

2010 EEN Forum Notes

Session Name: Evaluative Thinking From The Beginning

Session Date/Time: 06/07/2010 1:15 pm

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Main Themes:

- Evaluation is a key component of environmental design plans
- Incorporating evaluation from the beginning allows for benefits to be measured before the program or intervention begins
- Incorporating real time evaluation (RTE) allows for “on the fly” course corrections and immediate lessons learned.

Detailed Notes:

The Statistically Valid Pilot: Taking Advantage of Unique Opportunities to Design and Implement Rigorous Program Evaluations.(Dr. Terell Lasane, EPA, and Tracy Dyke Redmond, Industrial Economics Inc.)

For two years, Terell Lasane (EPA) and Tracy Dyke Redmond (Stratus Consulting) worked as part of a large team of diverse stakeholders evaluating compliance assistance activities on a forthcoming environmental rule. Because the aim of the project was prospective, building evaluative criteria into the design from the beginning was possible.

The project looked at auto body shops in VA and MA by using random assignment and random selection to account for potential sampling biases. The shops sand and spraypaint cars in booths with filters, with ventilation. Hazardous waste issues- covering waste and spills and leaks

The earlier evaluation approach lacked a baseline, pre-program measurement of desired outcomes, failed to address the problem of self-selection (those who volunteer for compliance assistance opportunities), and failed to address treatment diffusion effects (shops who receive assistance sharing knowledge with unassisted shops).

Designing a study ex-ante, (where measured benefit could be assessed before the program or intervention began), requires:

- Choosing among program candidates for evaluations
- Selection of a program for evaluation based quality control considerations
- Unique features of the autobody pilot
- Identification of a baseline
- Identification of a known universe
- Random selection, random assignment

Random assignment- selected autobody shops and randomly assigned into control and treatment group (invited to receive assistance in the form of workshops, and assistance materials)

Comparison group- no compliance assistance was planned- conducted baseline measurement to compare to random assignment groups

Key challenges for measurement design

- Conduct representative measurement of all regulated entities, not just voluntary participants
- Test phone survey reliability- validity often in question
- Do not prevent shops from receiving compliance assistance, while understanding what would happen without compliance assistance-

There were a number of unique aspects to this project, including:

- The amount of time and effort invested by the EPA.
- Building on prior work (common measures project)
- Commitment to measurement

Transferable elements

Consider measurement early in program design, which allows for...

More rigorous designs, eg...

Representative sampling

Comparison groups

Control groups

Measurement over time

The majority of the questions and concerns focused on potential sampling problems and ethical considerations of the project in general, not about the evaluative capacity of the project.

Very expensive project caused interest to wane over concern of project sustainability in a time of constrained budgets

Q: Do you see potential ethical problems with denying some groups (the control group) access to valuable methods?

A: As in every study with random assignment, ethical considerations are taken seriously.

Program designers in this study incorporated a tiered approach to benefits to compensate for that dilemma. For instance, everyone in MA gets assistance but some are delayed. This randomized control group allows for both accurate

Real-time Evaluation for Environmental Evaluators: Bridging the Gap between Monitoring and Evaluation (Dr. Charles Herrick and Dr. Diana Lane, Stratus Consulting)

This evaluative methodology champions a continuous level of evaluation that positions the program designers as evaluators rather than facilitators.

Bringing evaluation into the real time evaluation (RTE) (evaluation not before or after, but during)

Primary characteristics:

Takes place during program implementation
Short time frame
Iterative process
Immediate lesson learning
Course corrections

RTE Process integrated within the program cycle implications:

De-emphasis on reporting back- involved in hands on

There are tangible differences to incorporating RTE with more traditional ex-post-facto evaluations. Data collection and use differs through the types of available data, the reliability of that data, and the sources available.

RTE: Relevant types of data

Administrative- founder and grants
Organizational capacity- of the grantee or the field staff
ToC element indicators (theories of change) working with client to translate theory into assessable activities and pathways between activities that can be categorical or narrative

RTE: Data sources

Archival materials
Program staff interviews
Grantee interviews
Expert interviews
Prior research
Logical reasoning
Model projections

Data reliability:

Internal consistency
Directional soundness
Spatial and temporal continuity
Analogical reasoning- looking at similar programs from the past
Narrative coherence-

RTE: Data Time Frames

Environmental response

Intervention element time-cycle

Client organizational capabilities

Analytical tractability

RTE works best when thought of as a continuum of care rather than as a dichotomous approach to evaluation.