

Measurement Trials and Cost Analysis

CBCSE IES Methods Training in Economic Evaluation Methods Brief

By: Brooks Bowden & Rebecca Davis, University of Pennsylvania

This methods brief is intended to provide basic guidance for researchers proposing a measurement trial that will include a cost analysis. The guidance here is framed by the FY 21 RFA from the Institute of Education Sciences (IES).

IES FY 21 Requirements

Measurement grants do not require a cost analysis, but one is recommended. A cost analysis is particularly encouraged if “the instrument you propose to develop is intended for use by educators and education systems” (FY 2021 RFA p. 28). Costs should be included even if the program has a list price or will be offered free of charge. The cost analysis should be reflected in the proposal’s research plan and personnel sections. It is best if the cost component is integrated consistently throughout the proposal.

Costs Analysis

The goal of a cost analysis in a measurement study is to understand the resources used to deliver the measurement successfully. To do this, the costs must reflect implementation, rather than simply the measurement as designed.

Costs ≠ \$0. Even if a program is offered free of charge to a school, some level of resource input is required for implementation.

Costs ≠ List Price. A list price is insufficient as a stand in for a cost analysis. If available, the list price should be combined with the costs to implement.



Research Plan

In the Research Design and Methods section, specify the methods guiding the cost research, outline cost data collection on ingredients/resources during implementation considering treatment contrast, clarify sample for ingredients data collection, outline plan to estimate the cost value of ingredients with national average prices, plan for sensitivity tests, and compare to extant cost research if possible. Include these activities in the timeline.

Consider costs to implement

Cost analyses conducted for measurement grant applications should reflect the costs of implementing the measurement, including personnel time, resources and materials used, facility and equipment needs.

- **Describe materials:** If the assessment comes as a kit, clarify what comes in the kit and what materials, manipulatives, rewards, etc. are needed
- **Specify how the assessment will be delivered:** 1:1, small group, whole class, during class, pull-out, paper and pencil, workbooks, computers
- **Specify who delivers the assessment:** Teachers, counselors, psychologist, etc. Is there any special training or experience to successfully deliver assessment? How much time does the assessment take to deliver? Does the assessment require a FT person?
- **Plan to record the quantity of each resource used.** These quantities will be matched with standardized prices during the analysis phase.

Example Ingredients Table

Record the ingredients and quantities used. These are later matched with standardized national prices.

Site: Kindergarten Classroom #1		
Measurement delivered to 25 students		
Ingredient	Quantity	Units
Training time	5	Hours
Instructional aide time	12.5	Hours
Tablet	1	Item
App	1	Subscription
Set of math blocks	2	Sets

CostOut

The free CBCSE cost tool, *CostOut*, can be used to easily and efficiently log all resources and to match the resources with standardized prices.

- <https://www.cbcse.org/costout>

Local or national prices?

In a measurement study, it is usually best to use national prices to allow for broad generalizability.

In your proposal, show that you have a cost plan and describe how this plan fits with your purpose

Cost financing

After estimating the cost to deliver the measurement, provide information about how the costs would be incurred across sources. Clarify what is covered in the purchase price and what must be incurred as costs to others.

Example: If schools provide stickers, snacks, teacher time for data entry, and scheduling, etc. —each of these items is a cost and should be included. The teacher's time is a cost that is borne by the school because that teacher's time is not infinite and it has value

Personnel

In your proposal, clearly identify who will oversee the cost component and who will be involved in data collection and estimation of costs. Reference training or relevant experience. If needed, provide a plan to obtain additional training or support.

Stay tuned for IES methods training sessions in summer 2021!

Resources:

Ingredients Method Textbook

Levin, H.M., McEwan, P., Belfield, C., Bowden, A.B., Shand, R. (2018). *Economic Evaluation in Education: Cost-Effectiveness and Benefit Cost Analysis, 3rd Edition*. Sage Publications.

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