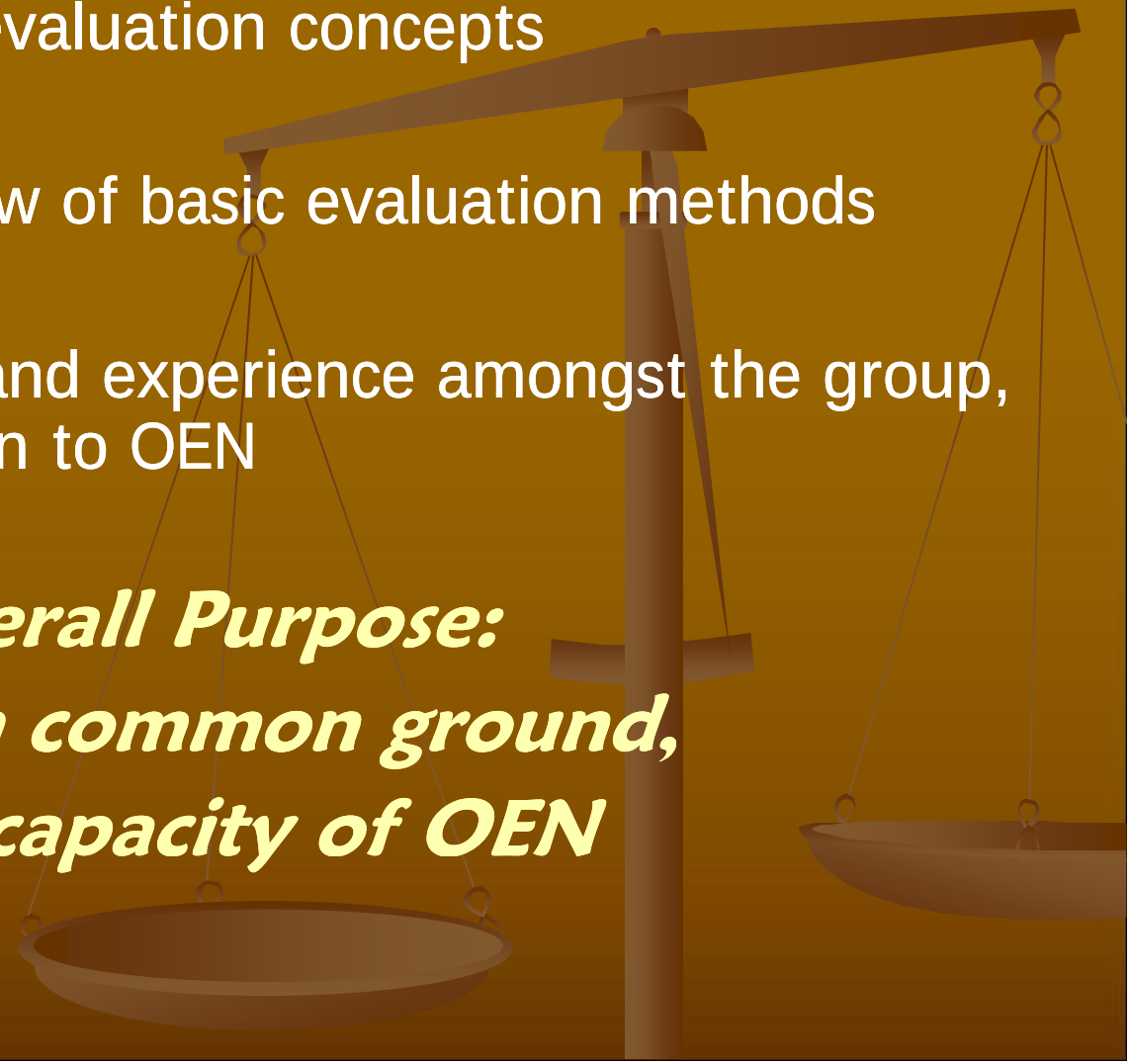
Session Objectives

1. Develop a common vocabulary, shared understanding of evaluation concepts

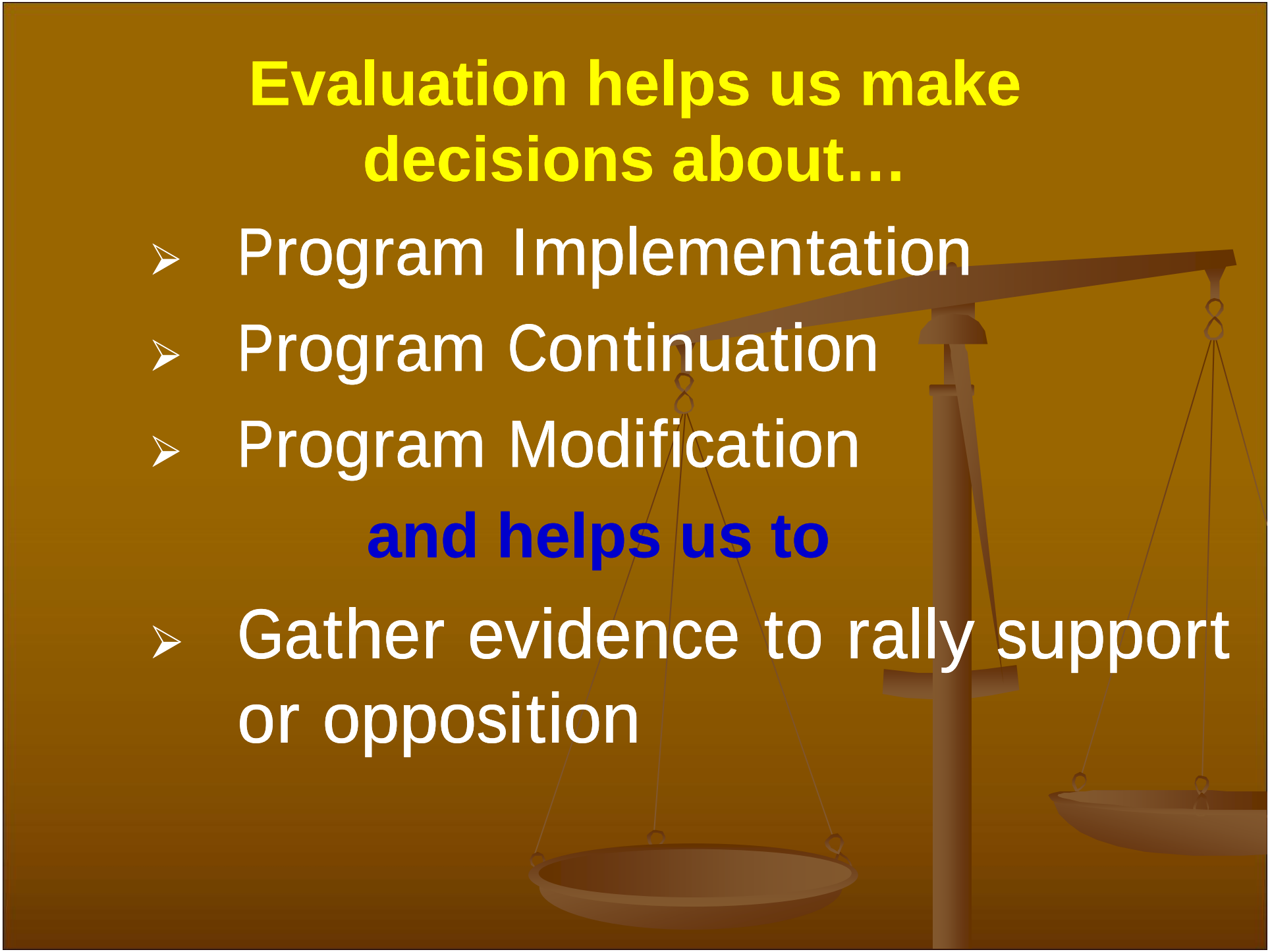
2. Provide an overview of basic evaluation methods

3. Share knowledge and experience amongst the group, consider application to OEN

Overall Purpose:
Establish common ground, build capacity of OEN



What is evaluation?



Evaluation helps us make decisions about…

- Program Implementation
- Program Continuation
- Program Modification

and helps us to

- Gather evidence to rally support or opposition

(Source: Nat'l Registry of Evidence-based Programs and Practices)

More subtle but equally important purposes of evaluation...

Institutionalize reflective practice

Ask the hard questions

Combine your hunches, intuitions, and experience

(information gathering)

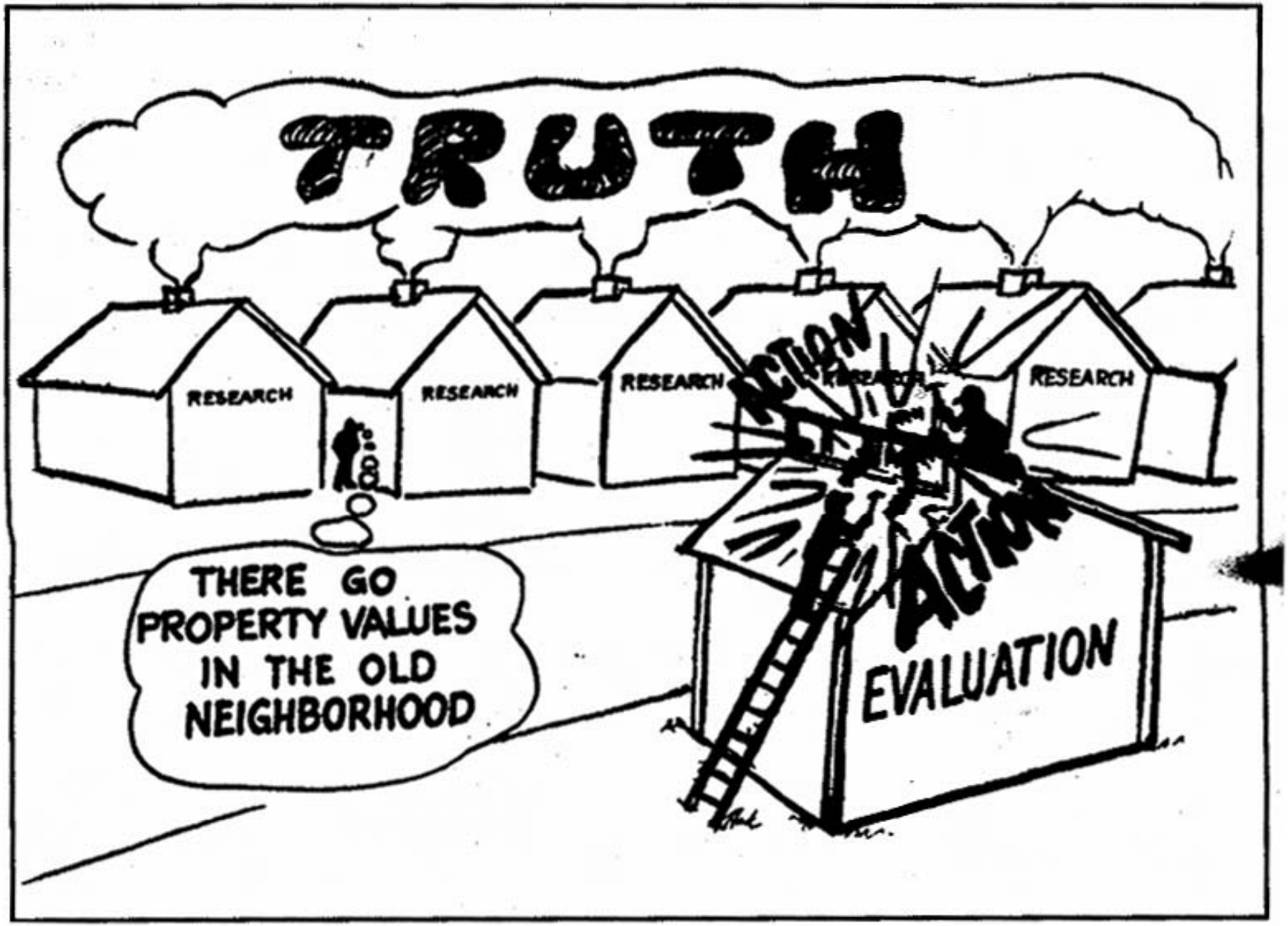
with systematic data collection

(information gathering)

Evaluation vs. Research?

	Definition / Purpose:	Nutshell	Scope	Type of inquiry
Evaluation	Systematic collection of information about activities, characteristics, & outcomes of programs to make judgments about the program, improve program effectiveness, and/or inform decisions abt future programming	Supports action	Tends to be more local ***(program specific)***	Decision-oriented inquiry
Research				

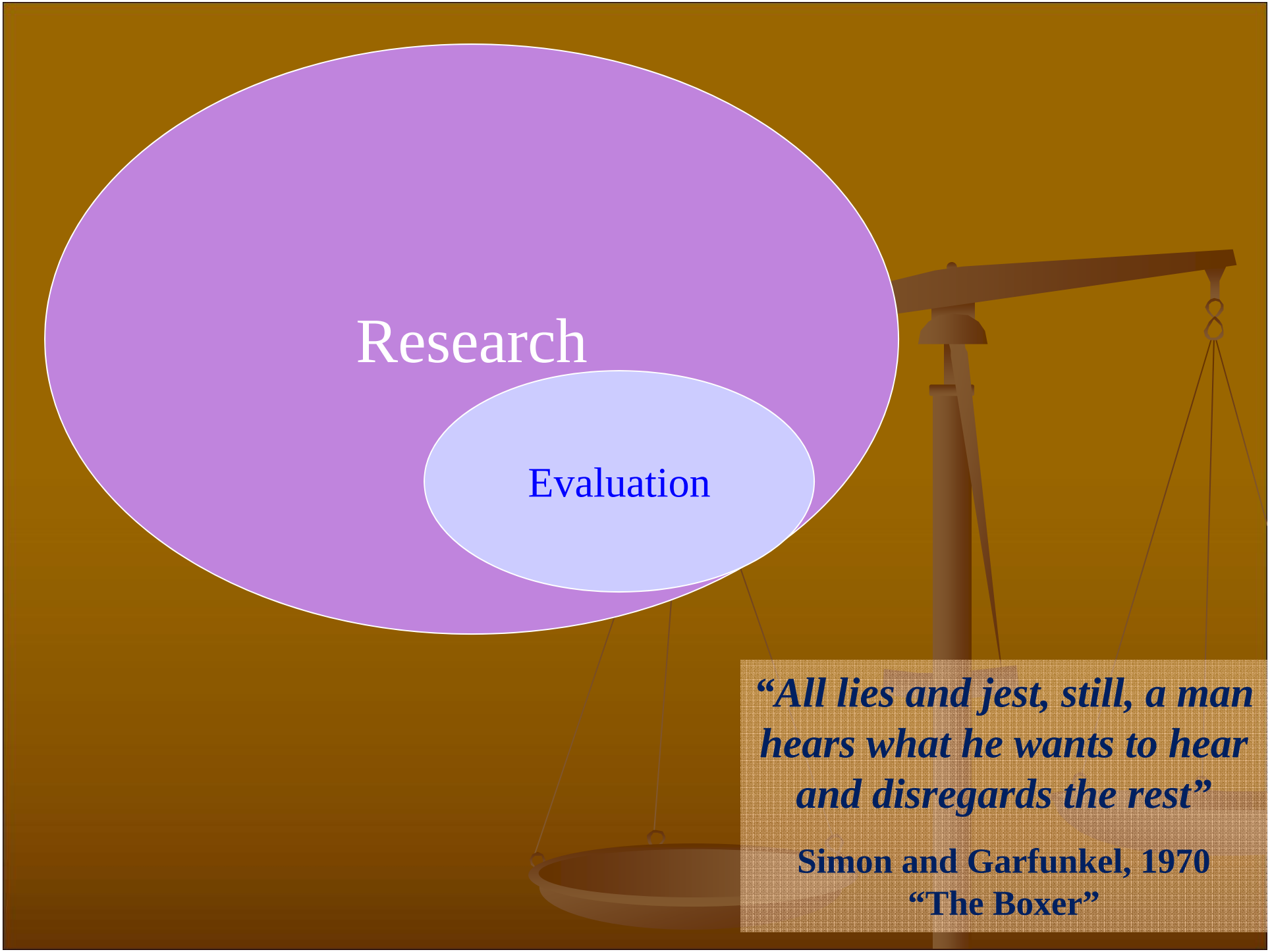
(Adapted from Patton, 1997)


TRUTH
RESEARCH
RESEARCH
RESEARCH
RESEARCH
RESEARCH
ACTION
ACTION
EVALUATION
THERE GO PROPERTY VALUES IN THE OLD NEIGHBORHOOD

Evaluation vs. Research?

	Definition / Purpose:	Nutshell	Scope	Type of inquiry
Evaluation	Systematic collection of information about activities, characteristics, & outcomes of programs to make judgments about the program, improve program effectiveness, and/or inform decisions abt future programming	Supports **action**	Tends to be more local *(program specific)*	Decision-oriented inquiry
Research	**Systematic** collection of data to discover new knowledge, test theories, establish truth and generalize across time and space (environment)	Produces **knowledge**	Tends to be more global *(generalizable)*	Conclusion-oriented inquiry

(Adapted from Patton, 1997)



"All lies and jest, still, a man hears what he wants to hear and disregards the rest"

Simon and Garfunkel, 1970
"The Boxer"

The Language of Evaluation

Formative
Reliability
Summative
Assessment
External
Quantitative

Validity
Qualitative
Outcome
Internal
Process

The Language of Evaluation

Six Pairs

Formative: improve an intervention	**Summative**: determine effectiveness

The Language of Evaluation

Six Pairs

Formative	Summative
Process: understanding the "how"	**Outcome: benefits for participants**

The Language of Evaluation

Six Pairs

Formative	Summative
Process	Outcome
Program Evaluation: **unit of analysis=program**	**Educational Assessment:** **unit of analysis=individual**

The Language of Evaluation

Six Pairs

Formative	Summative
Process	Outcome
Evaluation	Assessment
Internal: **access, rapport, utilization (hours worked), $/staff**	**External**: **objectivity, credibility, expertise, time/$**

The Language of Evaluation

Six Pairs

Formative	Summative
Process	Outcome
Evaluation	Assessment
Internal	External
Quantitative: **numbers/statistics (what? how many?)**	**Qualitative:** **descriptive/interpretive (how? why?)**

The Language of Evaluation

Six Pairs

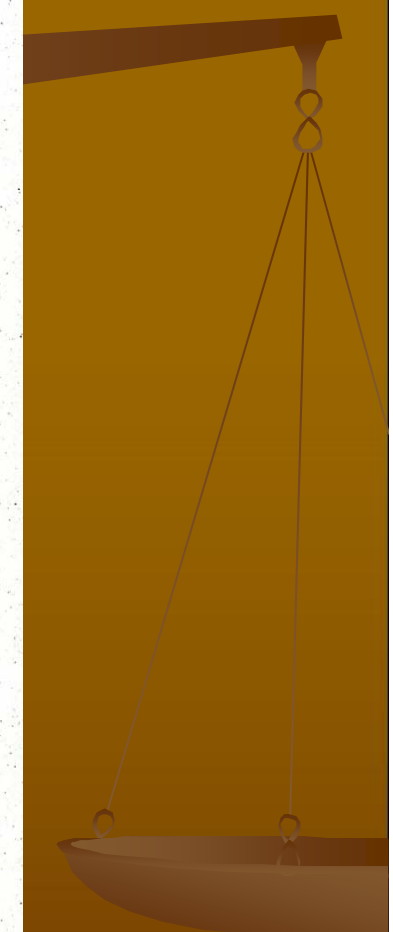
Formative	Summative
Process	Outcome
Evaluation	Assessment
Internal	External
Quantitative	Qualitative
Validity: measures what it says it does	Reliability: get consistent results

Measuring Program Outcomes

Measuring Program Outcomes:

A Practical Approach

United Way of America



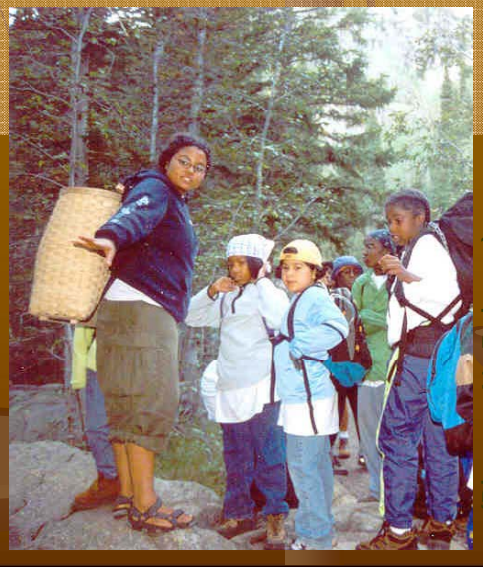
Basic Evaluation Process

1.
2. Develop an Evaluation Plan
3. Collect Data
4. Analyze and Interpret Data
5. Use the Findings

(Photo: D. Millner)

Basic Evaluation Process

1. Determine "Evaluability"
2. Develop an Evaluation Plan
3. Collect Data
4. Analyze and Interpret Data
5. Use the Findings



(Photo: N. Roberts)

Simplified Logic Model

Program Resources

Examples:

- Money
- Staff time
- Volunteers
- Facilities
- Equipment
- Supplies

What you do with the inputs

Examples:

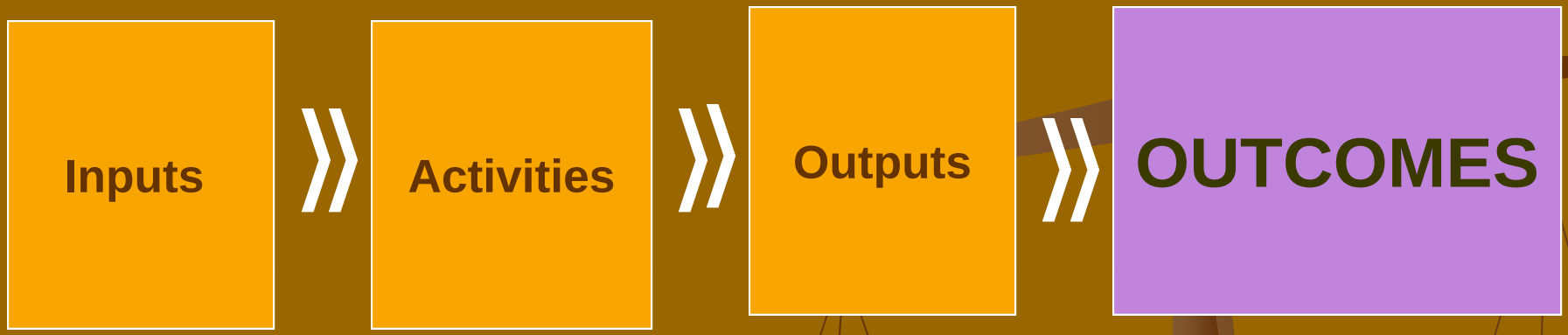
- Ranger-led hike
- Campfire program
- Professional training or workshop for leaders

Direct products of the activities

Examples:

- Nber of camping wkends
- Educational materials distributed
- Nber of people served

Simplified Logic Model *(cont'd)*



Changes in participants following program activities

Examples:

- What they know, learned, experienced
- What they think, value, believe
- What they can do
- How they behave
- Other?

(Adapted from *United Way's Measuring Program Outcomes)*

Inputs

What we invest

Staff

Volunteers

Time

Money

Research base

Materials

Equipment

Technology

Partners

OUTPUTS

What we do	Who we reach
ACTIVITIES	**PARTICIPATION**
• Train, teach • Deliver services • Develop products and resources • Network with others • Build partnerships • Assess • Facilitate • Work with the media	• Participants • Clients • Customers • Agencies • Decision makers • Policy makers Satisfaction

OUTCOMES

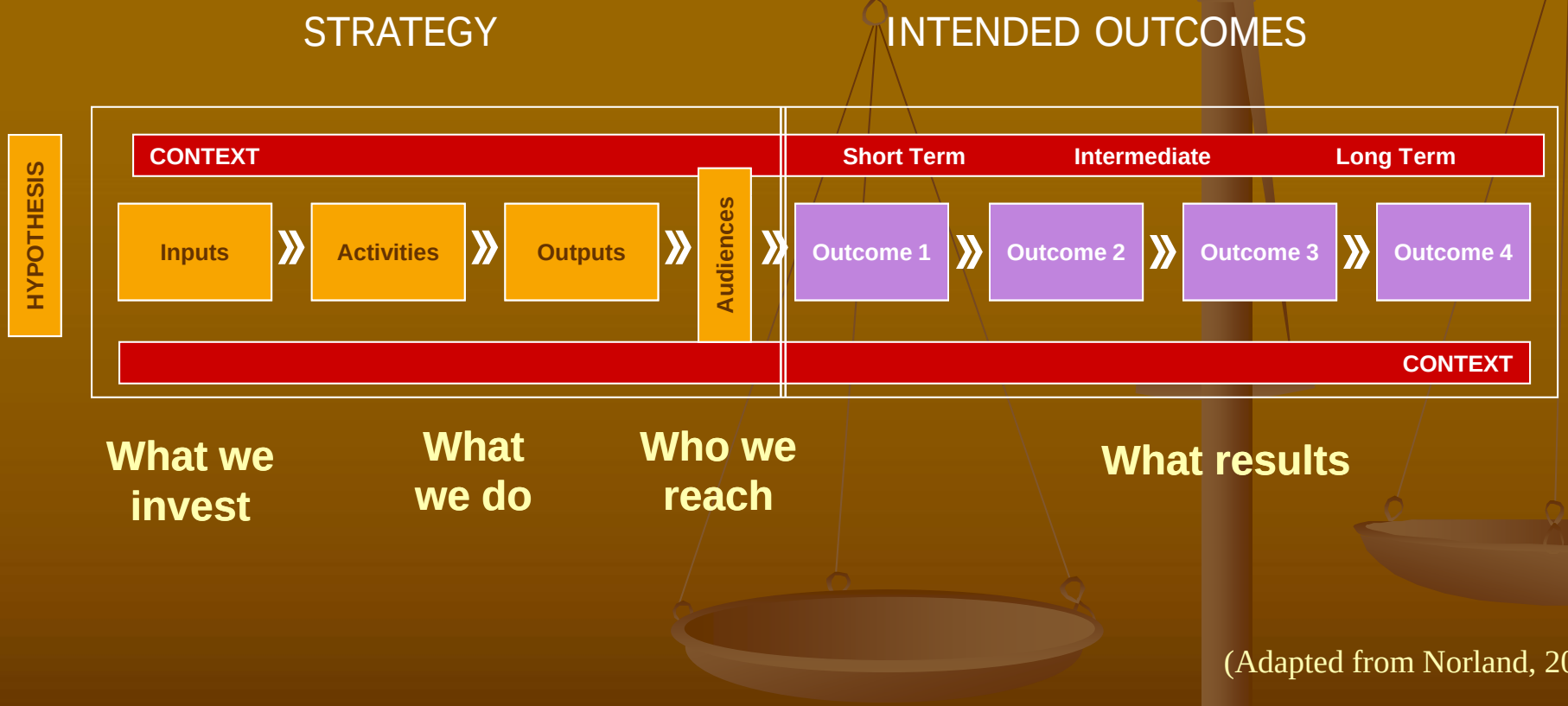
What results for individuals, families, communities…..

SHORT-TERM *Learning*	INTERMEDIATE *Action*	LONG-TERM *Conditions*
Changes in	***Changes in***	***Changes in***
• Awareness • Knowledge • Attitudes • Skills • Opinion • Aspirations • Motivation • Behavioral intent	•Behavior •Decision-making •Policies •Social action	Conditions Social (well-being) Health Economic Civic Environmental

C H A I N OF O U T C O M E S

A Logic Model…

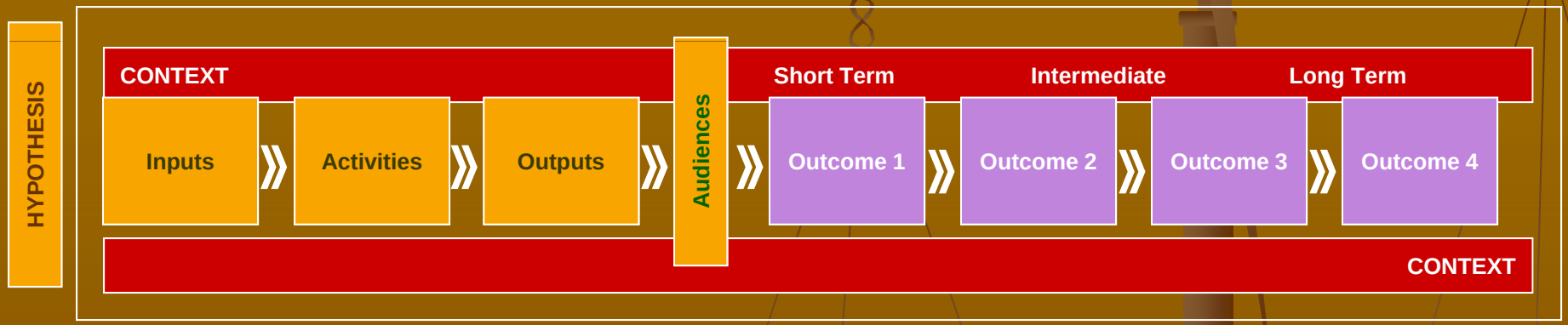
Links the strategy
with its intended outcomes



(Adapted from Norland, 2002)

A Logic Model…

Seeks to specify cause and effect relationships *(yet keep in mind there could be other intervening variables)*



Theory: Best practices for program leader will cause desired behavior changes in participants (e.g., stewardship, spending more time outdoors)

Theory: Youth exposed to mentors will be more environmentally responsible

Theory: With responsible youth, build healthy community

(Adapted from Norland, 2002)

Theory of Change!

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

(Anderson, 2000)

What type of evaluation is appropriate for <u>your</u> program's stage?

- ✓ Needs Assessment: ***Front end, deciding whether and how to design the program***
- ✓ Implementation Evaluation: ***New program, formative, evaluate the processes***
- ✓ Outcome Evaluation: ***Established program, summative, evaluate the effects on participants***

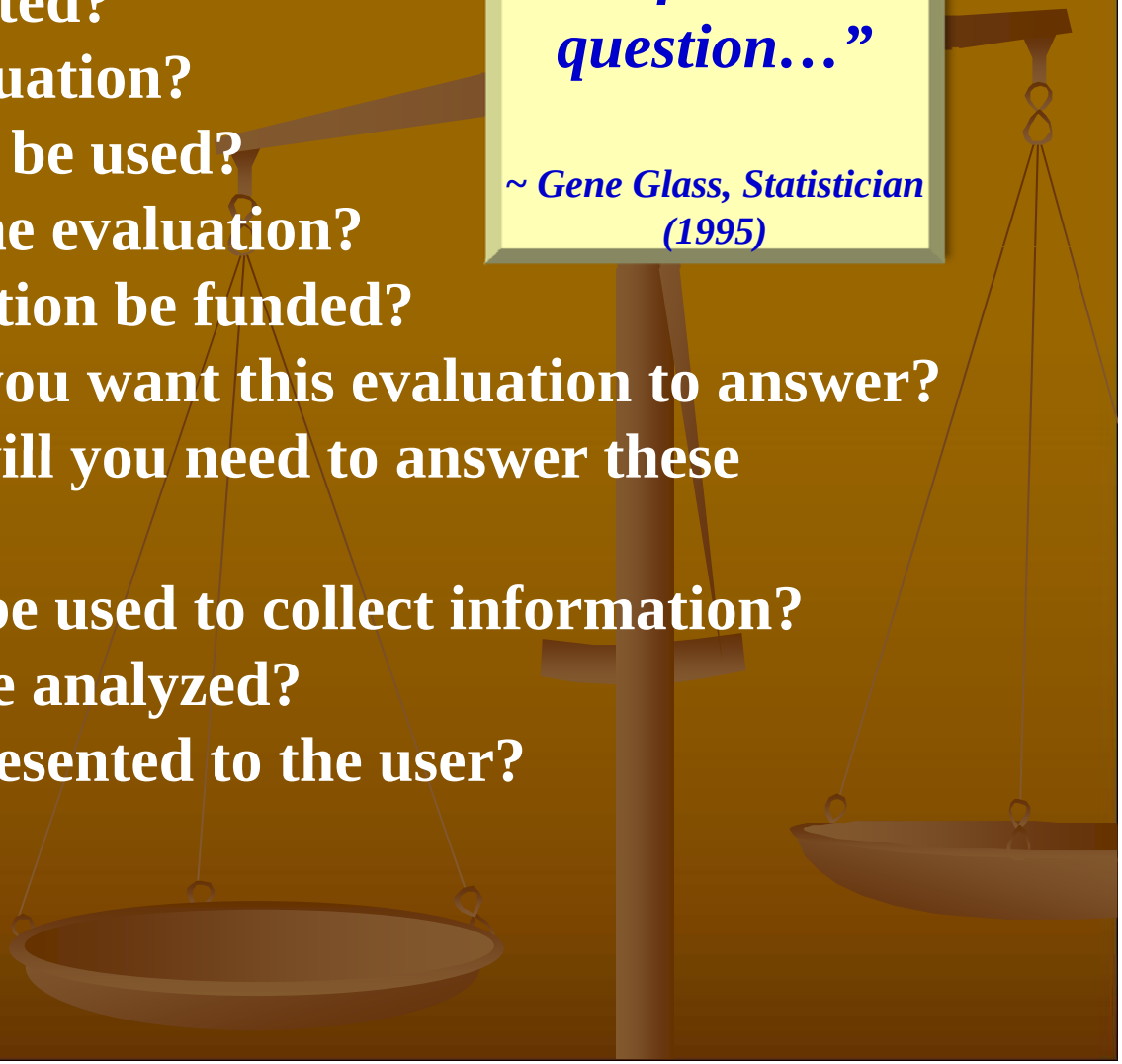
Stakeholder?
Anyone who affects or is affected by a program…
or anyone else who cares!
Nina S. Roberts©

Program Evaluation Planning Form

"The method must follow the question…"

~ Gene Glass, Statistician (1995)

1. **What will be evaluated?**
2. **Who wants the evaluation?**
3. **How will the results be used?**
4. **Who will conduct the evaluation?**
5. **How will the evaluation be funded?**
6. **What *questions* do you want this evaluation to answer?**
7. **What *information* will you need to answer these questions?**
8. **What *methods* will be used to collect information?**
9. **How will the data be analyzed?**
10. **How will data be presented to the user?**



(Adapted from McNamara Management Consulting)

Overview of Methods to Collect Information

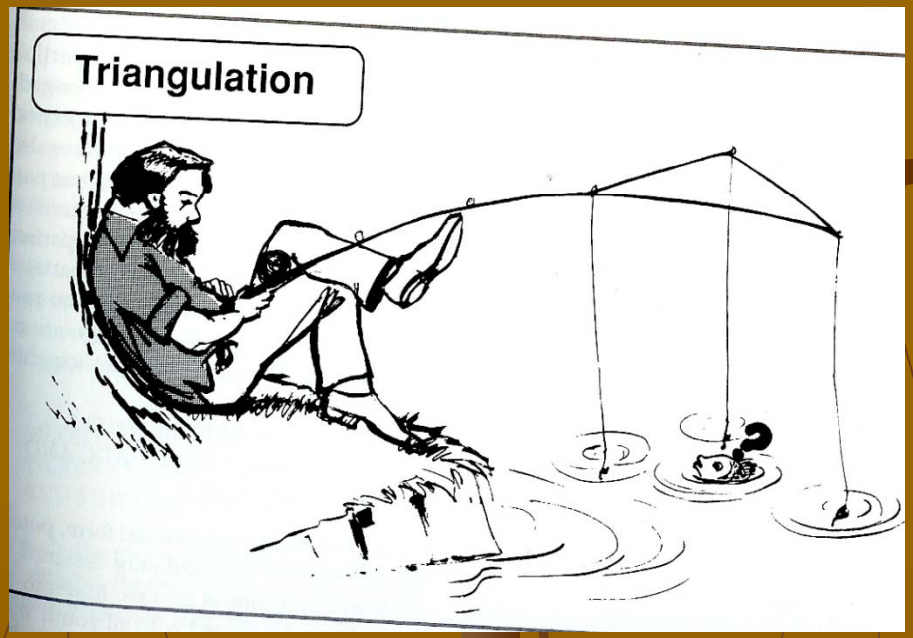
The following table provides an overview of the major methods used for collecting data during evaluations.

Method	Overall Purpose	Advantages	Challenges
questionnaires, surveys, checklists	when need to quickly and/or easily get lots of information from people in a non threatening way	-can complete anonymously -inexpensive to administer -easy to compare and analyze -administer to many people -can get lots of data -many sample questionnaires already exist	-might not get careful feedback -wording can bias client's responses -are impersonal -in surveys, may need sampling expert - doesn't get full story
interviews	when want to fully understand someone's impressions or experiences, or learn more about their answers to questionnaires	-get full range and depth of information -develops relationship with client -can be flexible with client	-can take much time -can be hard to analyze and compare -can be costly -interviewer can bias client's responses
documentation review	when want impression of how program operates without interrupting the program; is from review of applications, finances, memos, minutes, etc.	-get comprehensive and historical information -doesn't interrupt program or client's routine in program -information already exists -few biases about information	-often takes much time -info may be incomplete -need to be quite clear about what looking for -not flexible means to get data; data restricted to what already exists
observation	to gather accurate information about how a program actually operates, particularly about processes	-view operations of a program as they are actually occurring -can adapt to events as they occur	-can be difficult to interpret seen behaviors -can be complex to categorize observations -can influence behaviors of program participants -can be expensive
focus groups	explore a topic in depth through group discussion, e.g., about reactions to an experience or suggestion, understanding common complaints, etc.; useful in evaluation and marketing	-quickly and reliably get common impressions -can be efficient way to get much range and depth of information in short time - can convey key information about programs	-can be hard to analyze responses -need good facilitator for safety and closure -difficult to schedule 6-8 people together
case studies	to fully understand or depict client's experiences in a program, and conduct comprehensive examination through cross comparison of cases	-fully depicts client's experience in program input, process and results -powerful means to portray program to outsiders	-usually quite time consuming to collect, organize and describe -represents depth of information, rather than breadth

(Source: McNamara Management Consulting)

Triangulation!

- **Every method has its limitation!**
- **Helps reduce vulnerability to errors tied to a particular method**
- **Test for consistency in findings**



Data triangulation: variety of data sources

Researcher triangulation: several researchers

Methodological triangulation: use multiple methods

Data Analysis

quick sample

- Quantitative Analysis:
  - Subject data to statistical tests
  - Represent using charts and graphs
  - Describe and interpret findings
- Qualitative Analysis:
  - Type up responses or transcribe interviews, record observations
  - Read through data
  - Determine themes and codes to describe the data
  - Code all the data
  - Describe and interpret findings

What?
So what?
Now what?

Use the Findings

- Evaluator works with program staff to understand findings, assist with recommendations or bring in one time expert to facilitate meeting to discuss
- Program staff implement recommendations, modify program accordingly – make decisions!
- More than just providing the report to funders

Seeking Balance in Evaluation

Seeking input from evaluation specialists

Building organizational capacity to evaluate

Making evaluation useful for the upper echelons

Making evaluation useful on the ground

Centralizing the evaluation process

Promoting local input into evaluation process

Pitfalls to Avoid!

1. Don't balk at evaluation because it seems far too "scientific." It's not. Usually the first 20% of effort will generate the first 80% of the plan, and this is far better than nothing.
1. There is no "perfect" evaluation design. Don't worry about the plan being perfect. It's far more important to do something, than to wait until every last detail has been tested.
2. Work hard to include some interviews in your evaluation methods. Questionnaires don't capture "the story," and the story is usually the most powerful depiction of the benefits of your services.
3. Don't interview just the successes. You'll learn a great deal about the program by understanding its failures, dropouts, etc.
4. Don't throw away evaluation results once a report has been generated. Results don't take up much room, and they can provide precious information later when trying to understand changes in the program.

(Source: McNamara Management Consulting)

Focus on what you need to know

Map out the program's logic

Involve stakeholders

Be systematic

- “Everything that can be counted does not necessarily count; everything that counts cannot necessarily be counted”

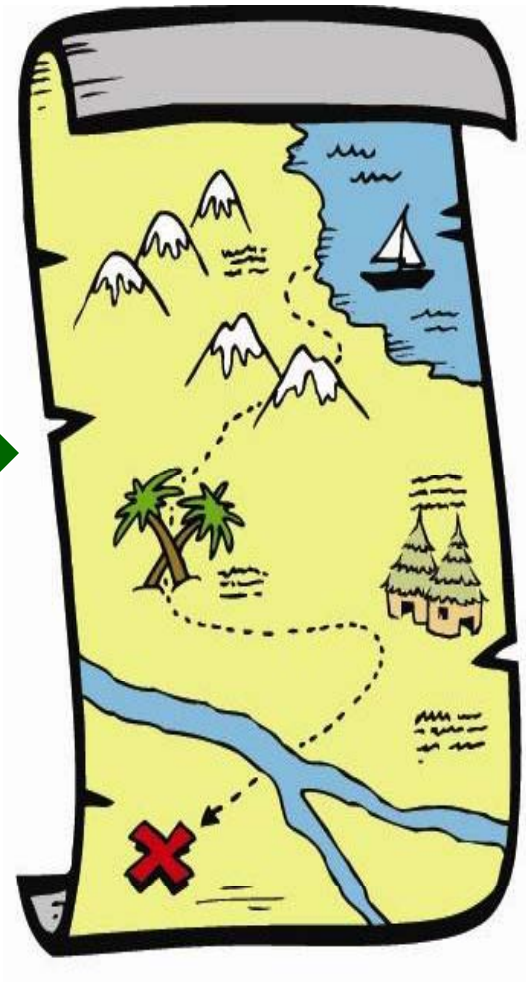
  ~ Albert Einstein

- “The pure and simple truth is rarely pure and never simple”

  ~ Oscar Wilde

NOW LET'S DEVELOP A LOGIC MODEL!

Many people say a logic model is a road map



Logic model may also be called…

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

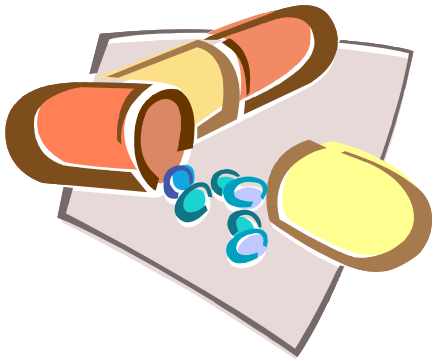
What logic model is not…

- A theory
- Reality
- An evaluation model or method

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

It provides a common approach for integrating planning, implementation, evaluation and reporting

Everyday example



H E A D A C H E

Get pills → Take pills → Feel better!

Situation | INPUTS | OUTPUTS | OUTCOMES

Family Vacation!

Family Members

Budget

Car

Camping Equipment

Drive to state park

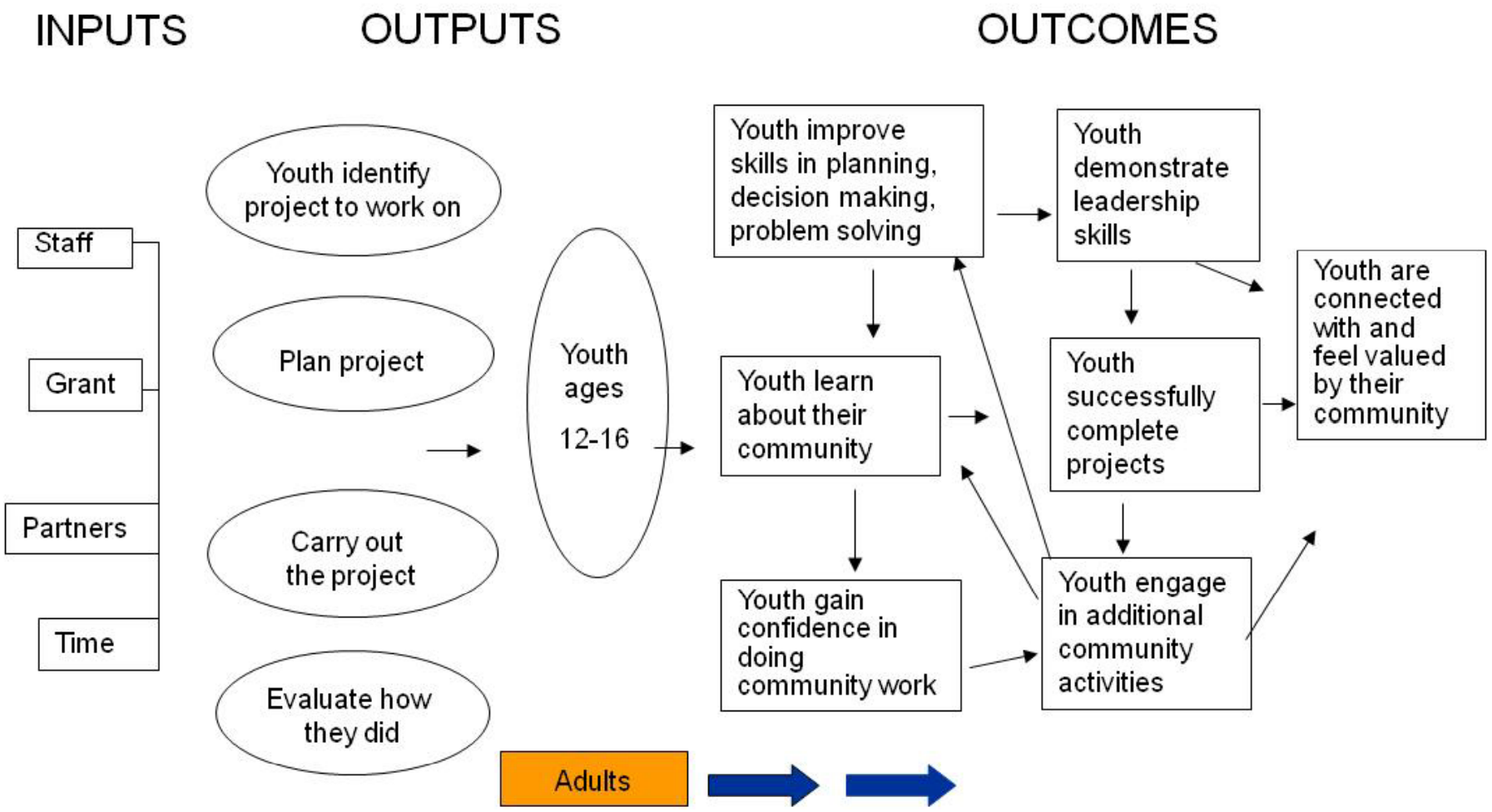
Set up camp

Cook, play, talk, laugh, hike

* Family members learn about each other
* Family bonds
* Family has a good time

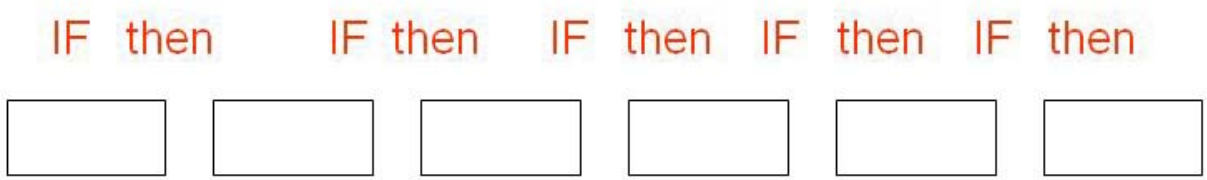
INPUTS **OUTPUTS** **OUTCOMES**

Youth and community service



If-then relationships

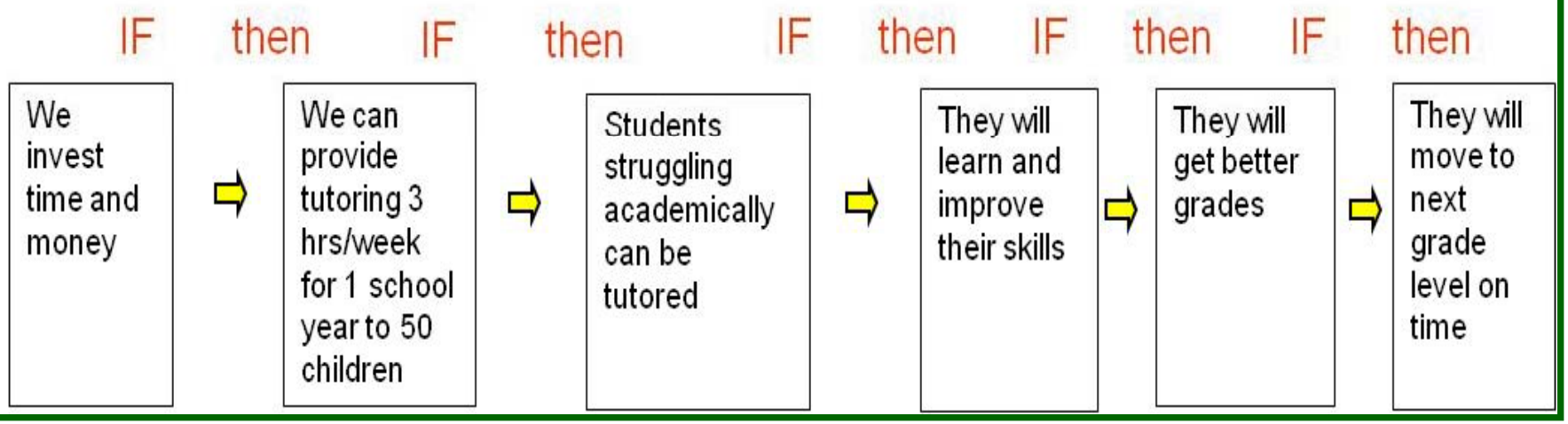
Underlying a logic model is a series of 'if-then' relationships that express the program's **theory of change**



How will activities lead to desired outcomes?

A series of if-then relationships

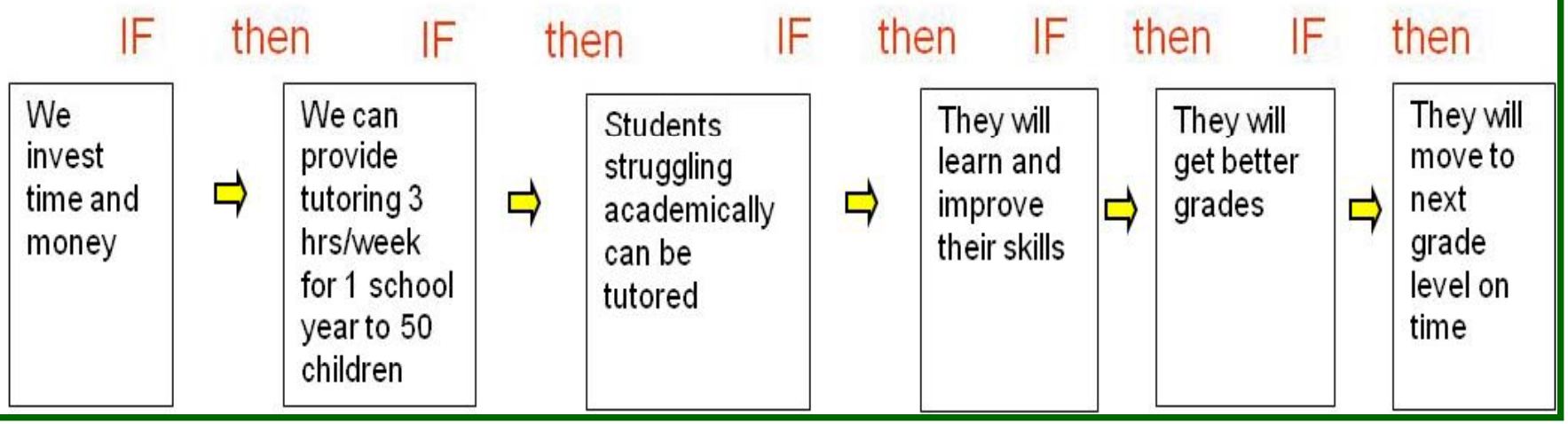
Tutoring Program Example



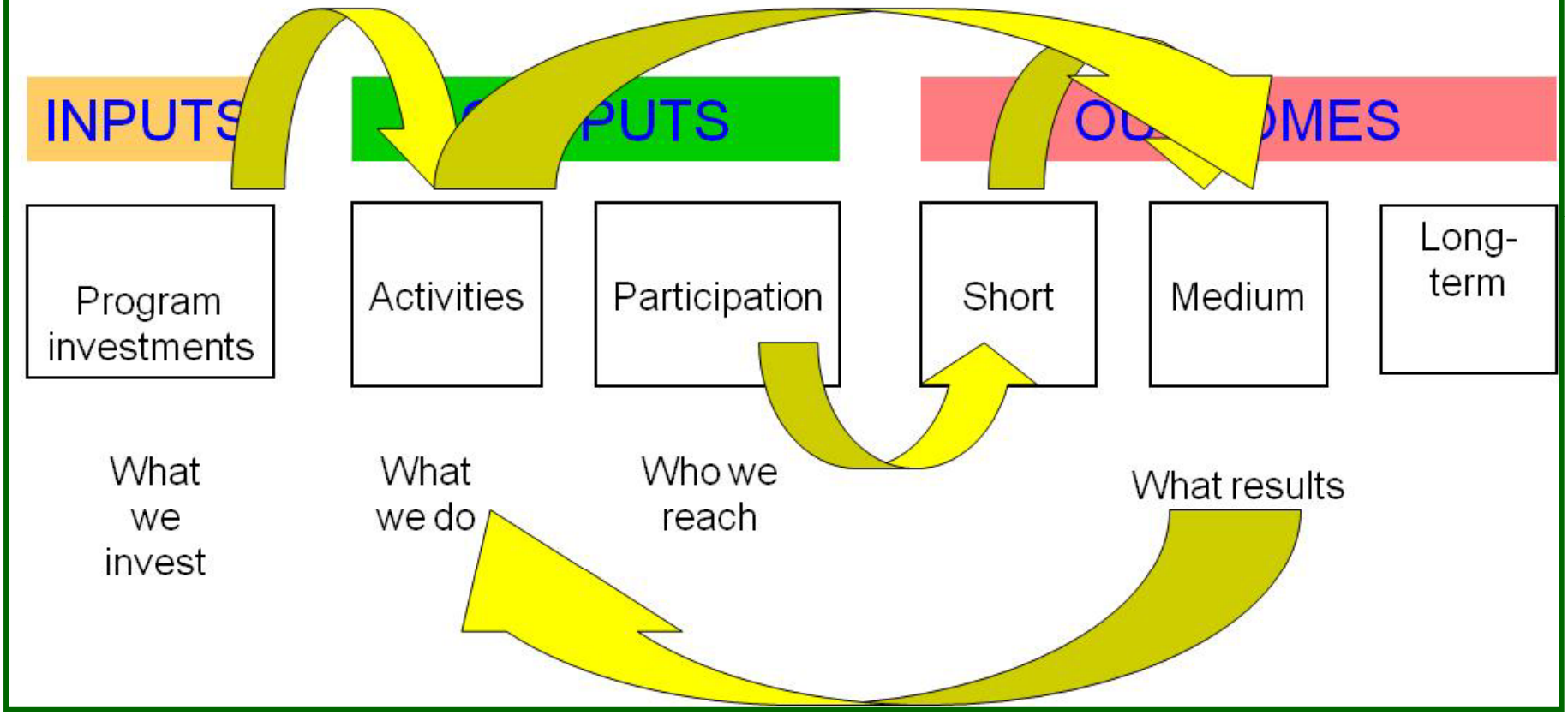
How will activities lead to desired outcomes?

A series of if-then relationships

Tutoring Program Example



Feedback loops and multi-dimensions



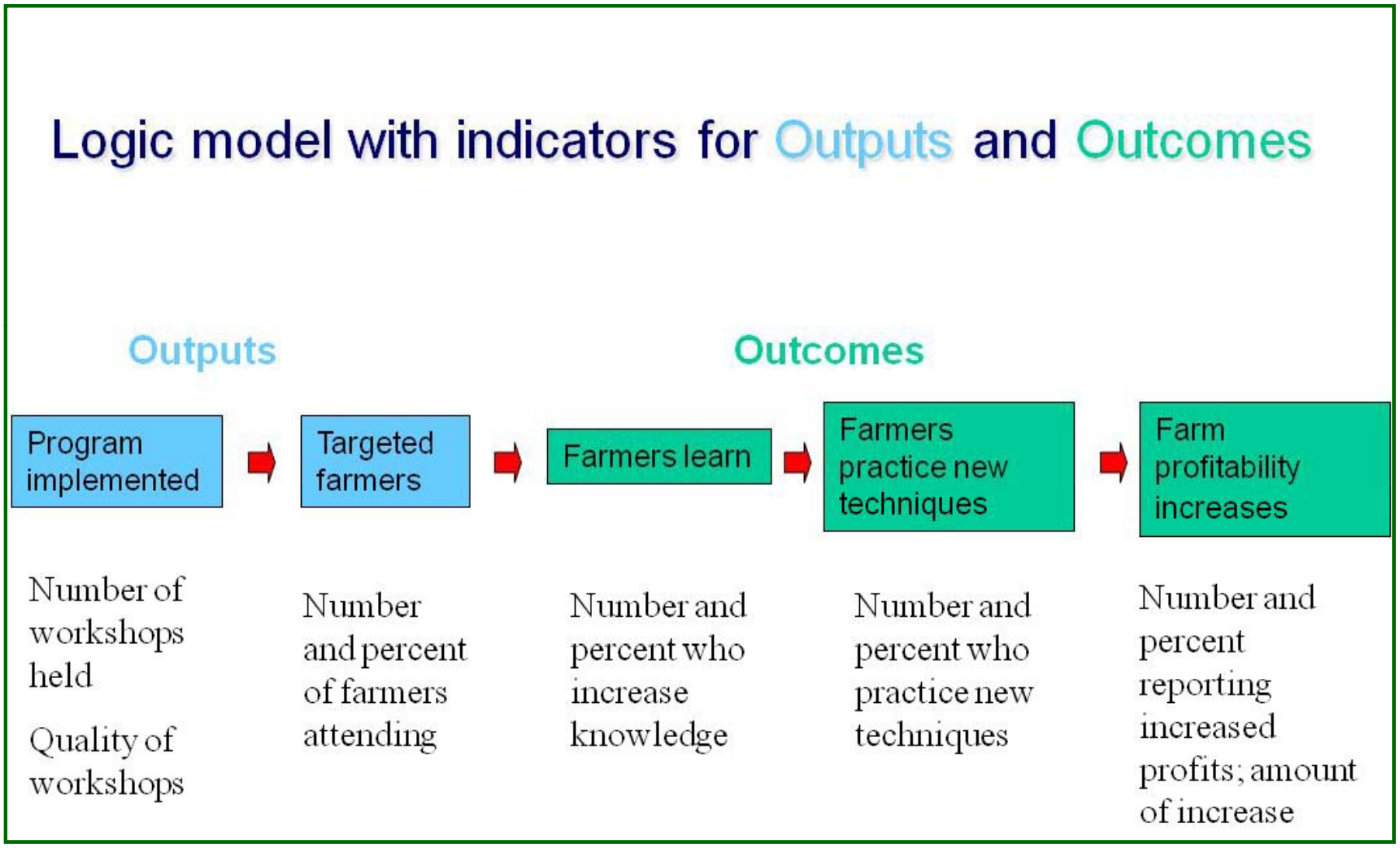
Programs are not linear; expect relationships to vary

Identify indicators

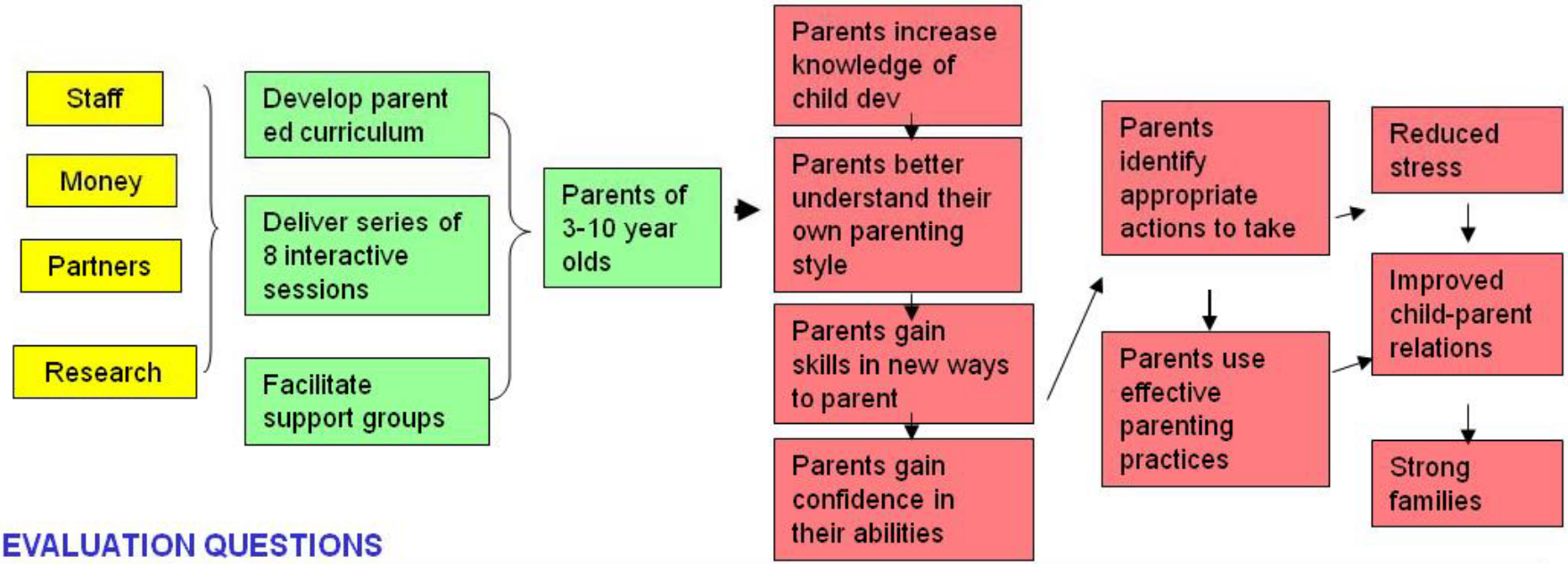
- How will you know it when you see it?
- What will be the evidence?
- What are the specific indicators that will be measured?

- Often expressed as #, %
- Can have qualitative indicators as well as quantitative indicators

Example ...


Logic model with indicators for Outputs and Outcomes
Outputs
Outcomes
Program implemented
Targeted farmers
Farmers learn
Farmers practice new techniques
Farm profitability increases
Number of workshops held
Quality of workshops
Number and percent of farmers attending
Number and percent who increase knowledge
Number and percent who practice new techniques
Number and percent reporting increased profits; amount of increase

Parent Education Example: Evaluation questions, indicators



EVALUATION QUESTIONS

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

INDICATORS

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

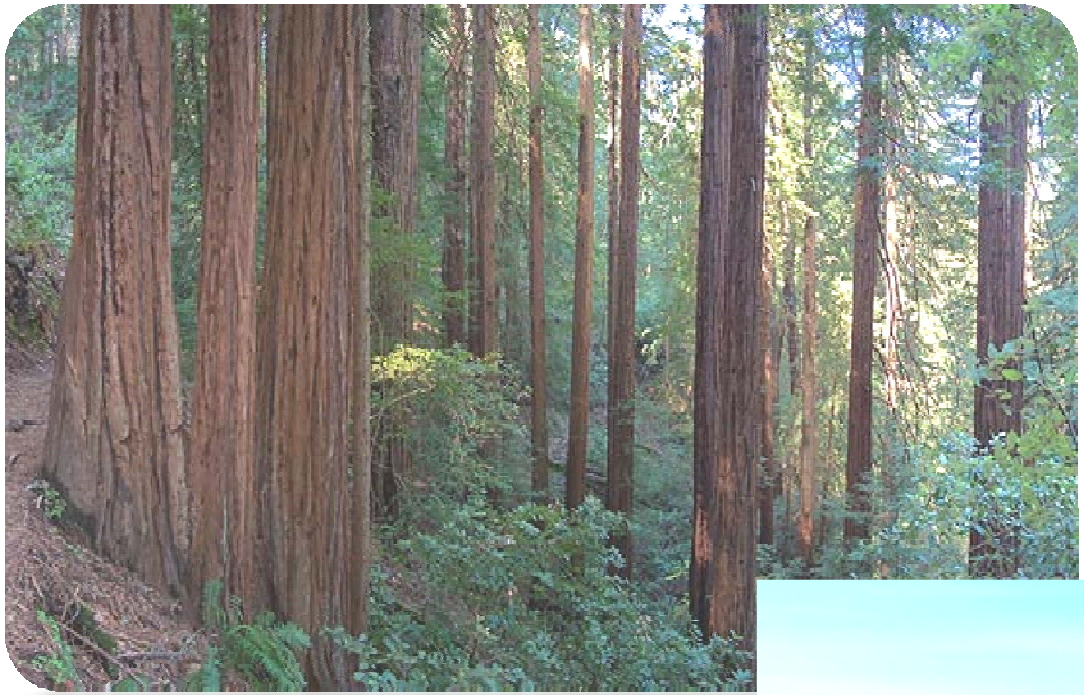
LET'S BUILD AN OEN MODEL!

Sample Areas for Consideration

- **Gear libraries**
  - inventory, management, maintenance, needs ...
- **Governance for OEN**
  - how involved will you be? autonomy vs. collective efforts? How best to share resources? What policies should be developed
- **Assets**
  - program by program, collective OEN?

- Benefits of outdoor activities
- Values of exploring wilderness
- Skill building *(what skills?)*
- Leader training
- Trip planning
- Transportation issues
- What data is necessary to tell your story and feed into the national network?

"Well, yes, we could fix it in Photoshop, but your arm would still be broken."



Good Luck!

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