Designing a Cost Study

Key Steps to Get Going

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Overview

- Understand policy problem and need for evaluation
- Identify and describe a program of interest, review prior literature
- Review the program's theory of action and how it works
- Determine which impacts will be measured
- Establish a framework for cost study within the evaluation context
- Draft research questions for the cost study
- Set the Scope
- Data collection plan
- Important aspects to note in analysis phase and in report writing

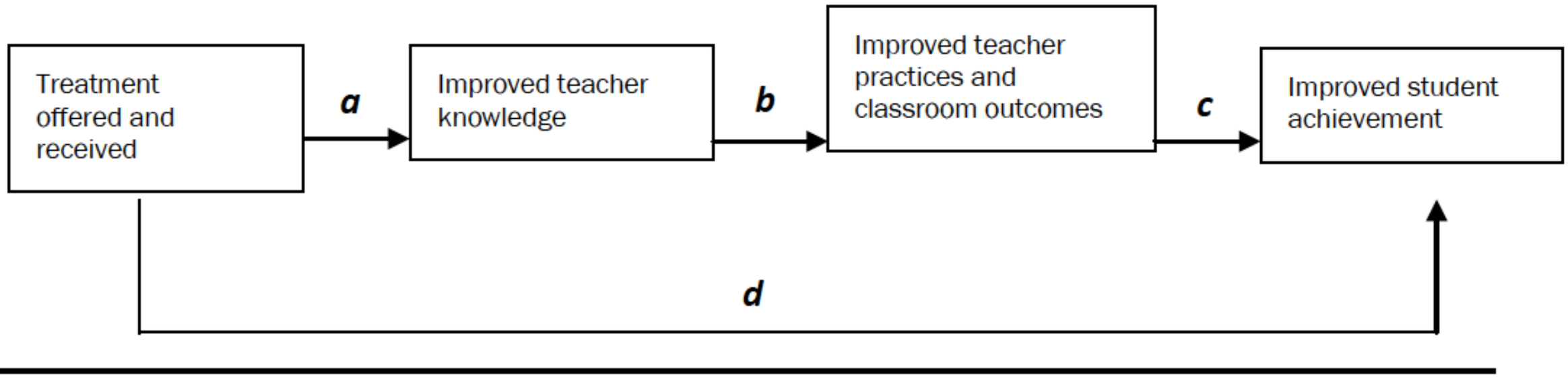
IES GOAL 3 RFA

The cost analysis should help schools and districts understand the monetary costs of implementing the intervention (e.g., expenditures for personnel, facilities, equipment, materials, training, and other relevant inputs). Annual costs should be assessed to adequately reflect expenditures across the lifespan of the program (e.g., start-up costs and maintenance costs). Intervention costs can be contrasted with the costs of comparison group practice to reflect the difference between them. The Institute is not asking for an economic evaluation of the program (e.g., cost-benefit, cost-utility, or cost- effectiveness analyses), although such analyses can be proposed.

Design Overview

- Understand policy **problem** and **need** for evaluation
- Identify and describe a **program** of interest, review prior literature
- Review the program's **theory of change** and **logic model**
- Determine which **impacts** will be measured and how
- Establish a **framework** for cost study within the evaluation **context**
- Draft research **questions** for the cost study
- Set the **scope**
- **Data** collection plan
- Important aspects to **note** in analysis phase and in report writing

Figure 1. Typical conceptual model for an education randomized control trial



Schochet, P. Z., Puma, M., & Deke, J. (2014). *Understanding variation in treatment effects in education impact evaluations: An overview of quantitative methods* (NCEE 2014–4017). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Analytic Technical Assistance and Development. Retrieved from http://ies.ed.gov/ncee/edlabs.

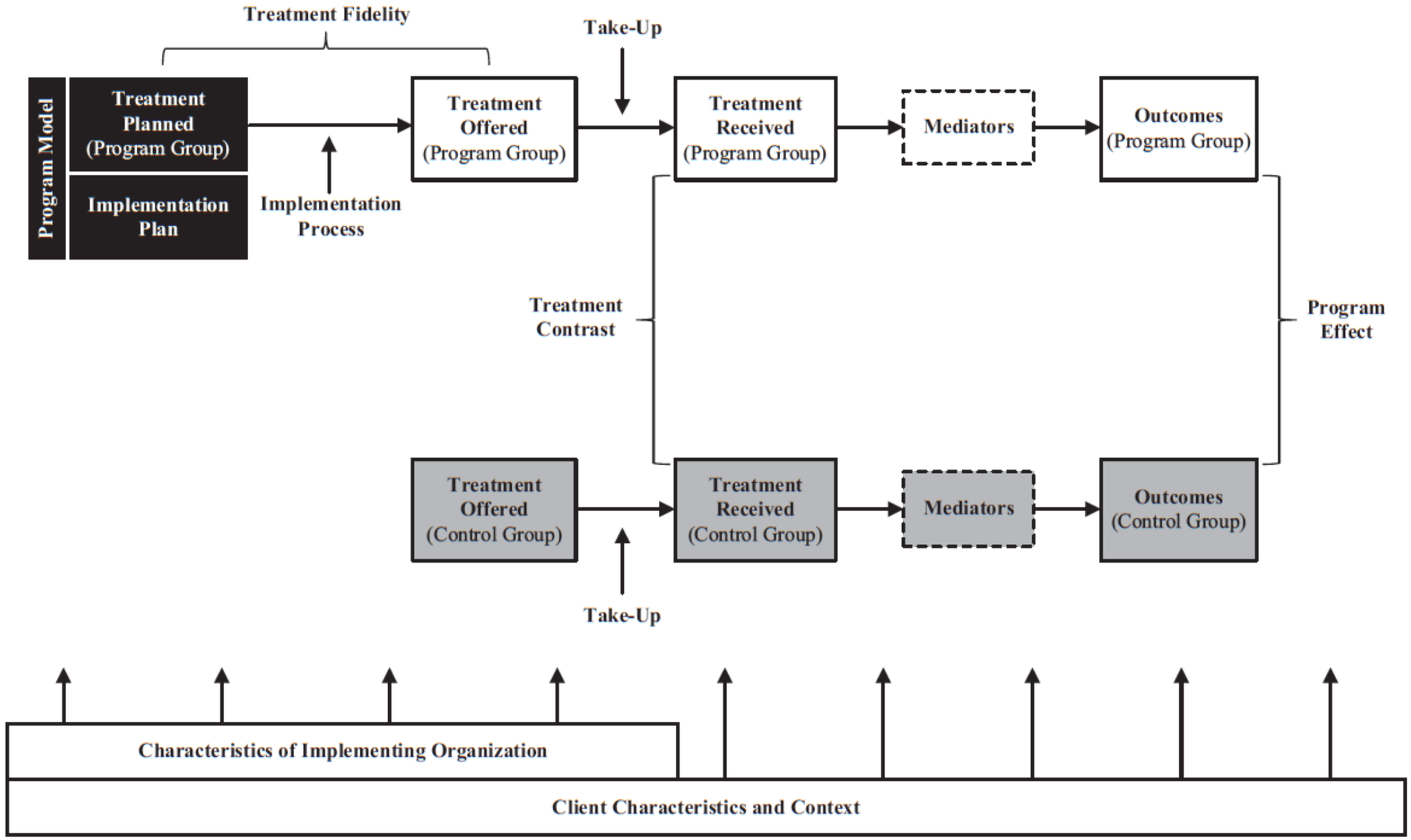
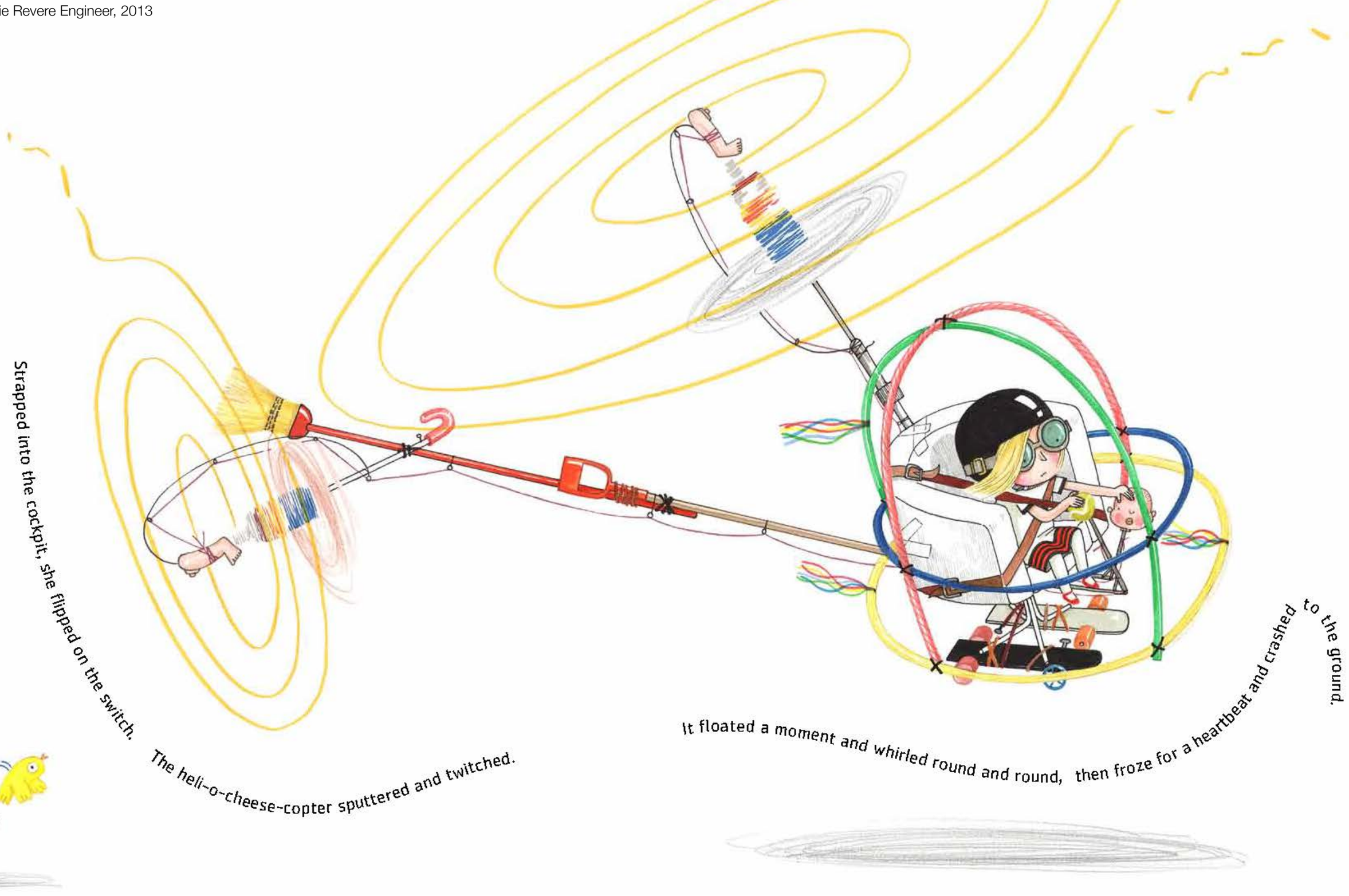


Figure 1. A Conceptual Framework for Studying Variation in Program Effects, Treatment Contrasts, and Implementation.

Weiss, M.J., Bloom, H.S., Brock, T., (2014). A conceptual framework for studying the sources of variation in program effects. *Journal of Policy Analysis and Management*, Vol. 33, No. 3, 778–808 (2014)

Source: Rosie Revere Engineer, 2013



How does it work?

Define the program.

Information Needed to Estimate Costs

- Personnel
  - Full-time or Part-time, Calendar or Academic Year
  - Benefits, Qualifications, Education, Experience, Responsibilities
  - Volunteers
  - Training
- Facilities
  - Devoted or flexible
  - Special aspects for replication or technology
  - Overhead
- Materials
  - Computers, curriculum materials, books, desks, etc.
- Other
  - Transportation
  - Client Inputs
  - Food or prizes

Framing the Cost Study

- Set goals for the cost study (these can help in framing and placement of the cost study in a proposal)
- Consider who may benefit from the cost study and which stakeholders are involved
- Initial ingredients list
- Outline potential questions of interest, data needed to address each,and approaches to analyses

Potential Questions

- Questions that may be asked in addition to the standard purpose of estimating the cost of replication, which is asked by "What is the cost of Program X?"

- What portion of the costs are fixed or variable?

- What is the cost of the program minus the cost of services received by the control group (net cost)?

- How does the cost vary by site?

- How does the cost per student change with scale?

- What is the cost to the school?

Don’t Worry!

Do not expect to know all the questions you will ask at this point. The purpose is to establish goals and an outline of the data you plan to collect.

Define a Scope for the Study

- Sample for cost study
- Control group data needed
- Outline how program might vary across sites or teachers in important ways
- Consider various data sources
- Set year and location for prices (standardize)
- Consider comparisons to other evaluations and alternative programs
- Use this information to begin outlining a budget

Source: UNESCO

Replication

Our purpose is to estimate the cost to replicate the outcome(s) of the program measured from a particular implementation. In order to design a cost study, we must first understand what is impacted by the program.

Data Collection Plan

- Draft ingredients list
- List questions needed to acquire necessary data on each ingredient (as well as any other contextual information that is important for the cost study)
- Review all data collection tools for evaluation
- Identify sources of data for each ingredient
- Draft needed protocols and measurement tools
- Incorporate cost study components into evaluation's project management tools and timeline
- Note complexities
- Determine how data will be stored and analyzed

- With preparation and planning, the cost study can be designed to answer the questions wanted - rather than waiting until the end and being left with answering (or attempting to answer) what is feasible.

- After the study has been proposed and designed, focus on data collection.

- Keep it simple. Transparency is key.

- Just as we find with impact evaluations, estimating the costs of some programs are more complex than others.

- Note limitations and assumptions made along the way.