

# Michael Scriven and “The Missing Half of Quantitative Evaluation”

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**Keywords:** costs; cost analysis; cost-inclusive evaluation (CIE); cost-exclusive evaluation (CEE); cost-effectiveness analysis (CEA); cost-benefit analysis (CBA); economic evaluation; Michael Scriven

For many years, I have referred to cost analysis as the missing half of quantitative evaluation ... (Scriven, 2008a, p. iii)

Program evaluation has been remarkably slow to incorporate certain methods that could make it more influential in funding decisions, more useful to program operators, and more studied by students (Persaud, 2018; Yates, 2020, 2023a). Consider the evaluation of costs, cost-effectiveness, and cost-benefit: few topics arouse as intriguing a combination of attention, anxiety, and rejection as evaluation of program costs, at least in our experience. Perhaps the only more consternation-causing concept has been to suggest that evaluation consider monetary outcomes (i.e., *benefits*; Levin et al., 2018), of programs as well as the more traditional nonmonetary outcome of *effectiveness*. Recognizing the potential impacts of including costs in evaluation, particularly when combining information about program costs with information about program outcomes, Michael Scriven wrote early and often about the need for reporting cost-inclusive evaluations (CIEs) and for training in CIE. He:

- anticipated the need for inclusion of cost, cost-effectiveness, and cost-benefit analyses in evaluation as a field,
- did not consider CIE the exclusive domain of economists,

- stated that essential competencies for evaluators included measurement and analysis of costs and cost-outcome relationships such as cost-effectiveness and cost-benefit, and
- mentored and otherwise encouraged contributors to CIE.

## Cost and Cost-Effectiveness Analyses as Evaluation

Michael Scriven anticipated the need for inclusion in evaluation of information on costs, cost-effectiveness, and cost-benefit. This was clearly expressed in his *Evaluation Thesaurus* (Scriven, 1991) and his *Key Evaluation Checklist* (Scriven, 2007, 2015). The checklist mentioned “cost” over 40 times. Noting that the cost checkpoint “...is crucial in determining *worth* (or, in one sense, *value*) by contrast with plain *merit* (or *quality*),” Scriven notes that “It requires attention to both (i) money *and* nonmoney costs” (Scriven, 2007, p. 13). His checkpoint C3 discussed costs and stated that costs are “a greatly neglected quantitative component” (Scriven, 2015, p. 35). The entirety of his checkpoint C4 was devoted to comparative cost analysis, reviewing different cost elements and definitions that can be used in program evaluations. “Cost-effectiveness” and “cost-benefit” analyses were mentioned explicitly and discussed on pages 17 and 38 respectively. Specifically, Scriven advised that alternative programs should be compared to

decide whether one program produced superior outcomes at similar or only slightly additional cost, or slightly inferior outcomes at substantially lower cost.

## Not Only for Economists: Evaluators Can Do Cost-Inclusive Evaluations

Scriven envisioned the analysis of costs, cost-effectiveness, and cost-benefit as forms of evaluation that were the domain of *evaluators* and not the exclusive domain of economists, as might be suggested by the contemporary phrase “economic evaluation” (Yates, 2021). Scriven (2008b) had clear and not particularly positive views of economists’ definition of *cost* as *opportunity cost*, which he regarded as flawed in its circularity and potential arbitrariness.

## Evaluators *Should* Do Cost-Inclusive Evaluations

As early as 1996, Scriven wrote not only that evaluators *could* do CIE, but that they *should* do CIE. In his table of necessary competencies for evaluators, “*cost analysis*” was the seventh of ten competencies that he believed evaluators should have. In fact, Scriven placed the competency of *cost analysis* just after *needs assessment* and immediately preceding *internal synthesis models and skills* (Scriven, 1996, p. 160). This cost-analysis competency focused on valuing the resources consumed by a program in monetary units when possible, and in other units when monetization was difficult.

Scriven also included “costs” in *Key Evaluation Checklist* (KEC; Kirkhart & Scriven, 1989; Scriven, 2007, 2015) and even “cost-effectiveness” in his metaevaluation checklist (Scriven, 1969, 2007), listing it along with commonly espoused characteristics of a good evaluation: “...validity, credibility, ethicality, utility, robustness, and *cost-effectiveness* [italics added]” (2009, p. v; see also Coryn & Scriven, 2007; Scriven, 1993). Scriven’s recent article on the KEC (Scriven, 2019) continued to emphasize the centrality of costs in evaluation, describing “Costs” as among “... the five most important components of the sixteen that make up the KEC: Process, Outcomes, *Costs* [italics added], Comparisons, and Generalizability” (p. 50).

## Mentoring, Encouraging Cost-Inclusive Evaluators

Scriven’s nurturing of evaluators who focused on costs, cost-effectiveness, and cost-benefit helped CIE begin to grow into an essential, recognized evaluation methodology. Inclusion of costs in program evaluation has extended to education (Levin, 1975; Levin et al., 2018), psychological interventions (e.g., Kazdin, 2003; Yates, 1996, 2023a), and diverse health and human services as well as international aid efforts and more (e.g., King, 2018; Yates, 2023b). Mentorship by Scriven resulted in at least two doctoral students promoting cost-inclusive evaluation through scholarship, teaching, practice, and mentorship. Davidson (2005) was the first student to illustrate Scriven’s cost cube narrative, which Scriven wrote about in *Evaluation Thesaurus*. Davidson subsequently mentored King (2019). Persaud (2007) modified Davidson’s (2005) cost cube and also created a benefits identification cube, along with a cost analysis checklist. Persaud and her coauthor, Yates, were inspired and encouraged by Scriven to bring to fruition their book, *Cost-Inclusive Evaluation: Planning It, Using It, Doing It* (Persaud & Yates, 2023). Scriven even wrote the foreword for this tome. Persaud and Yates dedicated their book to him.

## Conclusion: Scriven’s Guidance for Resistance to Cost-Inclusive Evaluation

Even proposing inclusion of cost analyses, cost-effectiveness or cost-benefit analyses, or measurement of monetary as well as nonmonetary outcomes can generate significant, sometimes involvement-terminating pushback from evaluands, traditional economists, and even fellow evaluators. Strategies of uncertain effectiveness and costs have been developed to mitigate this resistance (e.g., Yates, 1994, 2012), but Scriven also anticipated and prescribed potential solutions for this impediment to CIE. Among the many forms of resistance to inclusion of costs, cost-effectiveness analysis, and cost-benefit analysis in evaluation are protests that, by focusing on monetary costs and monetary outcomes, the evaluation may disregard the most important findings, usually identified as nonmonetary, qualitative resources consumed by programs and nonmonetary, qualitative outcomes produced by programs.

In his description of the cost analysis competency, Scriven addressed this issue explicitly. He noted that cost analysis should include "... the ability to determine ... non-money costs (since they are often the most important ones ...)" (1996, p. 160). Nonmonetary costs and outcomes also were recognized and promoted in *Key Evaluation Checklist* (Scriven, 2015) and *Evaluation Thesaurus* (Scriven, 1991). Rejection of CIE on the grounds that it is entirely and exclusively quantitative was anticipated by Scriven, too. He noted at least as early as 2008 that cost analysis could be done qualitatively as well as quantitatively (Scriven, 2008b; see also Scriven, 2015). This perspective has been expressed in other literature on the topic (see New Zealand Treasury, 2005; Persaud, 2007). In reference to qualitative evaluation, Scriven even stated that including costs "sometimes was the only possible approach" (Scriven, 2008a, p. iii). Others, including King (2018) and Rogers et al. (2009), have expanded and provided theoretical and methodological frameworks for qualitative CIE. Similar to the value-added that can be derived from a mixed-methods approach in cost-exclusive evaluation (CEE), using a mixed-methods approach in CIE promises to greatly enrich reporting and better inform decision-making.

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