Evaluation Overview

May 4, 2020

Sue Giancola, Ph.D.

Senior Associate Director

Center for Research in Evaluation & Social Policy

University of Delaware

Agenda

- ✓ Why is evaluation important?
- ✓ Types of evaluation
- ✓ Describing your project
  - ✓ Broader impacts
  - ✓ Goals and activities
- ✓ Logic modeling and theory-based evaluation (TBE)
- ✓ Evaluation plan
  - ✓ Evaluation questions and indicators
  - ✓ Evaluation methods
  - ✓ Data collection and analysis

NSF Proposals

- Intellectual Merit: the potential of the project to advance knowledge

- Broader Impacts: the potential of the project to benefit society and contribute to the achievement of specific, desired societal outcomes

What is evaluation?

VALUE

A method used to

judge the merit or worth

of something (a program)

in order to

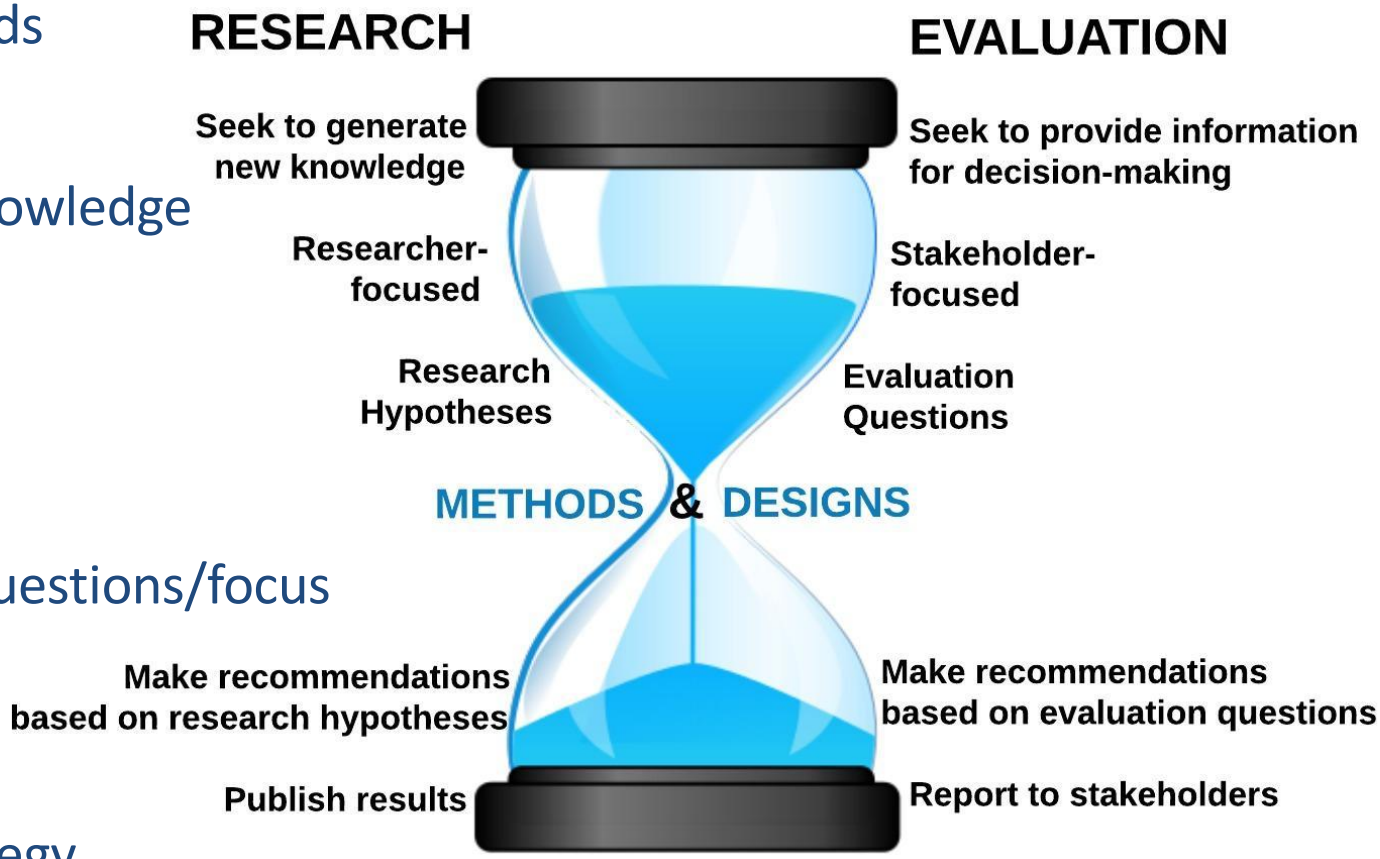
identify and use better quality practices

more effectively,

to improve the lives of people

Evaluation vs. Other Research

- Similarities
  - Designs and methods
  - Ethical obligations
  - Contributions to knowledge
  - Dissemination
- Differences
  - Utility/purpose
  - Determination of questions/focus
  - Judgmental quality
  - Role conflicts
  - Dissemination strategy
  - Allegiances
  - Setting (action vs. controlled)



Adapted from LaVelle, J. (2010, February 26). John LaVelle on describing evaluation. [Blog post]. Retrieved from https://aea365.org/blog/john-lavelle-on-describing-evaluation/

Evaluation Matters

- Evaluation is an ethical obligation
  - Help people
  - Do no harm
- **Evaluation fosters quality**
  - **Better decision-making**
  - **Continuous improvement**
- Evaluation is often required
  - To obtain funding
  - To maintain funding (compliance)
  - For accountability

Why do you evaluate?

NSF Career Merit Review Criteria

Principle 3: **Meaningful assessment and evaluation** of NSF funded projects should be based on **appropriate metrics**, *keeping in mind the likely correlation between the effect of broader impacts and the resources provided to implement projects*.

- If the size of the activity is limited, evaluation of that activity in isolation is not likely to be meaningful. Thus, **assessing the effectiveness of these activities may best be done at a higher, more aggregated, level than the individual project.**

With respect to the third principle, *even if assessment of Broader Impacts outcomes for particular projects is done at an aggregated level, PIs are expected to be accountable for carrying out the activities described in the funded project.* Thus, **individual projects should include clearly stated goals, specific descriptions of the activities that the PI intends to do, and a plan in place to document the outputs of those activities.**

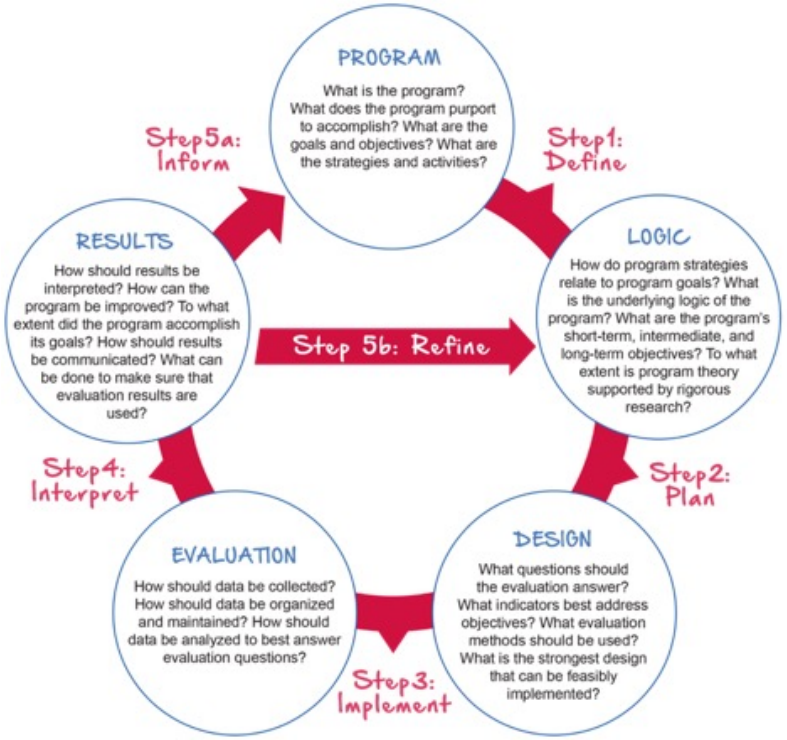
Types of Evaluation

- Evaluation for Formative Purposes
  - Needs assessment
  - Evaluability assessment
  - Implementation assessment (focused on fidelity and variation)
  - Process evaluation (focused on the implementation phase)
  - Formative evaluation (*intention* is to improve program)
- Evaluation for Summative Purposes
  - Outcome evaluation
  - Impact evaluation (examines net effects of the program)
  - Summative evaluation (*intention* is to make a decision)
  - Cost-benefit/cost-effective analysis (CBA/CEA)
  - Meta analysis
  - Meta-evaluation

Values and Standards

- Key Stakeholder Groups
  - Participation and utility
- Internal vs. External Evaluation
  - Perceived credibility
- Privacy and Confidentiality
  - IRB
- AEA Guiding Principles for Evaluators
  - American Evaluation Association
- Program Evaluation Standards
  - Joint Committee on Standards for Educational Evaluation

Project Evaluation and Reporting Section



Project Evaluation and Reporting

- Introduction of evaluator and qualifications
- Formative evaluation plan
  - Purpose is to monitor and document the implementation of project activities
  - Include key questions and data collection methods
  - Include how findings will be shared and used
- Summative evaluation plan
  - Purpose is document program outcomes
  - Include primary outcomes (long-term goals)

Data Collection and Analysis Procedures

- Include quantitative and qualitative indicators that will be used to measure project progress
  - Include a description of data collection instruments that will be used to inform indicators
  - If long-term tracking will be used, include how participants will be tracked post-project
  - Include information on how data will be stored (i.e., address privacy and confidentiality), analyzed, and reported
- Include an evaluation matrix that aligns project objectives, method of assessment, and data collection and analysis methods.

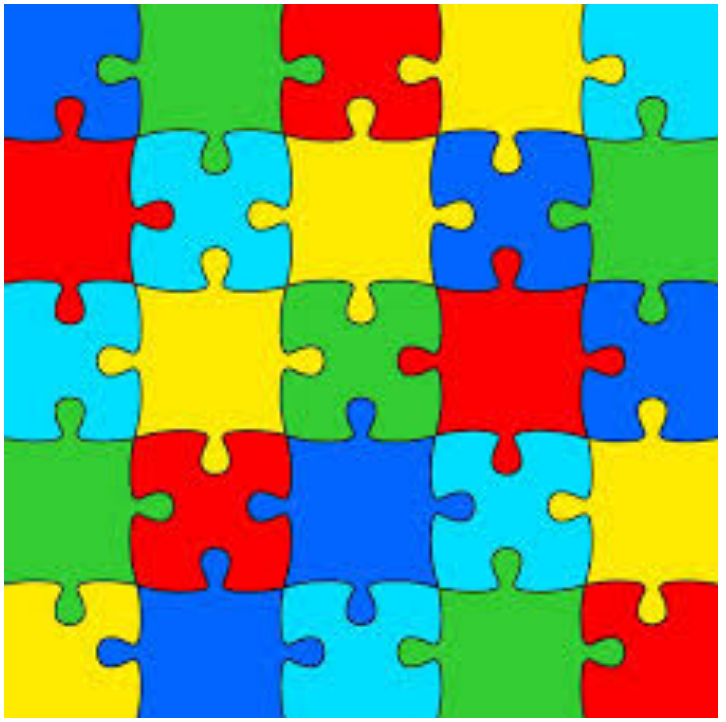
Where to start?

The first and *most important* step in evaluation is to **understand your program, project, or policy.**

For a proposal – it is to understand what you are proposing and be able to explain that clearly in terms of goals and strategies.

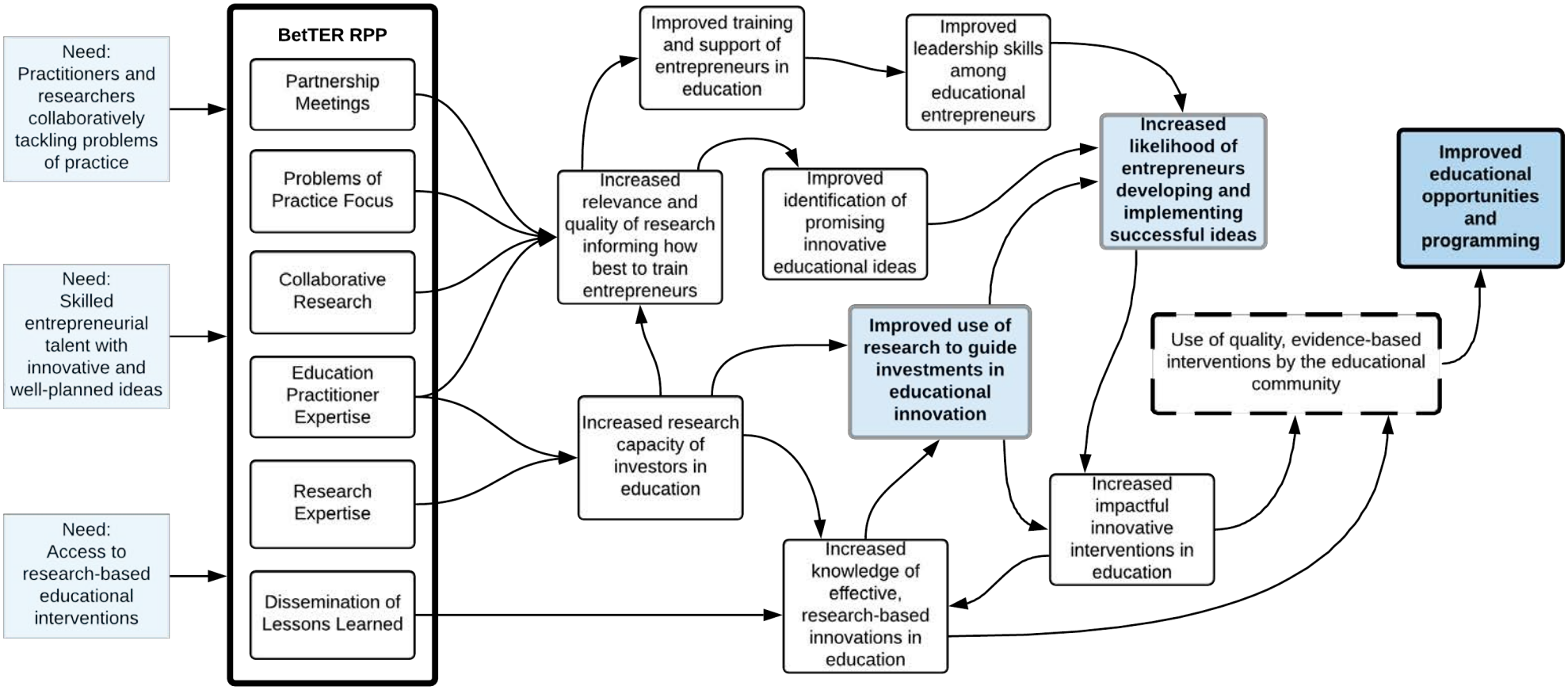
HERE → THERE

SECOND QUESTION:
What are the primary strategies or activities of your project?



FIRST QUESTION:
What does your project intend to accomplish? Why is this important? Why, why, why?

Spencer Proposal Theory of Change



Exercise: Describing Your Program

The <PROGRAM NAME> program intends to

<GOALS-*worded as outcomes*> by

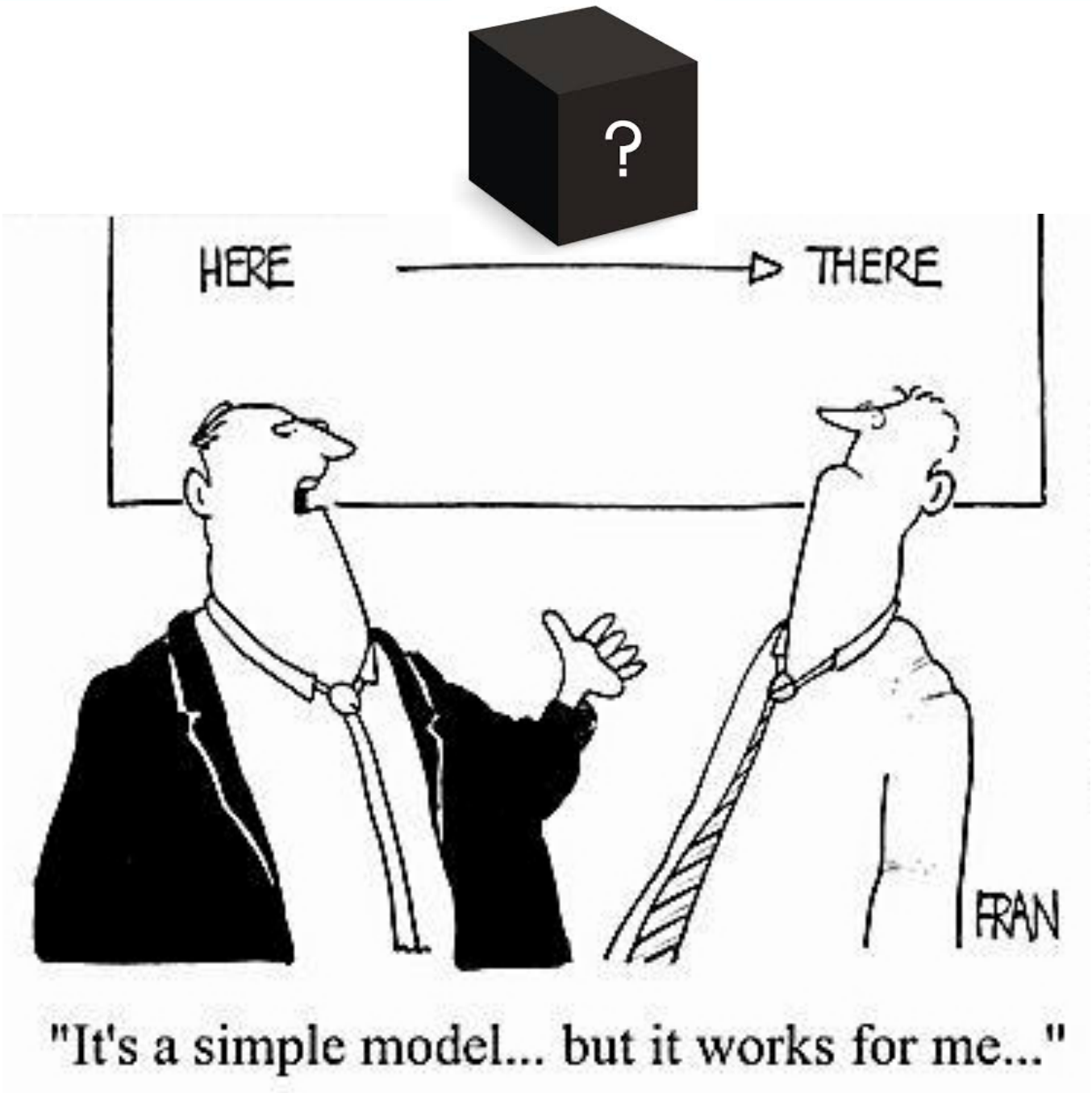
<STRATEGIES>.

Example: The **LEND** program intends to

improve the health and well-being for children and youth with ASD/DD

by

1) developing a competency–based curriculum, 2) training early career professionals using this curriculum, and 3) building community-based partnerships.

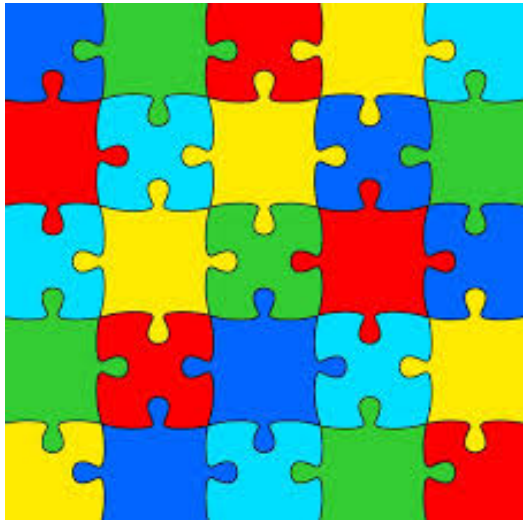

?
HERE
THERE
FRAN
"It's a simple model... but it works for me..."

Program Theory

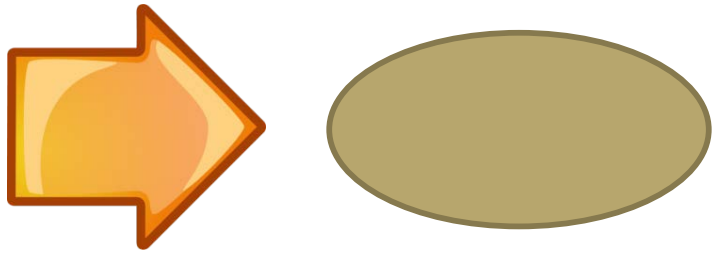
Set of assumptions relating your program/projects goals to its strategies/activities

HERE → THERE

Strategies **Early Objectives** **Intermediate Objectives** **Long Term Goals**



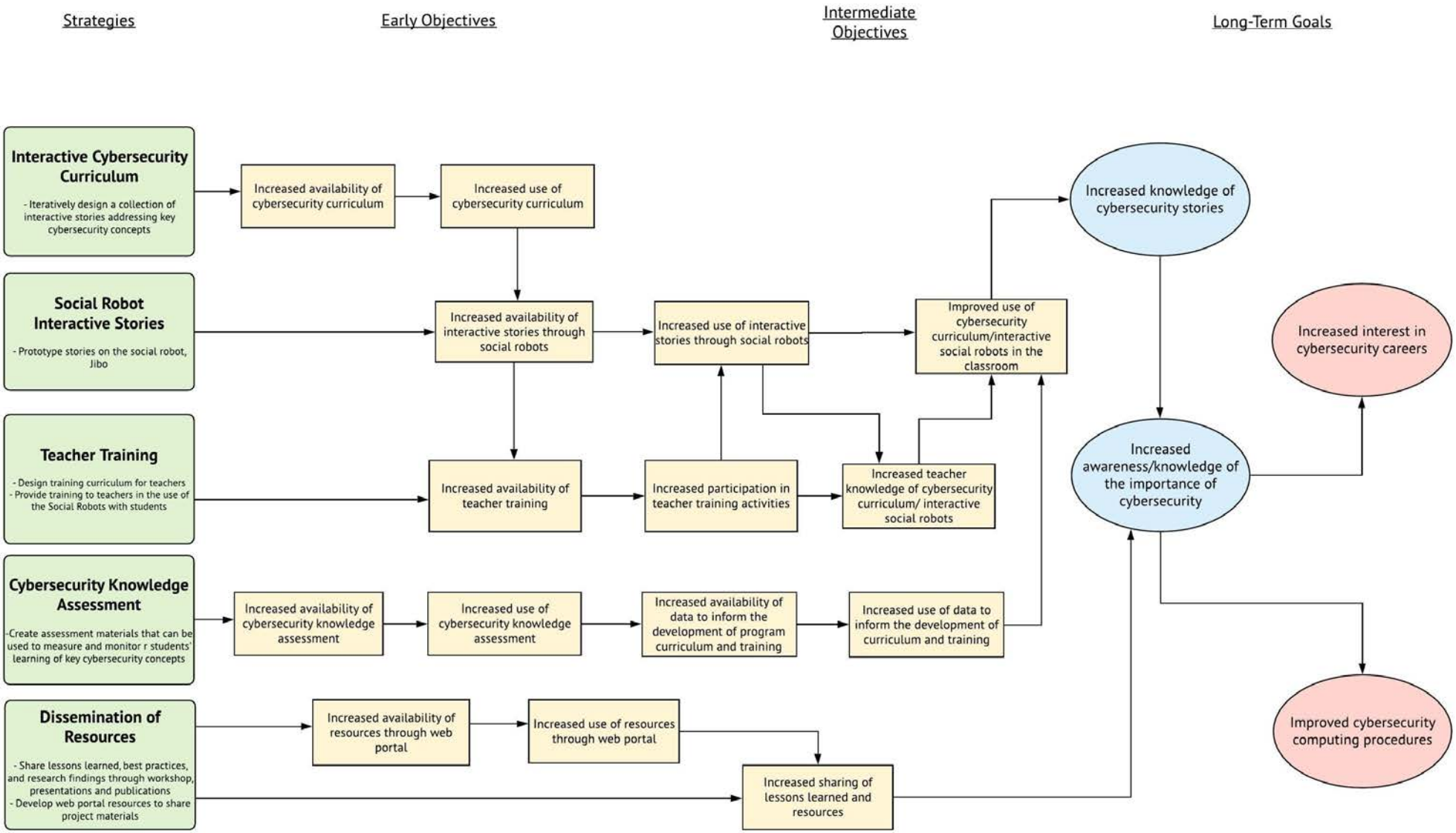
Logic Modeling



- A logic model explains how you expect a program's strategies and activities to result in the program's stated goals and objectives.
- It is a graphical representation of your program's theory (sometimes called a program theory map)
- Logic modeling is a process – and the model created through the process will be the foundation of your program and its evaluation.

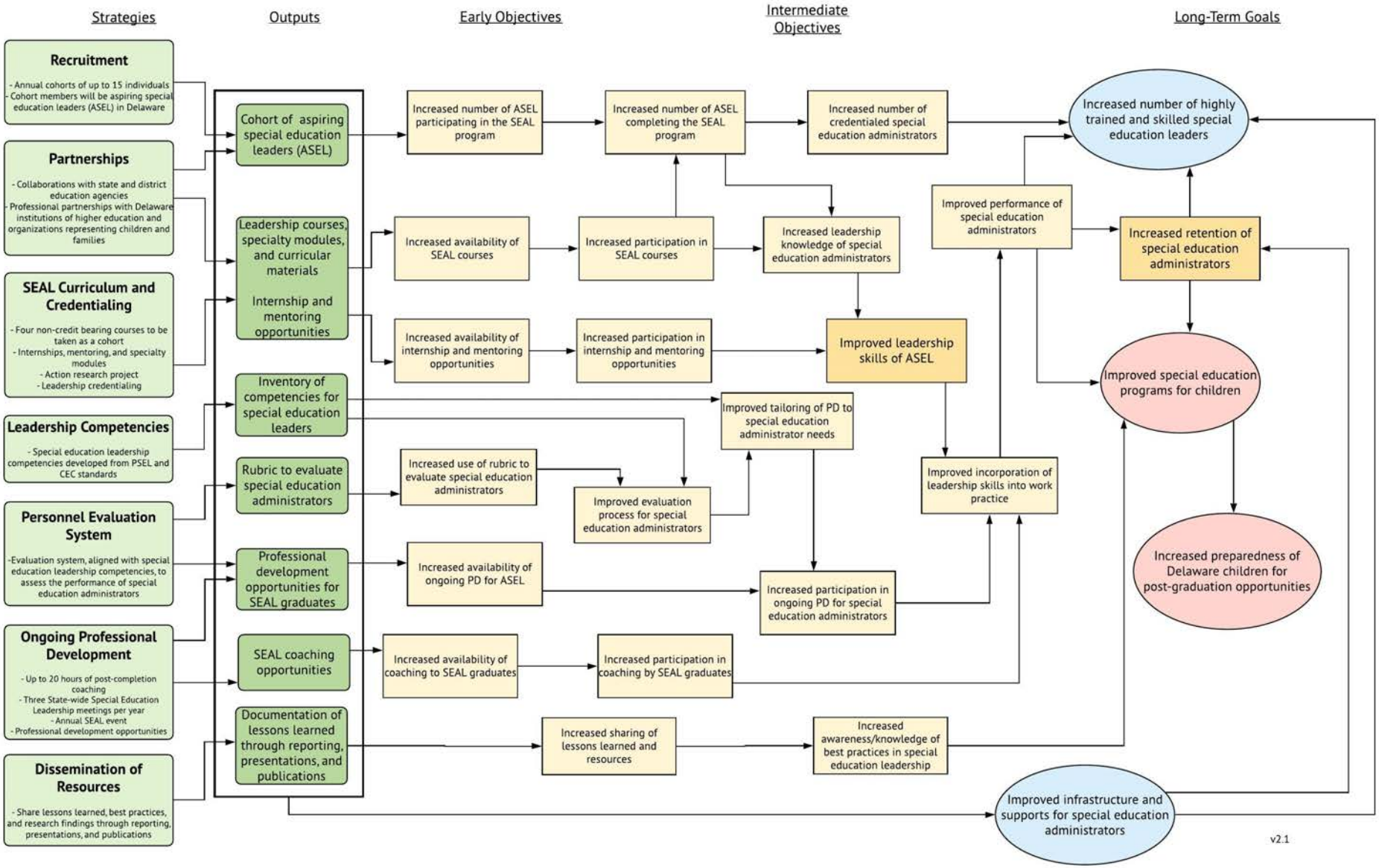
UNIVERSITY OF DELAWARE

NSF Cybersecurity Education Logic Model



UNIVERSITY OF DELAWARE

Delaware Special Education Administrative Leadership (SEAL) Program Logic Model



Evaluation Questions

- Generated from logic model
- Open-ended
- Focused on three categories . . .

1. Measuring the implementation of strategies and activities (fidelity of implementation)
2. Identifying the progress toward early/short-term and intermediate objectives
3. Recognizing the achievement of long-term program goals

Some Examples

- Formative Evaluation Questions – Implementation Assessment
  - To what extent are the implemented activities in alignment with the proposed activities?
  - What elements of the program infrastructure are useful and not useful?
  - In what ways could programmatic elements be improved?
  - …
- Formative Evaluation Questions – Early and Intermediate Objectives
  - To what extent was awareness of … increased?
  - In what ways was understanding of … improved?
  - To what extent was knowledge of … increased?
  - …
- Summative Evaluation Questions – Intermediate Objectives and Long-term Goals
  - To what extent was awareness of … increased?
  - In what ways was understanding of … improved?
  - To what extent was knowledge of … increased?
  - To what extent were skills in … improved?
  - How can research findings be used to …?
  - …

Evaluating Early and Intermediate Objectives

Early Objectives

- Increased number of . . .
- Increased knowledge of . . .
- Increased awareness of . . .

Intermediate Objectives

- Improved application of knowledge to . . .
- Increased engagement in . . .
- Increased skills in . . .
- Increased use of skills to influence . . .

Indicators and Targets

- Indicator: measures that can be used to gauge progress towards program goals and objectives

- Target: clarification of an indicator that provides a yardstick and timeline against the indicator will be examined

- Indicators and Targets are SMART:
  - Indicators are SMA: Specific, Measurable, and Agreed Upon
  - Targets are RT: Realistic and Time-bound

Evaluation Methods

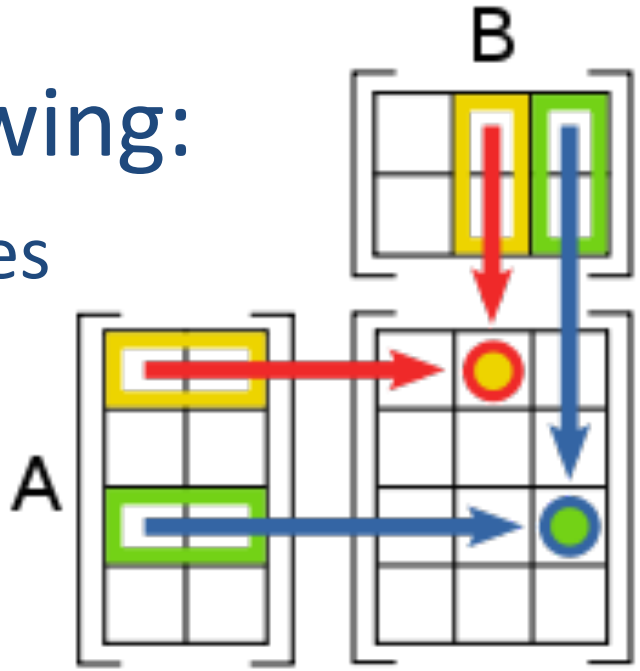
- **Qualitative methods:** rely primarily on noncategorical, free responses, or narrative descriptions of a program (often collected through interviews, focus groups, and case studies)

- **Quantitative methods**: rely primarily on discrete categories, such as counts, numbers and multiple-choice responses (often collected through tests or assessments; surveys or questionnaires; and existing data)

- **Mixed-method**: rely on a combination of both qualitative and quantitative methods

Evaluation Matrix

- Generate matrix from the logic model.
- Matrix for each of the following:
  - Program strategies and activities
  - Early/Intermediate objectives
  - Long term goals



Example Evaluation Matrix

Project Objective	Assessment Method	Data Collection and Analysis
Increased . . .		
Improved . . .		

OR

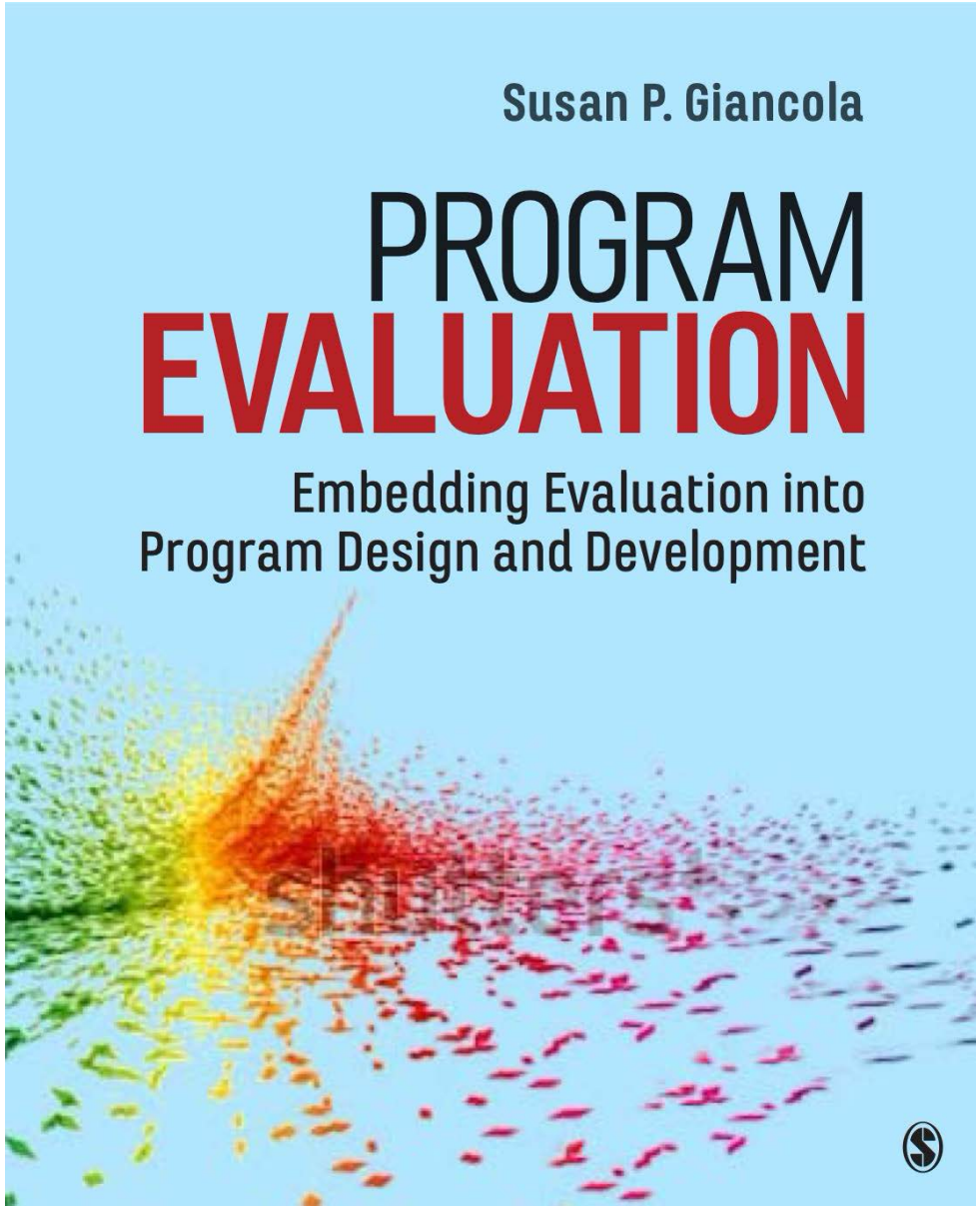
	Logic Model Component	Evaluation Questions	Indicators	Targets	Data Source	Data Collection	Data Analysis
Strategies and Activities/Initial Implementation							
Early/Short-term and Intermediate Indicators							
Long-term Goals							

Thank you for attending this session!

Feel free to contact me at . . .

Sue Giancola

giancola@udel.edu



Available on Amazon and at Sage Publications